

TRIUMPH GULF COAST, INC. TRUST FUND

UPDATED APPLICATION FOR FUNDS

BY

CITY OF PENSACOLA

FOR

PENSACOLA INTERNATIONAL AIRPORT

MRO AVIATION CAMPUS

JULY 5, 2018

Triumph Gulf Coast, Inc. Trust Fund Application for Funds

Proposal Instructions: The Triumph Gulf Coast, Inc. Trust Fund Grant Application (this document) must be completed by the entity applying for the grant and signed, as applicable, by either the individual applying for funds, an individual authorized to bind the entity applying for funds, a chief elected official, the administrator for the governmental entity or their designee. Please read the Application carefully as some questions may require a separate narrative to be completed. In addition, please complete all Addendums that may be applicable to the Proposed Project or program.

Triumph Gulf Coast, Inc. will make awards from available funds to projects or programs that meet the priorities for economic recovery, diversification, and enhancement of the disproportionately affected counties. Triumph Gulf Coast, Inc. may make awards for:

- Ad valorem tax rate reduction within disproportionately affected counties;
- Local match requirements of s. 288.0655 for projects in the disproportionately affected counties;
- Public infrastructure projects for construction, expansion, or maintenance which are shown to enhance economic recovery, diversification, and enhancement of the disproportionately affected counties;
- Grants to local governments in the disproportionately affected counties to establish and maintain equipment and trained personnel for local action plans of response to respond to disasters, such as plans created for the Coastal Impacts Assistance Program;
- Grants to support programs that prepare students for future occupations and careers at K- 20 institutions that have campuses in the disproportionately affected counties. Eligible programs include those that increase students' technology skills and knowledge; encourage industry certifications; provide rigorous, alternative pathways for students to meet high school graduation requirements; strengthen career readiness initiatives; fund high-demand programs of emphasis at the bachelor's and master's level designated by the Board of Governors; and, similar to or the same as talent retention programs created by the Chancellor of the State University System and the Commission of Education; encourage students with interest or aptitude for science, technology, engineering, mathematics, and medical disciplines to pursue postsecondary education at a state university or a Florida College System institution within the disproportionately affected counties;
- Grants to support programs that provide participants in the disproportionately affected counties with transferable, sustainable workforce skills that are not confined to a single employer; and
- Grants to the tourism entity created under s. 288.1226 for the purpose of advertising and promoting tourism and Fresh From Florida, and grants to

promote workforce and infrastructure, on behalf of all of the disproportionately affected counties.

Pursuant to Florida Law, Triumph Gulf Coast, Inc. will provide priority consideration to Applications for projects or programs that:

- Generate maximum estimated economic benefits, based on tools and models not generally employed by economic input-output analyses, including cost-benefit, return-on-investment, or dynamic scoring techniques to determine how the long-term economic growth potential of the disproportionately affected counties may be enhanced by the investment.
- Increase household income in the disproportionately affected counties above national average household income.
- Leverage or further enhance key regional assets, including educational institutions, research facilities, and military bases.
- Partner with local governments to provide funds, infrastructure, land, or other assistance for the project.
- Benefit the environment, in addition to the economy.
- Provide outcome measures.
- Partner with K-20 educational institutions or school districts located within the disproportionately affected counties as of January 1, 2017.
- Are recommended by the board of county commissioners of the county in which the project or program will be located.
- Partner with convention and visitor bureaus, tourist development councils, or chambers of commerce located within the disproportionately affected counties.

Additionally, the Board of Triumph Gulf Coast, Inc. may provide discretionary priority to consideration of Applications for projects and programs that:

- Are considered transformational for the future of the Northwest Florida region.
- May be consummated quickly and efficiently.
- Promote net-new jobs in the private sector with an income above regional average household income.
- Align with Northwest Florida FORWARD, the regional strategic initiative for Northwest Florida economic transformation.
- Create net-new jobs in targeted industries to include: aerospace and defense, financial services/shared services, water transportation, artificial intelligence, cyber security, information technology, manufacturing, and robotics.
- Promote industry cluster impact for unique targeted industries.
- Create net-new jobs with wages above national average wage (*e.g.*, similar to EFI QTI program, measured on graduated scale).
- Are located in Rural Area of Opportunity as defined by the State of Florida (DEO).
- Provide a wider regional impact versus solely local impact.

- Align with other similar programs across the regions for greater regional impact, and not be duplicative of other existing projects or programs.
- Enhance research and innovative technologies in the region.
- Enhance a targeted industry cluster or create a Center of Excellence unique to Northwest Florida.

Create a unique asset in the region that can be leveraged for regional growth of targeted industries.

- Demonstrate long-term financial sustainability following Triumph Gulf Coast, Inc. funding.
- Leverage funding from other government and private entity sources.
- Provide local investment and spending.
- Are supported by more than one governmental entity and/or private sector companies, in particular Proposed Projects or programs supported by more than one county in the region.
- Provide clear performance metrics over duration of project or program.
- Include deliverables-based payment system dependent upon achievement of interim performance metrics.
- Provide capacity building support for regional economic growth.
- Are environmentally conscious and business focused.
- Include Applicant and selected partners/vendors located in Northwest Florida.

Applications will be evaluated and scored based on compliance with the statutory requirements of the Triumph Gulf Coast legislation, including but not limited to the priorities identified therein and the geographic region served by the Proposed Project or program.

Applicant Information

Name of Individual (if applying in individual capacity): Ashton J. Hayward, III, Mayor, on behalf of the City of Pensacola

Name of Entity/Organization: **City of Pensacola, a Florida municipality**

Background of Applicant Individual/Entity/Organization: **The City of Pensacola is a Florida municipality and is the owner and operator of the Pensacola International Airport. Ashton J. Hayward, III, is the Mayor of the City of Pensacola.**

(If additional space is needed, please attach a Word document with your entire answer.)

Federal Employer Identification Number: **59-6000406**

Contact Information:

Primary Contact Information: **Eric Olson**

Title: **City Administrator**

Mailing Address: **Pensacola City Hall
Office of the Mayor
222 West Main Street
Pensacola, Florida 32502**

Phone: **850-435-1696**

Email: **eolson@cityofpensacola.com**

Website: **www.cityofpensacola.com**

Identify any co-applicants, partners, or other entities or organizations that will have a role in the proposed project or program and such partners proposed roles.

**State of Florida, Florida Department of Economic Opportunity, Florida Department of Transportation, Florida West, Escambia County, VT-MAE, Pensacola International Airport, Pensacola State College and the Escambia County school system will each have a substantive role in this project.
(See attached Response #1 for additional information.)**

(If additional space is needed, please attach a Word document with your entire answer.)

Total amount of funding requested from Triumph Gulf Coast: \$56 million. See the detailed budget narrative and analysis for the MRO Aviation Campus presented in attached Response #14.

Has the applicant in the past requested or applied for funds for all or part of the proposed project/program?

☐ Yes ☒ No

If yes, please provide detailed information concerning the prior request for funding, including:

- the date the request/application for funding was made;
 - the source to which the request/application for funding was made,
 - the results of the request/application for funding, and
 - projected or realized results and/or outcomes from prior funding.
-

(If additional space is needed, please attach a Word document with your entire answer.)

Describe the financial status of the applicant and any co-applicants or partners:

The financial status of the City of Pensacola is described in the Comprehensive Annual Financial Report (CAFR), dated February 1, 2018, for the period ending September 30, 2017. According to the Independent Auditors Report, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, in accordance with accounting principles generally accepted in the United States of America.

(If additional space is needed, please attach a Word document with your entire answer.)

In a separate attachment, please provide financial statements or information that details the financial status of the applicant and any co-applicants or partners.

The Comprehensive Annual Financial Report (CAFR) for City of Pensacola for the year ended September 30, 2017 may be found at the following site:

<https://www.cityofpensacola.com/ArchiveCenterViewFile/Item/937>

The Annual Report to Bondholders for the year ended September 30, 2016 may be found at the following site:

<https://www.cityofpensacola.com/ArchiveCenter/View File/Item/840>

Has the applicant or any co-applicants, partners or any associated or affiliated entities or individuals filed for bankruptcy in the last ten (10) years?

☐ Yes ☒ No

If yes, please identify the entity or individual that filed for bankruptcy and the date of filing.

(If additional space is needed, please attach a Word document with your entire answer.)

Eligibility

Pursuant to Section 288.8017, Triumph Gulf Coast, Inc. was created to make awards from available funds to projects or programs that meet the priorities for economic recovery, diversification, and enhancement of the disproportionately affected counties. The disproportionately affected counties are: Bay County, Escambia County, Franklin County, Gulf County, Okaloosa County, Santa Rosa County, Walton County, or Wakulla County. See, Section 288.08012.

1. From the choices below, please check the box that describes the purpose of the proposed project or program (check all that apply):
- ☐ Ad valorem tax rate reduction within disproportionately affected counties;
 - ☐ Local match requirements of s. 288.0655 for projects in the disproportionately affected counties;
 - ☒ Public infrastructure projects for construction, expansion, or maintenance which are shown to enhance economic recovery, diversification, and enhancement of the disproportionately affected counties;
 - ☐ Grants to local governments in the disproportionately affected counties to establish and maintain equipment and trained personnel for local action plans of response to respond to disasters, such as plans created for the Coastal Impacts Assistance Program;
 - ☐ Grants to support programs that prepare students for future occupations and careers at K-20 institutions that have campuses in the disproportionately affected counties. Eligible programs include those that increase students' technology skills and knowledge; encourage industry certifications; provide rigorous, alternative pathways for students to meet high school graduation requirements; strengthen career readiness initiatives; fund high-demand programs of emphasis at the bachelor's and master's level designated by the Board of Governors; and, similar to or the same as talent retention programs created by the Chancellor of the State University System and the Commission of Education, encourage students with interest or aptitude for science, technology, engineering, mathematics, and medical disciplines to pursue postsecondary education at a state university or a Florida College System institution within the disproportionately affected counties;
 - ☐ Grants to support programs that provide participants in the disproportionately affected counties with transferable, sustainable workforce skills that are not confined to a single employer; and
 - ☐ Grants to the tourism entity created under s. 288.1226 for the purpose of advertising and promoting tourism and Fresh From Florida, and grants to promote workforce and infrastructure, on behalf of all of the disproportionately affected counties.

2. Provide the title and a detailed description of the proposed project or program, including the location of the proposed project or program, a detailed description of, and quantitative evidence demonstrating how the proposed project or program will promote economic recovery, diversification, and enhancement of the disproportionately affected counties, a proposed timeline for the proposed project or program, and the disproportionately affected counties that will be impacted by the proposed project or program.

See attached Response #2

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears to be a standard notebook page or a sheet of stationery designed for writing.

3. Explain how the proposed project or program is considered transformational and how it will affect the disproportionately affected counties in the next ten (10) years.

4. Describe data or information available to demonstrate the viability of the proposed project or program.

5. Describe how the impacts to the disproportionately affected counties will be measured long term.

See attached Response #5

(If additional space is needed, please attach a Word document with your entire answer.)

6. Describe how the proposed project or program is sustainable. (Note: Sustainable means how the proposed project or program will remain financially viable and continue to perform in the long-term after Triumph Gulf Coast, Inc. funding.)

See attached Response #6

(If additional space is needed, please attach a Word document with your entire answer.)

7. Describe how the deliverables for the proposed project or program will be measured.

See Response to #5 above

(If additional space is needed, please attach a Word document with your entire answer.)

Priorities

1. Please check the box if the proposed project or program will meet any of the following priorities (check all that apply):
- ☒ [x] Generate maximum estimated economic benefits, based on tools and models not generally employed by economic input-output analyses, including cost-benefit, return-on-investment, or dynamic scoring techniques to determine how the long-term economic growth potential of the disproportionately affected counties may be enhanced by the investment.
 - ☒ [x] Increase household income in the disproportionately affected counties above national average household income.
 - ☒ [x] Leverage or further enhance key regional assets, including educational institutions, research facilities, and military bases.
 - ☒ [x] Partner with local governments to provide funds, infrastructure, land, or other assistance for the project.
 - ☐ [] Benefit the environment, in addition to the economy.
 - ☒ [x] Provide outcome measures.
 - ☒ [x] Partner with K-20 educational institutions or school districts located within the disproportionately affected counties as of January 1, 2017.
 - ☒ [x] Are recommended by the board of county commissioners of the county in which the project or program will be located.
 - ☐ [] Partner with convention and visitor bureaus, tourist development councils, or chambers of commerce located within the disproportionately affected counties.

2. Please explain how the proposed project meets the priorities identified above.

See attached Response #8, wherein each checked box item is addressed in detail.

(If additional space is needed, please attach a Word document with your entire answer.)

3. Please explain how the proposed project or program meets the discretionary priorities identified by the Board.

See attached Response #9

(If additional space is needed, please attach a Word document with your entire answer.)

4. In which of the eight disproportionately affected county/counties is the proposed project or program located? (Circle all that apply)

Escambia Santa Rosa Okaloosa Walton Bay Gulf Franklin Wakulla

5. Was this proposed project or program on a list of proposed projects and programs submitted to Triumph Gulf Coast, Inc., by one (or more) of the eight disproportionately affected Counties as a project and program located within its county?

☒ Yes ☐ No

If yes, list all Counties that apply:

Escambia County

6. Does the Board of County Commissioners for each County listed in response to question 5, above, recommend this project or program to Triumph?

☒ Yes ☐ No

****Please attach proof of recommendation(s) from each County identified.**

See attached minutes from the Escambia County Commissioners board meeting dated December 14, 2017 and April 17, 2018 wherein the proposed project was approved and reconfirmed, respectively.

Approvals and Authority

1. If the Applicant is awarded grant funds based on this proposal, what approvals must be obtained before Applicant can execute an agreement with Triumph Gulf Coast, Inc.?

Approval by Pensacola City Council

(If additional space is needed, please attach a Word document with your entire answer.)

2. If approval of a board, commission, council or other group is needed prior to execution of an agreement between the entity and Triumph Gulf Coast:
 - A. Provide the schedule of upcoming meetings for the group for a period of at least six months.
 - B. State whether that group can hold special meetings, and if so, upon how many days' notice.

See attached Response #10

(If additional space is needed, please attach a Word document with your entire answer.)

3. Describe the timeline for the proposed project or program if an award of funding is approved, including milestones that will be achieved following an award through completion of the proposed project or program.

See attached Response #11

(If additional space is needed, please attach a Word document with your entire answer.)

4. Attach evidence that the undersigned has all necessary authority to execute this proposal on behalf of the entity applying for funding. This evidence may take a variety of forms, including but not limited to: a delegation of authority, citation to relevant laws or codes, policy documents, etc. In addition, please attach any support letters from partners.

The Pensacola City Charter describes the roles and responsibilities of the Mayor and City Council. This proposal is executed by the Mayor of the City of Pensacola in the exercise of his executive authority granted by the Pensacola City Charter. The Pensacola City Charter may be found at: <https://www.cityofpensacola.com/ArchiveCenter/ViewFile/Item/222>

Funding and Budget:

Pursuant to Section 288.8017, awards may not be used to finance 100 percent of any project or program. An awardee may not receive all of the funds available in any given year.

1. Identify the amount of funding sought from Triumph Gulf Coast, Inc. and the time period over which funding is requested.

Total funding requested is \$56 million. See attached Response #14 for a detailed analysis of the budget and request for funding.

(If additional space is needed, please attach a Word document with your entire answer.)

2. What percentage of total program or project costs does the requested award from Triumph Gulf Coast, Inc. represent? (Please note that an award of funding will be for a defined monetary amount and will not be based on percentage of projected project costs.)

The amount of funds requested from Triumph is 17% of the total project cost. See the detailed budget analysis and narrative in attached Response #14.

(If additional space is needed, please attach a Word document with your entire answer.)

3. Please describe the types and number of jobs expected from the proposed project or program and the expected average wage.

See attached Response #12

(If additional space is needed, please attach a Word document with your entire answer.)

4. Does the potential award supplement but not supplant existing funding sources? If yes, describe how the potential award supplements existing funding sources.

☒ Yes ☐ No

See attached Response #13

(If additional space is needed, please attach a Word document with your entire answer.)

5. Please provide a Project/Program Budget. Include all applicable costs and other funding sources available to support the proposal.

See attached Response #14

Project/Program Costs: See the detailed analysis of total project costs in attached Response Number 14. This is a multi-phase project that will occur over the next four (4) years and includes three MRO hangars, warehouse/shop buildings and an administrative headquarters building.

Example Costs (Note: Not exhaustive list of possible Cost categories.)

Construction Reconstruction Design & Engineering

Land Acquisition Land Improvement Equipment Supplies

Salaries Other (specify)

Total Project Costs:

A. Other Project Funding Sources: **See attached Response #14.**

In Millions

\$ ---
\$ _____

\$ _____
\$ _____
\$ _____
\$ _____
\$ _____
\$ _____

Example Funding Sources (Note: Not an exhaustive list of possible Funding Sources.)

City/County _____

Private Sources _____

Other (e.g., grants, etc.) _____

Total Other Funding _____

Total Amount Requested: \$56.0 Million

Note: The total amount requested must equal the difference between the costs in 3A. and the other project funding sources in 3.B.

B. Provide a detailed budget narrative, including the timing and steps necessary to obtain the funding and any other pertinent budget-related information.

See attached Response #14

(If additional space is needed, please attach a Word document with your entire answer.)

APPLICANT UNDERSTANDS THAT THE TRIUMPH GULF COAST, INC. STATUTE REQUIRES THAT THE AWARD CONTRACT MUST INCLUDE PROVISIONS REQUIRING A PERFORMANCE REPORT ON THE CONTRACTED ACTIVITIES, MUST ACCOUNT FOR THE PROPER USE OF FUNDS PROVIDED UNDER THE CONTRACT, AND MUST INCLUDE PROVISIONS FOR RECOVERY OF AWARDS IN THE EVENT THE AWARD WAS BASED UPON FRAUDULENT INFORMATION OR THE AWARDEE IS NOT MEETING THE PERFORMANCE REQUIREMENTS OF THE AWARD.

☒ Yes ☐ No

APPLICANT UNDERSTANDS THAT AWARDEES MUST REGULARLY REPORT TO TRIUMPH GULF COAST, INC. THE EXPENDITURE OF FUNDS AND THE STATUS OF THE PROJECT OR PROGRAM ON A SCHEDULE DETERMINED BY TRIUMPH GULF COAST, INC.

☒ Yes ☐ No

APPLICANT ACKNOWLEDGES THAT APPLICANT AND ANY CO-APPLICANTS WILL MAKE BOOKS AND RECORDS AND OTHER FINANCIAL DATA AVAILABLE TO TRIUMPH GULF COAST, INC. AS NECESSARY TO MEASURE AND CONFIRM PERFORMANCE METRICS AND DELIVERABLES.

☒ Yes ☐ No

APPLICANT ACKNOWLEDGES THAT TRIUMPH GULF COAST, INC. RESERVES THE RIGHT TO REQUEST ADDITIONAL INFORMATION FROM APPLICANT CONCERNING THE PROPOSED PROJECT OR PROGRAM.

☒ Yes ☐ No

ADDENDUM FOR INFRASTRUCTURE PROPOSALS:

1. Program Requirements

- A. Is the infrastructure owned by the public?
☒ Yes ☐ No
- B. Is the infrastructure for public use or does it predominately benefit the public?
☒ Yes ☐ No

(See attached Response #15 for additional explanation.)

- C. Will the public infrastructure improvements be for the exclusive benefit of any single company, corporation or business entity?
- D. ☐ Yes ☒ No

(See attached Response #15 for additional explanation.)

- E. Provide a detailed explanation of how the public infrastructure improvements will connect to a broader economic development vision for the community and benefit additional current and future businesses.

See attached Response #3

(If additional space is needed, please attach a Word document with your entire answer.)

- F. Provide a detailed description of, and quantitative evidence demonstrating how the proposed public infrastructure project will promote:
- o Economic recovery,
 - o Economic Diversification,
 - o Enhancement of the disproportionately affected counties,
 - o Enhancement of a Targeted Industry.

See attached Response #3

(If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

A. Is this project an expansion of existing infrastructure project?

☒ Yes ☐ No

(See attached Response #16 for additional explanation.)

B. Provide the proposed beginning commencement date and number of days required to complete construction of the infrastructure project.

See attached Response #17

(If additional space is needed, please attach a Word document with your entire answer.)

C. What is the location of the public infrastructure? (Provide the road number, if applicable.)

The public infrastructure is located entirely on the grounds of Pensacola International Airport.

(If additional space is needed, please attach a Word document with your entire answer.)

D. Who is responsible for maintenance and upkeep? (Indicate if more than one is applicable.)

The infrastructure will be subject to a real property lease agreement with VT MAE. The lease will be a triple net lease, accordingly VTMAE is responsible for maintenance and upkeep.

(If additional space is needed, please attach a Word document with your entire answer.)

E. What permits are necessary for the infrastructure project?

1. **Stormwater Environmental Resource Permit (ERP) - should be FDEP modification to regional pond, but may need to involve Northwest Florida Water Management District (NFWFMD)**
2. **Building Permit - City of Pensacola**
3. **Water and Sewer Connection Permits - Escambia County Utility Authority**
4. **Driveway Connections/ Traffic Signal(s) - City of Pensacola**

(If additional space is needed, please attach a Word document with your entire answer.)

Detail whether required permits have been secured, and if not, detail the timeline for securing these permits. Additionally, if any required permits are local permits, will these permits be prioritized?

Permits have not been secured. Permitting will occur during the Planning/Design/Specification/Bidding phase of the program that will occur between July 2018 and December 2019 as shown on the proposed timeline for the proposed project included in attached Response #2. The building and Driveway Connection Permits are under the jurisdiction of the City of Pensacola and will be prioritized by the City.

(If additional space is needed, please attach a Word document with your entire answer.)

F. What is the future land use and zoning designation on the proposed site of the Infrastructure improvement, and will the improvements conform to those uses?

The zoning classification for the proposed site is Airport Restriction Zone (ARZ) and the Future Land Use designation is Airport Land Use District. The proposed improvements and uses conform to the current zoning and future land use requirements.

(If additional space is needed, please attach a Word document with your entire answer.)

G. Will an amendment to the local comprehensive plan or a development order be required on the site of the proposed project or on adjacent property to accommodate the infrastructure and potential current or future job creation opportunities? If yes, please detail the timeline

☐ Yes ☒ No

(If additional space is needed, please attach a Word document with your entire answer.)

H. Does this project have a local match amount? If yes, please describe the entity providing the match and the amount.

☒ Yes ☐ No

See attached Response #14 that describes the plan for funding.

(If additional space is needed, please attach a Word document with your entire answer.)

I. Provide any additional information or attachments to be considered for this proposal.

Memorandum of Understanding between VT Mobile Aerospace Engineering, Inc. and City of Pensacola, Florida dated November 14, 2017; VTMAE letter of financial commitment dated March 15, 2018; Haas Center Economic Impact of Proposed Expansion of Pensacola International Airport dated August 31, 2017.

(If additional space is needed, please attach a Word document with your entire answer.)

ADDENDUM NOT APPLICABLE

ADDENDUM FOR WORKFORCE TRAINING PROPOSALS

1. Program Requirements

- A Will this proposal supports programs that prepare students for future occupations and careers at K-20 institutions that have campuses in the disproportionately affected counties? If yes, please identify where the campuses are located and provide details on how the proposed programs will prepare students for future

occupations and at which K-20 institutions that programs will be provided.

☐ Yes ☐ No

(If additional space is needed, please attach a Word document with your entire answer.)

- B. Will the proposed program (check all that apply):

- ☐ Increase students' technology skills and knowledge
☐ Encourage industry certifications
☐ Provide rigorous, alterative pathways for students to meet high school graduation requirements
☐ Strengthen career readiness initiatives
☐ Fund high-demand programs of emphasis at the bachelor's and master's level designated by the Board of Governors
☐ Encourage students with interest or aptitude for science, technology, engineering, mathematics, and medical disciplines to pursue postsecondary education at a state university or a Florida College System institution within the disproportionately affected counties (similar to or the same as talent retention programs created by the Chancellor of the State University System and the Commission on Education)

For each item checked above, describe how the proposed program will achieve these goals

(If additional space is needed, please attach a Word document with your entire answer.)

- C. Will this proposal provide participants in the disproportionately affected counties?
with transferable, sustainable workforce skills but not confined to a single employer? If yes, please provide details.

☐ Yes ☐ No

(If additional space is needed, please attach a Word document with your entire answer.)

- D. Identify the disproportionately affected counties where the proposed programs will operate or provide participants with workforce skills.

(If additional space is needed, please attach a Word document with your entire answer.)

- E. Provide a detailed description of, and quantitative evidence demonstrating how the proposed project or program will promote:
- o Economic recovery,
 - o Economic Diversification,
 - o Enhancement of the disproportionately affected counties,
 - o Enhancement of a Targeted Industry.

(If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

- A. Is this an expansion of an existing training program? Is yes, describe how the proposed program will enhance or improve the existing program and how the proposal program will supplements but not supplant existing funding sources.
- ☐ Yes ☐ No

(If additional space is needed, please attach a Word document with your entire answer.)

- B. Indicate how the training will be delivered (*e.g.*, classroom-based, computer based, other).
- If in-person, identify the location(s) (*e.g.*, city, campus, etc.) where the training will be available.

If computer-based, identify the targeted location(s) (e.g., city, county) where the training will be available.

(If additional space is needed, please attach a Word document with your entire answer.)

- C. Identify the number of anticipated enrolled students and completers.

(If additional space is needed, please attach a Word document with your entire answer.)

- D. Indicate the length of the program (e.g., quarters, semesters, weeks, months, etc.) including anticipated beginning and ending dates.

(If additional space is needed, please attach a Word document with your entire answer.)

- E. Describe the plan to support the sustainability of the proposed program.

(If additional space is needed, please attach a Word document with your entire answer.)

- F. Identify any certifications, degrees, etc. that will result from the completion of the program.

(If additional space is needed, please attach a Word document with your entire answer.)

- G. Does this project have a local match amount? If yes, please describe the entity providing the match and the amount.
☐ Yes ☐ No
-

(If additional space is needed, please attach a Word document with your entire answer.)

- H. Provide any additional information or attachments to be considered for this proposal.
-

(If additional space is needed, please attach a Word document with your entire answer.)

ADDENDUM NOT APPLICABLE

ADDENDUM FOR AD VALOREM TAX RATE REDUCTION:

1. Program Requirements

- A. Describe the property or transaction that will be supported by the ad valorem tax rate reduction.

(If additional space is needed, please attach a Word document with your entire answer.)

- B. Provide a detailed explanation of how the ad valorem tax rate reduction will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

(If additional space is needed, please attach a Word document with your entire answer.)

- C. Provide a detailed description of the quantitative evidence demonstrating how the proposed ad valorem tax reduction will promote:
- o Economic recovery,
 - o Economic Diversification,
 - o Enhancement of the disproportionately affected counties,
 - o Enhancement of a Targeted Industry.

(If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

- A. What is the location of the property or transaction that will be supported by the ad valorem tax rate reduction?

(If additional space is needed, please attach a Word document with your entire answer.)

- B. Detail the current status of the property or transaction that will be supported - by the ad valorem tax rate reduction and provide a detailed description of when and how the ad valorem tax rate reduction will be implemented.

(If additional space is needed, please attach a Word document with your entire answer.)

- C. Does this proposed project have a local match amount? If yes, please describe the entity providing the match and the amount.
[] Yes [] No

(If additional space is needed, please attach a Word document with your entire answer.)

- D. Provide any additional information or attachments to be considered for this proposal.

(If additional space is needed, please attach a Word document with your entire answer.)

ADDENDUM NOT APPLICABLE

**ADDENDUM FOR LOCAL MATCH REQUIREMENTS OF SECTION 288.0655,
FLORIDA STATUTES**

1. Program Requirements

- A. Describe the local match requirements of Section 288.0655 and the underlying project, program or transaction that will be funded by the proposed award.

(If additional space is needed, please attach a Word document with your entire answer.)

- B. Provide a detailed explanation of how the local match requirements and the underlying project or program will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

(If additional space is needed, please attach a Word document with your entire answer.)

- C. Provide a detailed description of, and quantitative evidence demonstrating how the proposed local match requirements will promote:
- o Economic recovery,
 - o Economic Diversification,
 - o Enhancement of the disproportionately affected counties,
 - o Enhancement of a Targeted Industry.

(If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

- A. What is the location of the property or transaction that will be supported by the local match requirements?

(If additional space is needed, please attach a Word document with your entire answer.)

- B. Detail the current status of the property or transaction that will be supported by the local match requirement and provide a detailed description of when and how the local match requirement will be implemented.

(If additional space is needed, please attach a Word document with your entire answer.)

- C. Provide any additional information or attachments to be considered for this proposal.

(If additional space is needed, please attach a Word document with your entire answer.)

ADDENDUM NOT APPLICABLE

ADDENDUM FOR LOCAL ACTION PLAN

1. Program Requirements

- A. Describe how the proposed award will establish and maintain equipment and trained personnel for local action plans of response to respond to disasters.
- B. Describe the type and amount of equipment and trained personnel that will be established or maintained by the proposed award.
- C. Identify the specific local action plans (*e.g.*, Coastal Impacts Assistance Program) that will benefit from the proposed award.
- D. Provide a detailed explanation of how the proposed award will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

(If additional space is needed, please attach a Word document with your entire answer.)

- E. Provide a detailed description of the quantitative evidence demonstrating how the proposed will promote:
 - o Economic recovery,
 - o Economic Diversification,
 - o Enhancement of the disproportionately affected counties,
 - o Enhancement of a Targeted Industry.

(If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

- A. What is the location of the local action program that will be supported by the proposed award?

(If additional space is needed, please attach a Word document with your entire answer.)

- B. Detail the current status of the local action plans (*e.g.*, new plans, existing

plans, etc.) that will be supported by the proposed award and provide a detailed description of when and how the proposed award will be implemented.

(If additional space is needed, please attach a Word document with your entire answer.)

- C. Provide any additional information or attachments to be considered for this proposal.
-
-

(If additional space is needed, please attach a Word document with your entire answer.)

ADDENDUM NOT APPLICABLE

ADDENDUM FOR ADVERTISING/PROMOTION

1. Program Requirements

- A. Is the applicant a tourism entity created under s. 288.1226, Florida Statutes?
☐ Yes ☐ No
- B. Does the applicant advertise and promote tourism and Fresh From Florida? If yes, provide details on how it advertises and promotes tourism and Fresh From Florida.
☐ Yes ☐ No

(If additional space is needed, please attach a Word document with your entire answer.)

- C. Does the proposed award promote workforce and infrastructure on behalf of the disproportionately affected counties? If yes, describe how workforce and infrastructure is promoted on behalf of the disproportionately affected counties.
☐ Yes ☐ No

(If additional space is needed, please attach a Word document with your entire answer.)

- D. Provide a detailed explanation of how the proposed award will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

(If additional space is needed, please attach a Word document with your entire answer.)

- E. Provide a detailed description of the quantitative evidence demonstrating how the proposed will promote:
- o Economic recovery,
 - o Economic Diversification,
 - o Enhancement of the disproportionately affected counties,
 - o Enhancement of a Targeted Industry.

(If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

- A. Describe the advertising and promotion mediums and locations where the advertising and promotion will occur.

(If additional space is needed, please attach a Word document with your entire answer.)

- B. Detail the current status of the advertising and promotion (*e.g.*, new plans, existing plans, etc.) that will be supported by the proposed award and provide a detailed description of when and how the proposed award will be implemented.

(If additional space is needed, please attach a Word document with your entire answer.)

- C. Provide any additional information or attachments to be considered for this proposal.

(If additional space is needed, please attach a Word document with your entire answer.)

I, the undersigned, do hereby certify that I have express authority to sign this proposal on my behalf or on behalf of the above-described entity, organization, or governmental entity:

Name of Applicant: **City of Pensacola, a Florida municipality**

Name and Title of Authorized Representative: **Ashton J. Hayward III, Mayor**

Representative Signature: 

TRIUMPH GULF COAST, INC. TRUST FUND
DETAILED RESPONSES TO QUESTIONNAIRE
UPDATED APPLICATION FOR FUNDS

RESPONSE 1 - APPLICANT INFORMATION

OTHER ENTITIES HAVING A ROLE IN THE PROPOSED PROJECT

The table below shows other entities have a role direct role in the Proposed Project.

Name of Organization	Proposed Role
State of Florida	Funding partner
Florida West	Economic development agency for NW Florida supporting the application
Florida Department of Economic Opportunity	Funding partner
Florida Department of Transportation	Funding partner
Federal - Economic Development Agency	Funding partner
Triumph Gulf Coast, Inc.	Funding partner
Escambia County	Supporting Agency and Funding partner
City of Pensacola	Supporting Agency and Funding partner
VTMAE	Funding partner and primary tenant in the MRO aviation campus
Pensacola International Airport	Proposed project is located on the grounds of Pensacola International Airport. The hangars and buildings to be constructed on approximately 75 acres of land will be leased under a long-term Real Property lease to VTMAE.

Table 1 Other entities having role in the Proposed Project

ESCAMBIA COUNTY SCHOOL SYSTEM PARTICIPATION

In addition to the entities noted above, the local and regional educational institutions will play a vital role in this project. The Escambia County school system, including George Stone Technical Center and Booker T. Washington High School, and Pensacola State College have focused training programs supporting the MRO aviation industry. This project represents a significant future source of employment opportunities that will be available to graduates when they complete their basic curriculum. This project represents the logical conclusion of the “education, training and employment” cycle that will result in the long-term economic diversification and vitality of our region.

VT MOBILE AEROSPACE ENGINEERING, INCORPORATED

Who is VT Mobile Aerospace Engineering, Incorporated (VTMAE)? VTMAE is a wholly owned subsidiary of ST Engineering the world’s largest commercial airframe MRO service provider by man hours for 15 years consecutively. ST Engineering has a Triple AAA credit rating from Moody's Investor Service and Standard & Poor Financial Services. VTMAE is the MRO lessee currently occupying Hangar No. 1 at the Airport. For additional information about VTMAE and their parent corporation, please see the attached ST Engineering 2017 Annual Report.

PENSACOLA AEROSPACE TRAINING ACADEMY

VTMAE will team with its educational partners in the region to provide an advanced level of training through its vision of an Aerospace Training Academy. VTMAE can provide the subject matter expertise for aircraft trade

classes, whether as a consultant in course development or being an instructor. The Training Academy is aimed at preparing and educating high school graduates, transitioning military, and vocational students in the field of aviation maintenance and will supply the needed work force to the industry. Participants in the training academy can obtain their FAA Airframe and/or Powerplant Certificates, start paid apprenticeship programs, and advance to become aircraft master mechanics at the Pensacola Aviation MRO campus within five years.

The plan is for local educational institutions to provide basic airframe and powerplant certificate training. VTMAE will provide advance technology training needed for today's aircraft with complex electronic and digital systems.

The Triumph Board has recognized the importance of developing an educated workforce by virtue of its most recent \$3 million award to the Escambia County School Board. This project offers the pipeline of talented and trained graduates a high paying job with long-term career opportunities. This project also offers our retiring and retired military a post-military service employment opportunity to utilize and build upon existing skills developed during their years of active duty.

RESPONSE 2 – ELIGIBILITY – Q-2 – DETAILED PROJECT DESCRIPTION

TITLE – PROPOSED PROGRAM

The title of the proposed program is “PENSACOLA INTERNATIONAL AIRPORT MRO AVIATION CAMPUS” (MRO Campus). The Program consist of two components. Those components are:

- Hangar No. 1 shown on Figures 1 and 2 below.
- Project Titan (Proposed Project) consisting of the following propose facilities all as shown on Figure 2 below:
 - Hangars No. 2, 3 and 4
 - Warehouses/Shops
 - Administrative Headquarters

LOCATION OF THE PROPOSED PROJECT

The proposed MRO Aviation campus will be situated on approximately 112 acres of land located at the Pensacola International Airport. The City of Pensacola owns the Pensacola International Airport and it is operated as an enterprise department of the City. The land and buildings will be leased to a primary tenant, VTMAE, subject to a long-term Real Property lease to be negotiated in the future. The entire MRO development, including all roadways, taxiways, aprons, hangars and buildings; and all related infrastructure necessary to support this proposed project will be City owned assets of Pensacola International Airport. No part of this Proposed Project will be owned by a private business or enterprise.

DETAILED DESCRIPTION OF THE PROPOSED PROJECT

On November 14, 2017, the City of Pensacola (City) and VT Mobile Aerospace Engineering, Inc. (VTMAE) signed a Memorandum of Understanding (MOU) to expand VTMAE's aircraft maintenance, repair and overhaul (MRO) business operations at the Pensacola International Airport (a copy of the MOU is attached). This comes as VTMAE prepares to begin its initial operations at the airport's new 173,000 sq. ft. MRO hangar in June 2018 (See attached photo of Hangar 1).

PROPOSED PROJECT

The diagram below shows the generalized development plan for the Pensacola International Airport MRO Aviation Campus.



Figure 1 Generalized Development Plan for MRO Aviation Campus

HANGAR 1 - COMPLETED

The photograph below shows the completed Hangar 1 that began operations in June 2018.



Figure 2 Hangar No. 1 on April 30, 2018

MEMORANDUM OF UNDERSTANDING WITH MRO OPERATOR VTMAE

The signing of the MOU is an important first step in negotiations to expand VTMAE's business in Pensacola. A similar MOU signed by the City and VTMAE in December 2013 led to VTMAE's decision to establish its initial MRO business in a newly developed facility owned by the City. That facility, developed at a cost of \$46 million, will provide VTMAE with the infrastructure it needs to create 400 new high-wage jobs. Building on the success of the current VTMAE relationship, this Proposed Project for an MRO Aviation campus as described within the MOU creates an opportunity to add an additional 1,325 high-income jobs for Northwest Florida in the aerospace industry. When combined with the new jobs associated with the first hangar, total Aerospace sector jobs employed directly by VTMAE would be 1,725 (see Table 2 Proposed Project Jobs Summary).

PROJECTED JOBS PRODUCED BY MRO OPERATIONS AT AIRPORT

The table below shows the guaranteed and potential jobs. In addition to the 1,725 new direct VTMAE jobs at the MRO Aviation campus (400 for Hangar 1 and 1,325 for this project), as a result of the critical mass created by these activities, other full time equivalent jobs directly related to the Aerospace industry will be located at the Pensacola International Airport. These include approximately 77 VTMAE administrative and engineering staff, 60 full time (VTMAE customers) airline engineering jobs on site to oversee the repair and maintenance protocols associated with their aircraft, approximately 10 vendor employees on site, approximately 3 FAA auditors and approximately 3 auditors. In addition, there will be non-aerospace jobs created associated with security, maintenance and janitorial services, estimated to be approximately another 25 full time jobs. Also, currently under discussion is establishing approximately 63 North America executive and senior administrative jobs at the Airport.

	VTMAE-Aircraft Maintenance Technicians	VTMAE Administrative and Engineering	VTMAE North America Executive Office Functions	Airlines/FAA/Auditors/Vendors/others	Total
Summary of Jobs	Contractual	Derivative	Under Discussion	Derivative	
Guarantees					
Hangar No. 1	400				400
Project Titan-Aircraft Maintenance	1,325				1,325
Administration/Engineering		77			77
North America Executive/shared services functions			63		63
Airline engineering staff				60	60
Auditors				3	3
FAA Staff				3	3
Vendors				10	10
Total	1,725	77	63	76	1,941

Table 2 Proposed Project Jobs Summary

Further, in support of these MRO activities, VTMAE will spend approximately \$35 million annually in the procurement of airplane and non-airplane components from approximately 1,200 vendors supporting the business. This supply chain activity will undoubtedly create enhanced economic activities in the region and inevitably may lead to the permanent relocation of key suppliers into the region, further building the critical mass in the aerospace industry for the northwest Florida region.

In summary, the MRO aviation campus will result in the employment of over 1,900 jobs directly related to the aerospace industry. As a result of these direct jobs and as indicated in the Haas Center report attached herein, another 3,400 indirect jobs in various industries will also be created.

MRO CAMPUS TECHNICAL CAPABILITIES:

As envisioned, the proposed expansion project would include three additional hangars (one hangar at 173,000 sq. ft. and two additional hangars at 191,000 sq. ft. each), 100,000 sq. ft. of warehouse and shop space, 120,000 sq. ft. administrative office building, and all adjacent roadways, taxiways, aprons and infrastructure to support the development. The Pensacola MRO Campus would accommodate eight wide-body and twelve narrow-body aircraft. VTMAE is a world-class aircraft maintenance, repair and overhaul (MRO) organization fully certified by the US Federal Aviation Administration (FAA air agency certificate number AR013L) as a Class 4 repair station. They

would offer comprehensive aircraft maintenance and modification (AMM) services to an extensive range of airframe types, ensuring safe and reliable aircraft operation at all times.

They would have the tooling, equipment, training, support shops and experience to perform all levels of checks and maintenance for the following aircraft types:

- Boeing
- Boeing 737
- Boeing 747
- Boeing 757
- Boeing 767
- Boeing 777
- DC-10
- MD-10/11
- Airbus
- Airbus A300/310
- Airbus A320 Family
- Airbus A330
- Airbus A340

At the Pensacola MRO Campus they would have the capability and experience to perform heavy C and D checks, and in-house capabilities for detailed aircraft inspections, damage assessments and all major non-destructive inspection methods.

The structural capabilities and VTMAE's superb track record in performing major structural repairs and modifications -- such as winglet installation, pylon modification, floor beams repair, corrosion control, wing and fuselage skins replacement, and reconstruction of damaged structures -- are well recognized in the industry.

They would maintain a comprehensive suite of support shops to enhance maintenance services at the Pensacola MRO Campus. These support shops would perform services, repairs and fabrication of:

- Machined parts
- Composite structures
- Aircraft floorboards and cabin items
- Tubing and hoses
- Electrical wire harnesses
- Jigs and fixtures
- Welded sub-assemblies and parts
- Fuel cells
- Heat Treat Services
- NDT Services

AIRCRAFT MODIFICATIONS

The Pensacola MRO Campus would have the unique ability to design and develop engineering solutions and then perform the modifications in Pensacola MRO Campus facilities. These may range from simple modifications such as refreshing the aircraft cabin or upgrading the in-flight entertainment system to complex passenger-to-freighter conversions.

Aircraft modification services include the following:

- Developing the statement of work with the customer.
- Submission of a certification plan.
- Designing the modifications to the airframe, and entire aircraft and avionics systems to accept the new cargo door and cargo handling systems.
- Producing the detailed engineering drawings, and modification work cards.
- Preparing detailed parts manufacturing drawings
- Working with partners and suppliers to develop and manufacture tooling and the modification kits.
- Performing the substantiation analysis for structural loads, stress (inclusive of finite element modeling), damage tolerance, payloads, electrical loads, egress and safety, cooling, smoke evacuation, and aerodynamics.
- Planning, performing and conforming the prototype modification.
- Conducting ground and flight testing of the prototype.
- Producing technical supplements.
- Integrating fleet standardization upgrades.

VTMAE has been successful in the US over the past 28 years because airline customers have the added assurance that they will be available support designs and modifications for the life of the design, being a financially stable MRO with the backing of a large, world-wide parent company.

VTMAE is ISO 9001:2015 compliant as certified by Det Norske Veritas (DNV) Management System. The ISO 9000 family of standards relate to quality management systems and are designed to help organizations ensure they meet the needs of customers and other stakeholders.

As can be seen from the above MRO technical capabilities, the employees who will be employed by VTMAE will be very well trained and technologically on the cutting edge of the aerospace industry. The skill set they will acquire and maintain will support a high paying job and a long-term career.

In addition to VTMAE as the primary tenant, much of the city-owned infrastructure being developed will have multiple users. For example, within the MRO hangars, a training center will be established for use by a secondary education provider to offer aviation maintenance technology programs to prepare students for a career in the commercial aviation industry (See MOU Article 2.4(b)). Also, administrative offices are being developed for use by the Federal Aviation Administration representatives and airline representatives (i.e. Delta, American, UPS, etc.) to be on site while their aircraft are being overhauled. Further, all of the common usage aprons and taxiways will be utilized by general airfield traffic (all airlines and other aircraft operators).

Provided that funding and lease terms can be successfully negotiated in the coming months, design work on the new facilities could begin in mid-2018 and construction of a second hangar could begin in early 2019. Design and construction of the other MRO campus facilities could conceivably be completed by the end of 2021.

QUANTITATIVE EVIDENCE OF HOW THE PROPOSED PROJECT WILL PROMOTE ECONOMIC RECOVERY, DIVERSIFICATION AND ENHANCEMENT OF THE DISPROPORTIONATELY AFFECTED COUNTIES

There are multiple quantitative measures that promote economic recovery and diversification. Upon full implementation, the total economic benefits to be realized to the region are as follows:

- The direct new jobs commitment by VTMAE for Aerospace industry sector jobs specifically associated with this request are 1,325 (See MOU Article 2.4(c)) and total indirect new jobs will increase by over 3,400 (See Haas Center report).
- The average wage associated with the direct new jobs is \$44,461, not including fringe benefits (See MOU Article 2.4(c)).
- Based on the above, total annual payroll to NW Floridians will be \$58.9 million associated with the Proposed Project.
- When combined with the new jobs already created associated with the development of Hangar 1 (not part of the Proposed Project), total new Aerospace industry sector jobs will be 1,725, total annual payrolls will be approximately \$69.0 million.
- Upon full operation, personal net incomes in the state of Florida will increase by \$400 million annually.
- Upon full operation, GDP in the state of Florida will increase by \$600 million annually.
- The Proposed Project will create an additional \$210 million of publicly owned assets dedicated to the Aerospace industry sector, all subject to a long-term lease with a Triple AAA (Moody 's and Standard & Poor) rated tenant.

PROPOSED TIMELINE FOR THE PROPOSED PROJECT:

The following is the anticipated timeline for the planning and construction of the Aviation MRO Campus. As the project would occur over a 4-year time period, the request for Triumph funds mirrors the construction schedule. The timeline below represents a four-year strategy to develop the MRO Campus.

Proposed MRO Campus Development Schedule Pensacola Commercial Aviation Center Pensacola International Airport																																																												
Task	2018												2019												2020												2021												2022											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D												
Hangar No. 2																																																												
Plans and Specification Preparation																																																												
Construction																																																												
Prerequisites for Hangar 3, 4, Support Facilities																																																												
Environmental Assessment																																																												
Plans and Specification																																																												
Hangar No. 3 Construction																																																												
Hangar No. 4 Construction																																																												
Administrative Building Construction																																																												
Warehousing and Shops Construction																																																												

Table 3 Proposed Project Timeline

The following is the project schedule in terms of dates.

Hangar 2

- Plans/Specifications/Bidding -August 2018 to May 2019
- Construction - June 2019 to November 2020

Hangars 3 and 4, Support Facilities and Administration Building

- Environmental-August 2018 to May 2019
- Plans/Specifications/Bidding- August 2018 to January 2020
- Construction Hangar 3 - February 2020 to August 2021
- Construction Hangar 4- June 2020 to January 2022
- Construction Administration Building - February 2019 to August 2020
- Construction Warehousing/Shops/Support Facilities - April 2019 to October 2020

DISPROPORTIONATELY COUNTIES AFFECTED BY PROPOSED PROJECT

The scale of this project will provide significant economic benefit and diversification across the entire region of NW Florida. Because of the critical mass associated with the levels of employment, all the counties in the region will enjoy increased levels of personal incomes, gross domestic product and growth. Further, members in the surrounding military bases (NAS, Eglin, Hurlbert) will be able to have future job opportunities in their community as a result of this project.

This Proposed Project will be located at the Pensacola International Airport which is located within Escambia County. Consequently, it is expected that Escambia County and the immediately proximate counties of Okaloosa County and Santa Rosa County will be most significantly impacted by this project. However due to the large scale of the project and both the direct and indirect jobs created as a result of this expansion of the Aerospace sector, all of NW Florida and the state of Florida will be favorably impacted.

RESPONSE 3— ELIGIBILITY – Q-3 – Transformational

HOW IS THE PROPOSED PROJECT TRANSFORMATIONAL OVER THE NEXT 10 YEARS

Transformation #1 – Highly skilled and technology focused workforce

This project will result in the employment of over 1,900 workers (See Table 2 Proposed Project Jobs Summary) dedicated to the aviation and aerospace industry. As such, VTMAE will be among the top 5 employers in this region. As a result of this project, the community will be able to expand and leverage its educational resources, create employment opportunities for lower income and minority populations and create a pathway to the middle class for many who would not otherwise have this type of opportunity.

Upon completion of the MRO Aviation Campus, these facilities will be the 2nd largest MRO complex in North America, but more importantly will be #1 in North America for technical sophistication and smart technologies. In day-to-day operations, VT engineers, technicians, and mechanics will use the following next generation technology:

- All work is electronic
- Laser scan technology to fabricate parts
- 3D printing to fabricate parts
- Drones for remote aircraft inspection
- New age technology
- Composites — move forward out of legacy aircraft. A321 – A320 evolve into composites
- VT recently acquired a robotics company and has said it is looking to incorporate its technology into their operations at the Pensacola MRO Campus.

With the evolution of the aerospace industry to these new technologies, the employees of VTMAE will be among the most highly skilled in the industry and will be in great demand. This reputation for being a technological leader in the MRO industry will be a magnet for future talent.

Transformation #2 – Regional economic growth

The ability to create an industry cluster and critical mass in the Aviation and Aerospace sector will elevate the region; and NW Florida will become a magnet for talent and will attract other business enterprises to the region. The economic benefit of this project made possible by the investment of Triumph funds will provide the maximum economic value, a high ROR on the investment of invested dollars and outstanding leverage on the use of those funds. This leverage is demonstrated not only by the fact that the Triumph investment represents approximately 17% of the overall project costs, but that the increase in personal incomes and statewide GDP creates a significant return annually for decades to come.

Prior to the execution of the MOU, the City engaged the Haas Center to conduct a preliminary economic impact study on the basis of a proposed MRO Aviation campus resulting in 1,200 new direct jobs (See attached *Economic Impact of Proposed Expansion of Pensacola International Airport*, dated August 31, 2017). The new jobs number has subsequently been increased to 1,325 as described in the MOU (Article 2.4(c)). Based on the findings of the Haas Center, there are several measures and outcomes that reflect the transformational nature of this project to the NW Florida region. The results are conservative as they are based on 1,200 rather than 1,325 new jobs.

The Haas Center report shows that a nationally recognized MRO aviation campus would attract additional aviation industry businesses to Northwest Florida and significantly diversify the regional economy. In addition to the 1,325 direct new jobs, the planned expansion project would create up to 3,400 indirect new jobs in the state of Florida. Further, this would increase statewide personal net income by \$400 million **per year** and increase the state's GDP by \$600 million **per year**. Florida is consistently ranked as one of the top states in the country for Aerospace industry attractiveness. The addition of an MRO Aviation Campus to the already robust tourism, military and financial services sectors of the regional economy will further strengthen Northwest Florida's economic resiliency and solidify Florida's reputation as a leader in meeting the growing demand for aviation services. This project creates a Center of Excellence in the MRO industry, which is consistent with the state of Florida and Northwest Florida FORWARD's growth strategy for the Aviation and Aerospace industry sector.

Transformation #3 – Regional Economic Diversification

This project firmly establishes an Aerospace and Aviation industry sector in the regional economy and will diversify economic activity in the region. Significant MRO activity adds an additional dimension to the regional economy that complements the emerging sectors of Clean Energy Wind Turbines (200 jobs), Cyber Security (140 jobs), Financial Services (6,200 jobs), MRO activity at the Airport (1,725 jobs), Tourism and Military/Government activity. Continuing investment in infrastructure along with an existing and future highly trained workforce paves the way for successful economic enhancement of the targeted aviation/aerospace industry. According to the 2014 Military Transitioning Study completed by UWF Haas Center, relevant skills are essential to continue to attract aviation investment in NAICS Targeted Industry Sectors. Specifically, this investment supports a growth strategy over the next four years to increase the number of jobs by 1,325 in Aircraft Maintenance, Modification (NAICS Code 336411, \$44,720), Support Engineering, Materials Fabrication (NAICS Code 336411, \$27,700) and Administration (NAICS Code 551114, \$70,833).

Transformation #4 – Critical Mass for The Region in A Strategic, Targeted Industry

The Proposed Project together with the MRO facilities recently completed creates a critical mass of MRO activity in Northwest Florida that will enhance the ability of the region to attract additional aviation and aerospace business opportunities. An expanded MRO industry not only creates new direct economic activity but

also generates indirect activity in terms of construction jobs, supply chain providers, service providers and customers located at the Airport and the surrounding area, providing jobs and economic activity at a series of levels to grow the regional economy. As this project spans a construction timeline of 4 years, significant economic stimulus is realized by the construction activity alone and is in addition to the favorable economic impacts noted previously.

In addition to regional economic diversification and the creation of high-quality new jobs, an MRO campus further leverages the expanding Aviation and MRO industry opportunities along entire Gulf Coast. Through this project, the region will participate in the projected global growth of the MRO industry, expected to grow from total gross revenues of \$75.6 billion in 2017 to an estimated \$109.2 billion in 2027.

Transformation #5 – VTMAE’s Role as A Community Leader and Good Corporate Citizen

Based on prior history, VTMAE will be a leader in the NW Florida community. If past experience may serve as an indicator of future performance, VTMAE will be a civic leader. Following are some of their current affiliations and activities:

Affiliations

- Aeronautical Repair Station Association
- Partners in Education Program
- American Cancer Society
- St. Jude Children’s Cancer Research Hospital
- Breast Cancer Eradication
- Chamber of Commerce
- Local schools, church and civic groups
- American Heart Association
- Statewide Economic Development Partnership (as a stakeholder)

Events sponsored

- Suitcase Soiree for Charity
- Annual Chili Cook Off for American Cancer Society
- Pink Ribbon Golf Tournament
- Annual Worlds of Opportunity events for Middle School Students
- Annual St. Jude Classic Golf Tournament
- Annual 5K on the Runway
- STEM Initiatives
- Annual Military Appreciation Luncheon
- American Red Cross blood drives
- Statewide Toy Drives

Transformation #6 – Quality of Life

It is not difficult to imagine the long-term and positive impacts this project will have on our region and communities. The ability to enhance and leverage our educational system, develop training programs in targeted industries, create employment opportunities for our veterans, diversify our economy, create a targeted industry cluster and increase personal incomes of our citizen will enhance the quality of life for all. It is said that a rising tide lifts all boats, and this project is a prime example of the way our region and communities will be uplifted.

This project is truly *transformational* as it creates thousands of direct and indirect new jobs where none previously existed. The positive impact will span generations and will forever change and enrich NW Florida.

Transformation #7 – Enhanced Airport Air Service and Economic Impact of the Airport on Northwest Florida

The volume of airline activity at the Airport directly drives financial performance for the Airport and economic impact on the region. Air service development as the critical component of the efforts to expand regional tourism and economic development. Having an MRO at the Airport is an economic and operational asset that could be leveraged by the region to attract new and retain existing air service.

VT MAE is a globally recognized leader in the MRO sector. Its presence in a major MRO campus at the Airport, will over time, bring with it the benefit of a greater recognition of the Northwest Florida market by VT MAE's airline customers and airline industry in North American and around the globe. As the air service development efforts are geared to sell the regional economy and its potential to the airlines. The recognition created by VT MAE's presence in a major MRO campus in Northwest Florida will serve to bolster the on-going efforts to expand the reach of the Airport's brand within the airline industry.

Airlines seek to operate at airports in the most efficient manner. Having a major MRO campus at the Airport offers an added level of convenience for the airlines not available at most other airports. Airlines will integrate additional air service to the Airport to take advantage of VT MAE's major MRO campus to rotate aircraft to and from the MRO servicing in revenue service thus avoiding "dead heading" aircraft at substantial additional airline cost.

Another key aspect of an airport's air service development program is managing the marketing efforts around the airlines' cost to operate at its facilities. An airport that does not have a competitive airline cost structure is at a great disadvantage when it seeks to retain and attract new air service. VT MAE will contribute to the airport's non-aeronautical revenue base through rents and fees and stimulation of airline activity. These revenues under the Airport's airline use and lease agreement will help to keep the cost per enplanement (a key airline industry metric) very competitive at the Airport.

The complete buildout of MRO facilities at the Airport will result in increased air service, an increase in Passenger Facility Charge revenue, a contribution to non-aeronautical revenue base, and a reduction in the overall cost per enplaned passenger.

Increased numbers of aircraft operating at the Airport will increase the amount of airline landed weight that is the basis of charging landing fees. Landing fees are a basic charge for the use of the Airport's airfield. The chart below shows that with a major MRO campus at the Airport airline landing weights are projected to increase from 1,056,000 (one-thousand-pound units) in FY 2018 to 1,298,000 (one-thousand-pound units) FY 2025. Also, the chart shows that without a major MRO campus at the Airport airline landing weights are projected to range from 1,056,000 (one-thousand-pound units) in FY 2018 to 1,203,000 in FY 2025.

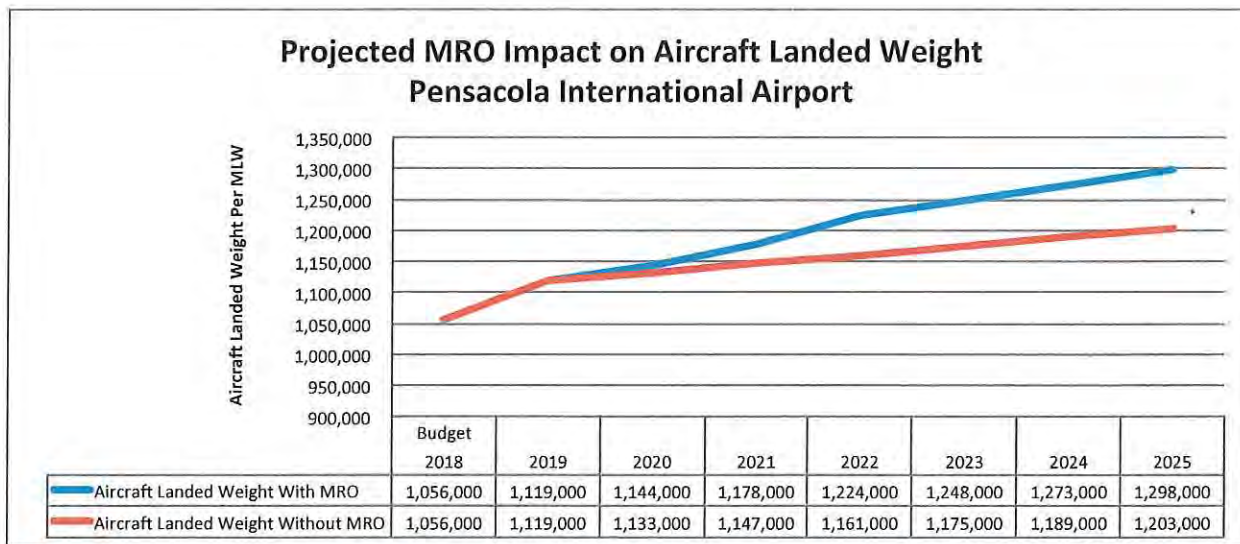


Table 4 Airport Airline Landed Weight projections with and without the Proposed Project

The City foresees that the presence of a major MRO campus will attract additional air service and passengers over the years. The chart below shows the projected number of enplaned passengers at the Airport with and without a major MRO campus. The chart shows the City's projections of enplaning passengers with a major MRO campus increasing from 829,000 in FY 2018 to 971,000 in FY 2025. Also, the chart shows the City's projections of enplaning passengers without a major MRO campus increasing from 829,000 in FY 2018 to 911,000 in FY 2025.

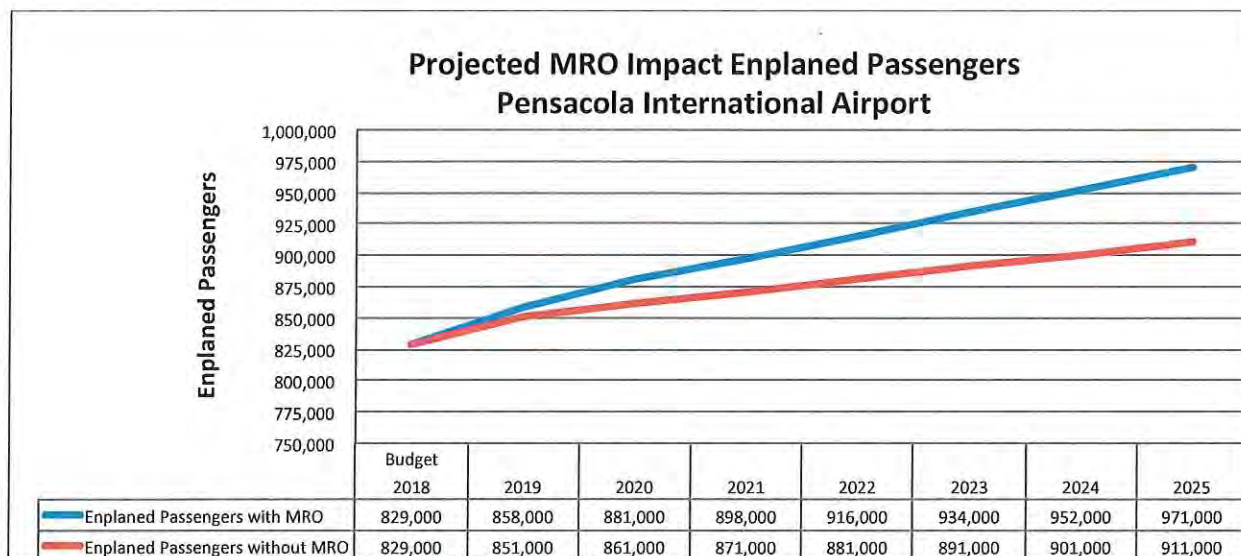


Table 5 Airport Enplaned Passenger projections with and without the Proposed Project

The Federal Aviation Administration has authorized the City to collect a Passenger Facility Charge (PFC) at the Airport to pay for certain Federally approved capital projects. The PFC, paid by passengers, is \$4.50 for every enplaned passenger at the Airport. Airports must use the money from the fees to pay for projects approved by the Federal Aviation Administration that, according to the FAA, enhance safety, security, or capacity; reduce noise; or increase air carrier competition. The PFC funded portions of airport improvements cannot be included in rents, fees, and charges paid by the airlines.

The stimulation of the Airport traffic driven by the presences of a major MRO campus, as shown above, is projected to increase the number of passengers enplaned at the Airport. This in turn will increase the amount of PFC revenues received by the Airport for FAA approved capital improvements. As shown on the chart below, with a major MRO campus at the Airport, PFC proceeds are projected to increase from \$3,312,000 in FY 2018 to \$3,878,000 in FY

2025. Without a major MRO campus PFC proceeds are projected to increase from \$3,312,000 in FY 2018 to \$3,640,000 in FY 2025. This additional PFC revenue would, with a major MRO campus, permit the City to finance approximately \$2.4 million in additional FAA approve Airport projects at no additional capital cost to the Airport’s airlines or other users. This improves the Airport’s national competitiveness.

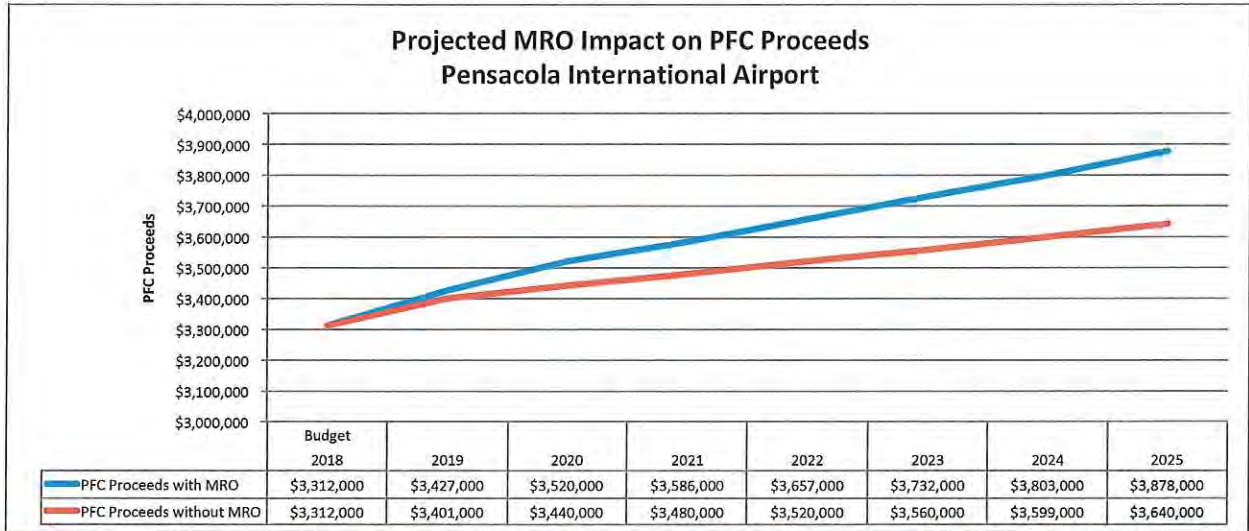


Table 6 Airport Passenger Facility Charges projections with and without the Proposed Project

Airline average cost per enplaned passenger (CPE) is a basic metric used by airlines to assess the operational efficiency and the competitiveness of airports. The CPE is calculated by totaling all airport rents, fees, and charges and dividing this total by all enplaned passengers at an airport of a defined fiscal period. In the airline industry, it is assumed, the lower the CPE the more efficient and competitive the airport, resulting in a greater opportunity for airline profitability at that airport compared with another airport with a higher CPE. The City is projecting that the stimulation that a major MRO campus will generate will impact the Airport’s CPE.

The chart below shows the projected impact on the Airport’s CPE with and without a major MRO campus at the Airport. The chart shows without a major MRO campus at the Airport the airline CPE would range from \$6.84 in FY 2018 to \$7.30 in FY 2025. With a major MRO campus at the Airport, the chart show, the airline CPE would decrease from \$6.48 in FY 2018 to \$5.49 in FY 2025. The information on this chart shows that the airlines would be about \$1.4 million more profitable at the Airport with a major MRO campus at the Airport. Airline profitability drives airlines decisions to both sustain current levels of air service and to add service to an airport.

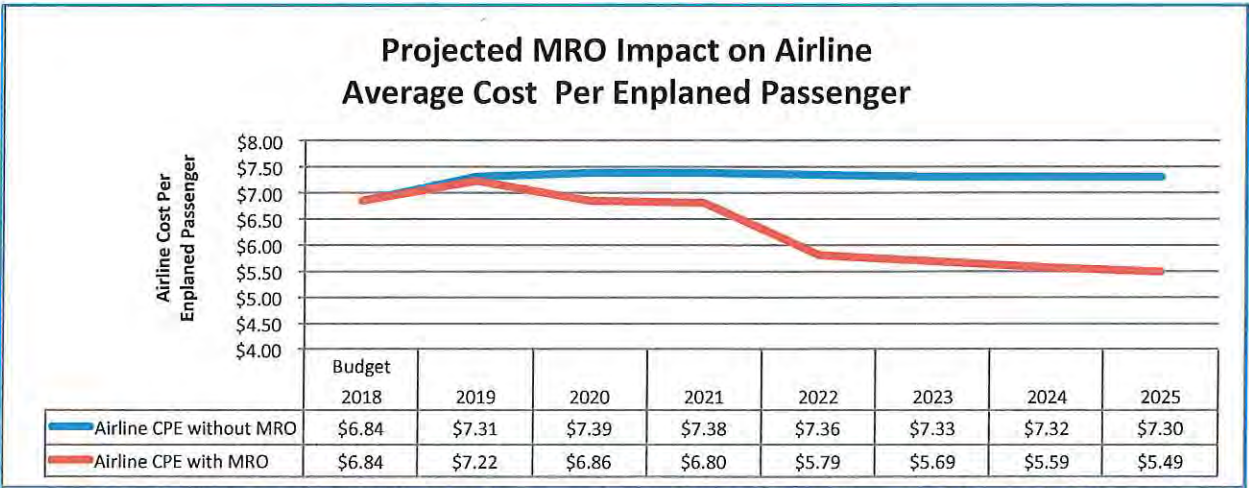


Table 7 Airport Airline cost per enplaned passenger projections with and without the Proposed Project

RESPONSE 4 - ELIGIBILITY – Q-4 – Demonstrate Viability

DESCRIBE DATA OR INFORMATION TO DEMONSTRATE VIABILITY OF THE PROPOSED PROJECT

The project is viable as the City and VTMAE have previously negotiated and executed a Real Property lease and construction is complete on the first MRO hangar as part of the MRO Aviation campus. This new hangar will create 400 new jobs for citizens in NW Florida, but is the first phase in the greater project, which is the development of the MRO Aviation Campus. The City and VTMAE have entered into a new MOU that outlines the future intentions of both parties to continue with the further expansion and development of the MRO Aviation campus as described in this Application. The following data describes the financial viability of the Proposed Project at full implementation, and reflects the key economic indicators and impact of terms agreed to in the MOU:

- a. 1,325 direct new **MRO** jobs (per MOU)
- b. 3,400 indirect new jobs, other industries (per Haas Center report)
- c. \$210,000,000 value in City owned infrastructure dedicated to the Aerospace industry
- d. \$58,900,000 direct annual payroll
- e. \$44,461 average annual salary, without benefits (per MOU).
- f. Approximately \$1,500,000 annual rent for real property lease (based on Hangar 1 lease terms)
- g. \$400,000,000 annual personal net incomes increase (per Haas Center) \$600,000,000 annual statewide GDP increase (per Haas Center)

RESPONSE 5 – ELIGIBILITY – Q-5 – Measured Long Term IMPACTS

HOW IMPACTS WILL BE MEASURED LONG TERM

The primary deliverable from the Proposed Project is the creation of new direct jobs at the agreed-to average annual compensation. It is anticipated that the real property lease between the City and VTMAE, as well as agreements with funding partners, will have terms and conditions that will require VTMAE to demonstrate it has met its obligations regarding minimum job and salary levels. Similar agreements were documented in funding commitments for the development of Hangar 1 currently under construction; and will serve as a guideline to measure outcomes and determine "clawbacks" if performance measures are not achieved for the current Proposed Project.

RESPONSE 6 – ELIGIBILITY – Q-6 – SUSTAINABILITY

HOW THE PROPOSED PROJECT IS SUSTAINABLE:

The Proposed Project will result in the construction of \$210,000,000 of new city owned Airport infrastructure including hangars, support buildings, an administrative building and adjacent roadways, taxiways, aprons and site improvements. This is in addition to the over \$46 million infrastructure for the construction of Hangar 1 just completed. These facilities together represent the MRO Aviation Campus and will be leased to VTMAE under a Master development agreement that defines the rights and responsibilities of each party for the entire site development. The underlying leases will be long term leases for each separate facility and will be modeled upon the Real Property Lease Agreement executed between City and VTMAE for Hangar 1. VTMAE is the subsidiary of ST Aerospace, which is the largest global provider of MRO services. Upon completion, VTMAE

will have invested approximately \$75 million of its own funds to create what will be one of the largest MRO facilities in North America.

The project is sustainable because the MRO business is a growing and technologically expanding industry. The anticipated global expansion of the MRO industry is expected to grow from total gross revenues of \$75.6 billion in 2017 to an estimated \$109.2 billion in 2027. As the leader in this industry, ST Aerospace and its subsidiary VTMAE will likely experience a similar growth pattern in the future. Based on the quality of the primary tenant and the expected growth and sustainability of the MRO industry, it is reasonable to expect this project will have long-term financial viability and sustainability.

Furthermore, the state-of-the-art facilities to be developed in the MRO Aviation campus will enable VTMAE to efficiently implement "Smart MRO" technologies as described below. This will further solidify their global industry leadership and long-term sustainability. This Smart MRO technology, such as robotics, aerial inspection and data connectivity to enhance workplace safety, productivity and quality of solutions adds value to their customers and enhances the technical skills of their employees.

The following are a few of the elements that make up "'Smart MRO" technologies:

Digitized Work Flow — Using paperless processes, tasks are assigned, approved and monitored online.

Virtual Warehouse — Spare parts are 3D printed and assembled on site to shorten turnaround time and reduce warehousing and logistics costs.

Wearable Connectivity — Augmented Reality (AR) glasses provide technicians with visual cues for each task and provide remote connectivity support while wrist-worn devices track the activities in real-time.

Robotics — Drones equipped with 3D-Scanners and HD Cameras inspect the aircraft fuselage for defects. UGVs transport inventory from Automated Storage and Retrieval System (ASRS) for Just-In-Time (JIT) servicing.

Automated Toolcribs — Tools are inspected to be serviceable before being pre-packed in toolboxes according to the work cards.

SMART Hangar —Biometric iris scanner in AR glasses automatically clock technicians work schedules. Sensors within the hangar provide round-the-clock security. Data analytics is used to understand the information collected from the sensors, bots and other devices to optimize workflow and recommend predictive maintenance for aircraft.

RESPONSE 7 – ELIGIBILITY – Q-7 – DELIVERABLES MEASURED

HOW DELIVERABLES WILL BE MEASURED

See Response #5 above. City will have the primary responsibility to verify that the deliverables (stated jobs at a stated average salary level) are being realized on an annual basis.

RESPONSE 8 – PRIORITIES – Q -1 & 2 – MEETING PRIORITIES

The following are the response for each check box in Priorities question no.1.

GENERATE MAXIMUM ESTIMATED ECONOMIC BENEFIT

- a. 1,325 direct new MRO jobs (per MOU)
- b. 3,400 indirect new jobs, other industries (per Haas Center report)
- c. \$210 million value in City owned infrastructure dedicated to the Aerospace industry
- d. \$58.9 million direct annual payroll
- e. \$44,461 average annual salary, without benefits (per MOU)
- f. Approximately \$1,500,00 annual rent for real property lease (based on Hangar I lease terms)
- g. \$400 million **annual** personal net incomes increase (per Haas Center)
- h. \$600 million **annual** statewide GDP increase (per Haas Center)

INCREASE HOUSEHOLD INCOME ABOVE NATIONAL AVERAGES

The initial commitment is to provide 1,325 new direct jobs at an average annual salary of \$44,461 plus benefits.

LEVERAGE OR FURTHER ENHANCE KEY REGIONAL ASSETS, INCLUDING EDUCATIONAL INSTITUTIONS, RESEARCH FACILITIES, AND MILITARY BASES

The Proposed Project leverages existing real estate at Pensacola International Airport that has been consolidated over time to create a commerce park with the intention of it becoming an income-producing asset focused in the aerospace industry. This project is the culmination of a long-term land use plan and converts approximately 112 acres of unused land to income producing assets that will generate approximately \$1.50 million per year annual ground rent to the Airport. By creating this income source, the Airport will be able to effectively manage user fees that make the Airport more competitive, potentially creating lower fares, more routes and greater air service choices for the citizens of NW Florida.

The Proposed Project leverages and enhances existing workforce development programs through Washington High School (Aviation Maintenance Academy), George Stone Technical Center (Airframe & Power plant Technology) and Pensacola State College certification programs. It would be expected that each of these educational institutions will expand their programs and capabilities to respond to the increasing workforce development demands. In addition, this Proposed Project will assist in transitioning veteran military personnel to commercial aviation and aerospace jobs. As noted previously, a near-term strategic vision is the collaboration between VTMAE and local education providers to create an MRO Aviation Training Academy to develop the workforce needed to man the available jobs and to maintain a pipeline of trained technicians for the future.

PARTNER WITH LOCAL GOVERNMENTS TO PROVIDE FUNDS, INFRASTRUCTURE, LAND, OR OTHER ASSISTANCE FOR THE PROJECT

As mentioned above, the Pensacola International Airport is providing the land that will be used for the Proposed Project. In addition, the State of Florida, City of Pensacola, Escambia County, the Florida Department of Transportation, the Governor's Jobs Growth Grant Fund and the Federal Economic Development Administration are expected to provide funding to support the project. Also, VTMAE will make a substantial investment to support the Proposed Project.

PROVIDE OUTCOME MEASURES

The Proposed Project has a significant number of outcome measures that have been described previously in this document. Among the most significant are 1,325 new direct jobs in the Aerospace industry, 3,400 indirect new jobs in other related industries, \$210 million in publicly owned infrastructure developed for an MRO Aviation

campus, \$400 million increase in personal net incomes and \$600 million increase in Florida GDP, all as a result of the Proposed Project.

RECOMMENDED BY THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY IN WHICH THE PROJECT OR PROGRAM WILL BE LOCATED

The Escambia County Board of County Commissioners approved forwarding the City's pre-application submission to the Triumph board during its meeting held on December 14, 2017 and re-confirmed its support during its meeting held April 17, 2018. A copy of the Board minutes is attached.

RESPONSE 9 – PRIORITIES – Q-3 – MEETS IDENTIFIED PRIORITIES

HOW THE PROPOSED PROJECT OR PROGRAM MEETS THE DISCRETIONARY PRIORITIES IDENTIFIED BY THE BOARD

As described in previous responses within this document, the Proposed Project is transformational to the region of NW Florida and in fact to the state of Florida. Through the development of the Proposed Project, an Aerospace industry is created. The creation of this targeted industry results in economic diversification and stability. Most importantly, this new industry results in long-term high quality, high paying jobs that will solidify the region's economic recovery and assure a better quality of life (See Response #3 above).

As there is already an existing MOU between the City and VTMAE, both parties stand ready to commence negotiations to formalize their intentions as outlined in the MOU. In connection with the development of Hangar 1, the City and VTMAE have already negotiated a previous Real Property Agreement; therefore, once funding is finalized the process should be consummated efficiently and timely.

The Proposed Project has, as one of its most important features, the creation of 1,325 high quality new direct jobs in the MRO industry. The average annual salary is \$44,461 plus benefits. The net new jobs are specifically within the targeted aerospace industry. The Proposed Project will also result in a significant number of new indirect jobs in resultant industries (See Response #4 above).

The creation of an MRO Aviation campus is precisely aligned with Northwest Florida FORWARD regional strategic initiative for economic transformation. MRO services are within the Aerospace and Aviation industry sector that is major part of the strategic initiative. Further, the MRO Aviation campus creates an industry cluster that will be a magnet to other businesses in the Aerospace and Aviation industries.

RESPONSE 10 – Approvals and Authority – Q-2 & 3 – Authority

PROVIDE THE SCHEDULE OF UPCOMING MEETINGS

Pensacola City Council is scheduled to meet on the following dates for their regularly scheduled Council meetings. Regular City Council meetings are typically held the second Thursday of every month and each meeting begins at 5:30 PM:

- July 19
- August 9
- September 13
- October 11
- November 8
- December 13

Pensacola City Council is permitted to convene special meetings as provided in the City Charter. According to section 1.03 of City Council Rules and Procedures, notice shall be given to the Council members and media by email 72 hours prior to the meeting.

The Pensacola City Charter describes the roles and responsibilities of the Mayor and City Council. This proposal is executed by the Mayor of the City of Pensacola in the exercise of his executive authority granted by the Pensacola City Charter. The Pensacola City Charter may be found at:

RESPONSE 11 – Approvals and Authority – Q-3 – Project Timeline

The following is the schedule for MRO Campus development.

Table 8 Pensacola International Airport MRO Aviation Campus.

RESPONSE 12 – Funding and Budget – Q-1-2-3 – Financial Details

TIMING OF TRIUMPH GULF COAST, INC. FUNDING

The following table shows the amount of funding sought from Triumph Gulf Coast, Inc. and the time period over which funding is requested.

The requested current funding commitment is \$56.0 million. Given the timing of construction, the committed funds may be distributed over the following periods:

Project Titan Construction Costs MRO Aviation Campus Pensacola International Airport	
Fiscal Year*	Funding
FY 2019	\$20,000,000
FY 2020	20,000,000
FY 2021	16,000,000
Total	\$56,000,000
* Assumes Fiscal Years ending September 30th.	

Table 9 Funding and timing of funds sought from Triumph Gulf Coast, Inc.

TRIUMPH GULF COAST, INC. FUNDING PERCENTAGE OF TOTAL PROGRAM

As shown on the figure below, the provisional requested amount of funds requested from Triumph is 17% of the total program cost. The funding plan shown below will be confirmed as the funding plan is formalized with each funding partner. See the detailed budget analysis and narrative in Response Number 14.

MRO Campus Funding Sources and Shares Pensacola International Airport

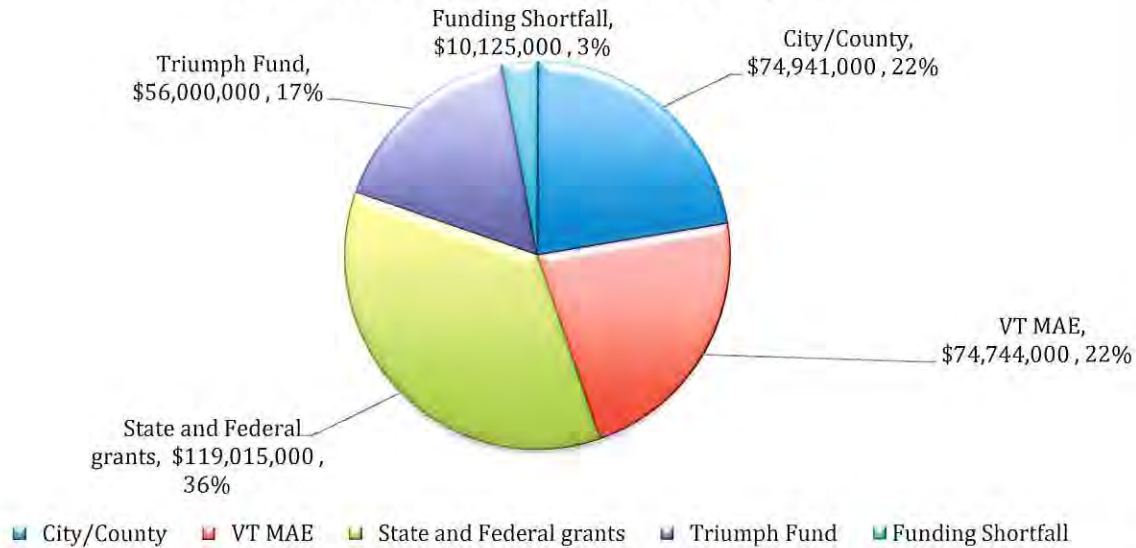


Figure 3 MRO Campus funding sources and shares

DESCRIBE THE TYPES AND NUMBER OF JOBS EXPECTED FROM THE PROPOSED PROJECT OR PROGRAM AND THE EXPECTED AVERAGE WAGE:

As presented in Response 2, the following tables shows the job growth from the beginning of operation in Hangar 1 through the third year of operations in the fully constructed campus.

Summary of Jobs	VTMAE-Aircraft Maintenance Technicians	VTMAE Administrative and Engineering	VTMAE North America Executive Office Functions	Airlines/FAA/Auditors/Vendors/others	Total
Guarantees	Contractual	Derivative	Under Discussion	Derivative	
Hangar No. 1	400				400
Project Titan-Aircraft Maintenance	1,325				1,325
Administration/Engineering		77			77
North America Executive/shared services functions			63		63
Airline engineering staff				60	60
Auditors				3	3
FAA Staff				3	3
Vendors				10	10
Total	1,725	77	63	76	1,941

Table 1 Proposed Project Jobs Summary

The Proposed Project supports a growth strategy over the next four years that will increase the number of direct new jobs by 1,325 in Aircraft Maintenance, Modification (NAICS Code 336411, \$44,720), Support Engineering, Materials Fabrication (NAICS Code 336411, \$27,700) and Administration (NAICS Code 551114, \$70,833). The expected average wage overall is \$44,416 plus benefits.

In addition to the 1,725 new direct VTMAE jobs at the MRO Aviation campus (400 for Hangar 1 and 1,325 for this project), as a result of the critical mass created by these activities, other full time equivalent jobs directly related to the Aerospace industry will be located at the Pensacola International Airport. These include approximately 60 full time jobs that the airlines (VTMAE customers) will keep on site to oversee the repair and maintenance protocols associated with their aircraft, approximately 10 vendor employees, approximately 3 FAA auditors and approximately 3 internal auditors.

North American Headquarters: While a formal commitment has not been made to relocate North American headquarters to Pensacola, based on input and discussions with VTMAE, they are seriously considering this possibility. If headquarters are located in Pensacola, the following is a breakdown of the jobs to be relocated:

• Executives	5
• Finance	20
• Marketing	10
• Auditor	1
• Internal audit	2
• Human Resources	10
• Procurement	5
• Other	10

In addition to the above, it is also possible that the Pensacola MRO Aviation campus will become the future home for North American shared services function for the MRO business. If shared services are relocated to Pensacola, the following type of job categories would be included in the shared services activities: Group Leadership & Strategy, Business Development, Legal counsel, Group Finance and Auditing, Group Marketing, Corporate Communications, Shared Services for IT, Finance and Human Resources.

In addition to the above jobs directly related to the aerospace industry, the Proposed Project will also support the addition of approximately 3,400 indirect new jobs in associated resultant industries.

RESPONSE 13 – Funding and Budget – Q-4 – Supplementing Existing Funding Sources

DOES THE POTENTIAL AWARD SUPPLEMENT BUT NOT SUPPLANT EXISTING FUNDING SOURCES

The Triumph funds are supplemental as they represent a portion of the MRO Aviation Campus project cost, however the project could not proceed without the requested support from Triumph. The request of Triumph funds represents 17.0% of the total project costs for the complete buildout of the MRO Aviation campus, including Phase I that has just been completed. The remaining 83.0% of the MRO Aviation Campus project costs will be publicly funded by city, county, state and federal sources; and privately funded by VTMAE, as those entities are the primary beneficiaries of the economic and community impacts from the Proposed Project. See Response #14 for a detailed analysis of the project costs and funding sources.

RESPONSE 14 – Funding and Budget – Q-5 – A/B Program Funding Sources

PROVIDE A DETAILED BUDGET NARRATIVE

The development of the MRO Aviation Campus at Pensacola International Airport is a technically challenging and significant project. In accordance with the Master Plan for the airport, land adjacent to the airport has been acquired over the years with the intention of creating commerce related activities compatible with airport operations. The development of an MRO Aviation Campus is the culmination of years of planning and forward thinking.

In order to execute the development of an MRO Aviation Campus and bring VTMAE to Pensacola as its primary tenant, significant costs have been and will be required to be incurred for land acquisition and construction of facilities; as well as costs incurred by VTMAE to properly staff and equip the facilities for its MRO operations. Although not part of this specific request for funding, Hangar 1 was the first step in the

development of the MRO Aviation Campus and was completed as of May 1. VTMAE commenced operations in June 2018.

This specific request is for the costs associated with the construction of Hangars 2, 3 and 4; and the construction of Administrative headquarters and a Warehouse/Shops building. Preliminary concept plans have been developed by Atkins Global and the estimated project costs of \$210 million appears reasonable based on their experience with the design and construction of Hangar 1. The following table shows a breakdown of costs:

Project Titan Construction Cost MRO Aviation Campus Pensacola International Airport	
Facility	Projected Cost
Hangar 2	\$49,000,000
Hangar 3	55,000,000
Hangar 4	55,000,000
Warehouses/Shops	19,000,000
Administrative Headquarters	32,000,000
Total	\$210,000,000

Table 10 Proposed Project cost breakdown by facility

The following table is the working funding plan for the development of the full MRO Aviation Campus Program. The table shows that City and its funding partners have invested over \$59 million the development of Hangar No. 1. The table shows that Hangars 2, 3, and 4 plus warehousing, support facilities, and administrative headquarters are projected to cost \$210 million plus land, site preparation and other required facilities that are projected to cost over \$65 million. The table shows that the total MRO Aviation Campus Program will cost approximately \$334 million.

**MRO Aviation Campus
Total Project Costs and Funding Sources
Pensacola International Airport**

Source of Funds	Hangar 1	Project Titan	Total
VT MAE Cash contribution	\$ 7,244,000	\$ 35,000,000	\$ 42,244,000
City contribution Hangar	3,971,000	-	3,971,000
Escambia County cash Hangar #1	4,800,000	-	4,800,000
FDOT Hangar #1	23,015,000	-	23,015,000
FDOT Airport grant #1 committed		25,000,000	25,000,000
FDOT Airport grant #2 requested	-	25,000,000	25,000,000
IREFF	7,000,000	-	7,000,000
Governor's Job Growth Fund - Year 1	-	4,000,000	4,000,000
Florida Legislature allocation	-	3,000,000	3,000,000
City/County - Titan - projected	-	20,000,000	20,000,000
Governor's Job Growth Fund - Year 2 - forecast	-	15,000,000	15,000,000
Federal Economic Development Administration (forecast)	-	17,000,000	17,000,000
Triumph - contribution	-	56,000,000	56,000,000
Total Building Construction Costs	\$ 46,030,000	\$ 200,000,000	\$ 246,030,000
Funding shortfall	\$ -	\$ 10,125,000	\$ 10,125,000
Land, Site Readiness and Tenant Relocation costs			
VT MAE			
Tenant Improvements, Furniture, fixtures and equipment - projected	\$ 2,500,000	\$ 10,000,000	\$ 12,500,000
Relocation, training and recruitment, asset impairment - projected	6,000,000	14,000,000	20,000,000
City of Pensacola			
Land acquisition and site readiness (demolition and related costs)	4,835,000	31,335,000	36,170,000
Runway extension commitment	-	10,000,000	10,000,000
Total Land, Site Readiness and Tenant Relocation costs	13,335,000	65,335,000	78,670,000
Total Cost - MRO Aviation Campus	\$ 59,365,000	\$ 275,460,000	\$ 334,825,000

Table 11 MRO Campus Program Costs and Funding Sources

As can be seen, the funding sources are diverse and reflect the recognition that this project will have an important and generational economic impact on the region. The commitment of funds by various governmental units, as well as the commitment by VTMAE (see copy of the letter from VTMAE for their commitment to contribute \$35.0 million to the construction project), shows that all have “skin in the game”.

MRO Campus Funding Sources and Shares Pensacola International Airport

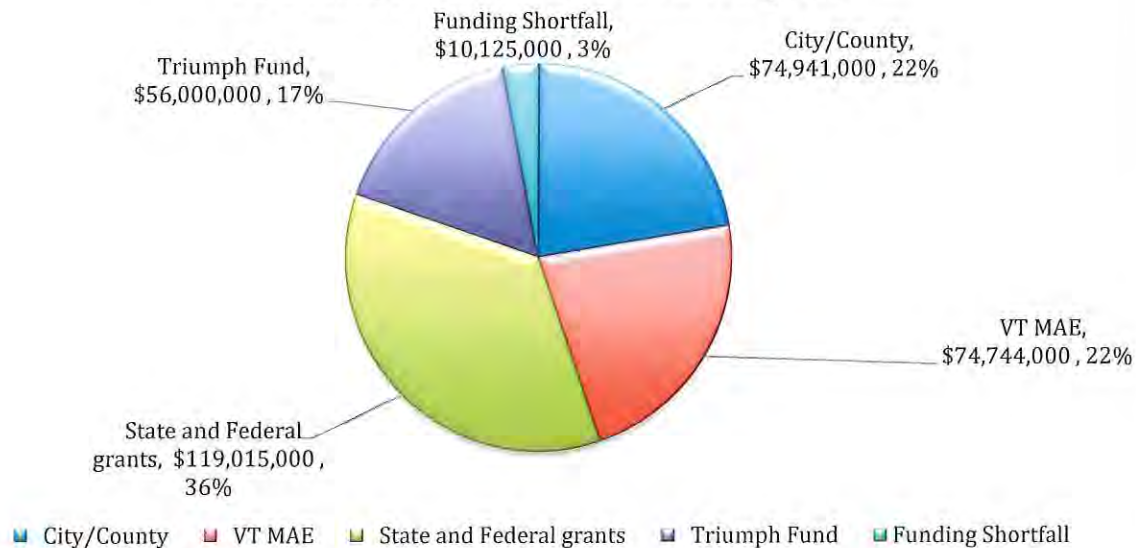


Figure 4 MRO Campus funding sources and shares.

The Triumph funds requested (\$56 million) are essential to provide the transformative level of project funding. At this funding level, Triumph funds represent 17.0% of the overall MRO Aviation Campus project costs. The remaining costs are funded as follows: City/County (22.0%), VTMAE (22.0%) and state and federal grants (36.0%). As of the date of this application update, there is a Project Funding Shortfall of \$10.1 million — 3.0% of the total. The City proposes to continue to work with its funding partners to eliminate the Project Funding Shortfall while this updated Triumph funding request is processed.

RESPONSE 15 – Infrastructure – Q-b & D – Program Requirements

IS THE INFRASTRUCTURE FOR PUBLIC USE OR DOES IT PREDOMINATELY BENEFIT THE PUBLIC

The infrastructure predominately benefits the public as the entire project construction (\$210 million in assets) is owned by a public entity (the City of Pensacola's international Airport) and the ground lease revenue from the Proposed Project is Airport revenue, each of which is predominately for the benefit of NW Floridians and the traveling public. The primary tenant of the facilities will be VTMAE, however as stated previously, much of the city- owned infrastructure will have multiple users. A training center will be established for use by a secondary education provider to offer aviation maintenance technology programs to prepare students for a career in the commercial aviation industry, administrative offices are being developed for use by the Federal Aviation Administration representatives and airline representatives (i.e. Delta, American, UPS, etc.) to be on site while their aircraft are being overhauled and all of the common usage aprons and taxiways will be utilized by general airfield traffic (all airlines and other aircraft operators).

RESPONSE 16 – Infrastructure – Q-2A – Program Requirements

IS THIS PROJECT AN EXPANSION OF EXISTING INFRASTRUCTURE PROJECT

The City has a well-established business relationship with VTMAE that dates to late 2012, when discussions first began with VTMAE to establish an MRO hangar at the Pensacola International Airport. Ultimately the City was successful, and a MOU was entered into on November 12, 2013. After funding was finalized, the final lease agreement between City and VTMAE was signed on September 9, 2014. Planning and design documents were prepared, contracts were bid out and October 28, 2016 marked the official groundbreaking for Hangar 1. Hangar 1 is a 173,000 sq. ft. MRO hangar being built at a cost of approximately \$46 million. The hangar was recently completed and ready for occupancy April 2018. The grand opening is scheduled for June 8, 2018. The MRO Aviation campus represents an exciting expansion of the existing commitment that City and VTMAE has made to expand their focus on the Aerospace and Aviation industry.

RESPONSE 17 – Infrastructure – Q-2A – Days Required

PROVIDE THE PROPOSED BEGINNING COMMENCEMENT DATE AND NUMBER OF DAYS REQUIRED TO COMPLETE CONSTRUCTION OF THE INFRASTRUCTURE PROJECT

Assuming all funding approvals could be confirmed by July 2018 it will take 1,355 days or approximately 44.52 months to plan and construct the project. The proposed schedule is as follows:

Hangar 2

- Plans/Specifications/Bidding -August 2018 to May 2019
- Construction - June 2019 to November 2020

Hangars 3 and 4, Support Facilities and Administration Building

- Environmental-August 2018 to May 2019
- Plans/Specifications/Bidding- August 2018 to January 2020
- Construction Hangar 3 - February 2020 to August 2021
- Construction Hangar 4- June 2020 to January 2022
- Construction Administration Building - February 2019 to August 2020
- Construction Warehousing/Shops/Support Facilities - April 2019 to October 2020

Recognizing that July 2018 may not be a likely start date since funding decisions may yet be unresolved, the schedule can be adjusted to reflect an appropriate later start date. This is a significant and technically complex project spanning approximately a four-year period of time.

MRO MEMORANDUM OF UNDERSTANDING

MEMORANDUM OF UNDERSTANDING

VT MOBILE AEROSPACE ENGINEERING, INC

AND

CITY OF PENSACOLA, FLORIDA

THIS MEMORANDUM OF UNDERSTANDING ("MOU") is hereby made and entered into as of the 14th day of November, 2017, by and between **VT MOBILE AEROSPACE ENGINEERING, INC.**, a corporation organized in the State of Alabama ("Company") and the **CITY OF PENSACOLA**, a Florida municipal corporation ("City"), in its capacity as proprietor and sponsor of the **PENSACOLA INTERNATIONAL AIRPORT** ("Airport"). The above-referenced entities may from time to time be referred to individually as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, the City enthusiastically supports and encourages economic development and workforce training and development, particularly the expansion of the business activities at the Airport;

WHEREAS, the Company's primary business activity is the maintenance, repair and overhaul of aircraft ("Aircraft MRO");

WHEREAS, the City and the Company have entered into a Real Property Lease at Pensacola International Airport dated September 9, 2014, pursuant to which the City is currently constructing an Aircraft MRO hangar facility that will be occupied and used by the Company ("Phase I");

WHEREAS, the City and the Company have discussed proposals for the construction of new additional Aircraft MRO hangars and ancillary facilities (the "Project") at the locations at the Airport depicted on Exhibit A attached hereto (the "Project Site");

WHEREAS, the Project will include, without limitation, site work, utilities, flatwork, ramps, aprons, taxiways, access roads or drives, parking areas, hangars and ancillary facilities, design services and construction administration services;

WHEREAS, the Parties desire to enter into this non-binding MOU to set out a general working arrangement for proceeding with the development of the Project;

November 14, 2017

NOW, THEREFORE, the Parties agree as follows:

ARTICLE I

NONBINDING EFFECT

1.1 This MOU reflects the Parties' current intentions, is subject to the negotiation and execution of definitive written agreements which shall take precedence over this MOU, and is not and shall not be construed as a binding or enforceable agreement for any purpose. Without prejudice to the generality of the foregoing, none of the parties have an obligation to enter into any definitive agreements or to consummate the transactions contemplated herein. If the Parties fail, for any reason, to agree upon and execute definitive written agreements for the Project or this MOU is otherwise terminated, neither Party will have any claim against the other for any reason including but not limited to any claim based on "part performance", "detrimental reliance", "lack of good faith" or any other cause of action arising out of this MOU.

1.2 This MOU may be terminated at any time by a Party by providing written notice of termination to the other Party.

1.3 In the event this MOU terminates, for whatever reason, each Party shall bear its own costs and expenses incurred in connection with this MOU and the transactions contemplated herein.

ARTICLE II

PROPOSED UNDERTAKINGS OF THE PARTIES

2.1 Project Development to Date. The Parties and their consultants have been collaborating to develop a detailed hangar design concept, parking configuration, building design and site work narrative and estimate of Project Cost for the proposed Project (collectively, the "Preliminary Plans"). The Preliminary Plans as of the date of this MOU are attached as, or identified in, Exhibits A - F. For purposes of this MOU, such Preliminary Plans form the basis of the Parties' understanding of the scope and costs of the Project. The Company has had the opportunity to participate in the planning of the Project and understands the nature, cost, and funding of the Project to be constructed.

2.2 Mutual Undertakings. The Parties agree to undertake the following actions in a collaborative and mutual basis:

(a) The Parties will develop plans and specifications for the Project in a form that is suitable for incorporation into public bid documents based upon a

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"construction manager at risk" method of project construction. The construction period is estimated to be 24 months from authorization to proceed for Hangar 2 and 36 months from authorization to proceed for the remainder of the Project. The estimated Project schedule is detailed in Exhibit F.

(b) The Parties will finalize a detailed breakdown of the total estimated cost of the Project, presently estimated to be \$200,000,000.00 (the "Project Cost"). The Parties will collaborate on a value-engineering process with the mutual objective of securing a reduction of the Project Cost. The current breakdown of the estimated Project Cost is attached hereto as Exhibit D. The City may use savings in one or more elements of the Project Cost to defray overages in other elements of the Project Cost.

(c) The City, in accordance with applicable legal requirements, and after consultation with the Company to the extent lawfully permitted, will select the design professionals and construction manager at risk, who will be responsible for the design and construction of the Project. The selected construction manager at risk will be at risk and responsible for paying the amount by which the actual construction cost exceeds the agreed guaranteed maximum price.

(d) In the event that the actual Project Cost is projected to exceed \$200,000,000.00, the Parties will work together in good faith to find a mutually agreeable solution. In the event that, despite the Parties' good faith efforts, the projected actual Project Cost exceeds \$200,000,000.00, the Company has the right to either terminate the Project or agree to pay the additional costs in excess of \$200,000,000.00 and continue with the Project at the increased Project Cost.

(e) The Parties will negotiate a lease (the "Lease") of the Project and Project Site from City to Company that (i) establishes the respective responsibilities of the Parties; (ii) is compliant with state and federal airport guidelines; (iii) is consistent with airport industry best practices; (iv) acknowledges that the lease will be subject to and subordinate to the City's agreements with the United States of America and City Bond Resolution 59-88 (as amended and supplemented); (v) establishes fair market value annual ground rent for the Project Site (which ground rent will be abated from the date of the Lease until the date of beneficial occupancy of the Project) (A) at the estimated initial fair market rental rates of \$0.33 per square foot per year for the Hangar 2 site and \$0.35 per square foot per year for the remainder of the Project site, subject to adjustment in accordance with a current MAI appraisal of the Project Site complying with FAA guidelines which will be prepared prior to execution of the Lease, (B) that will be payable from the date of beneficial occupancy until the end of the Lease term, and (C) that will be subject to periodic adjustment as hereinafter provided; (vi) establishes rent that will repay the annual debt service requirement on any special purpose facility financing instruments requested by the Company to be issued; and (vii) has an initial term of thirty (30) years.

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(f) The parties shall be entitled to terminate the Lease without cause as follows:

(1) The Lease will provide that the Company may terminate the Lease without cause by giving the City written notice of termination at any time during or after the eighth (8th) year of the Lease. Upon the giving of such written notice of termination, this Lease shall terminate as of the termination date specified in such written notice; provided that such termination date shall be not less than two (2) years after the date such notice is given.

(2) The Lease will provide that the City may terminate the Lease without cause by giving the Company written notice of termination at any time during or after the eighteenth (18th) year of the Lease. Upon the giving of such written notice of termination, the Lease shall terminate as of the termination date specified in such written notice; provided that such termination date shall be not less than two (2) years after the date such notice is given.

The parties understand, however, that the ultimate funding sources for the Project may require different early termination provisions in the Lease.

(g) The Parties will agree upon an environmental baseline to determine the subsurface conditions of the Project Site at the beginning of the Lease.

(h) During the Lease term, the ground rent will be increased annually (starting in the second year of the Lease) in proportion to increases in the U. S. Consumer Price Index for All Urban Consumers ("CPI"). The CPI increases in ground rent are limited to no more than a two (2.0%) percent increase over the immediately preceding Lease year. In no event will the CPI-adjusted ground rent be less than the ground rent for the immediately preceding Lease year.

(i) The ground rent shall further be adjusted as follows: At the end of the tenth year of the Lease term, the City will engage an MAI appraiser to determine the then-current fair market rental rate of the Project Site, which rate shall be effective on the first day of the eleventh year of the Lease term; provided that the rent adjustment as the result of the re-appraisal will not exceed two percent (2.0%) compounded annually from the date of beneficial occupancy of the Project through the tenth (10th) year of the Lease. Thereafter, the appraised rate will be annually adjusted by CPI through the twentieth year of the Lease as provided in paragraph (h) above. At the end of the twentieth (20th) year of the Lease, the City will engage an MAI appraiser to determine the fair market rental rate of the Project Site, which rate shall be effective on the first day of the twenty-first year of the Lease term; provided that the rent adjustment as the result of the re-appraisal will not exceed two percent (2.0%) compounded annually from the date of beneficial occupancy of

November 14, 2017

the Project through the twentieth (20th) year of the Lease. Thereafter, the appraised rate will be annually adjusted by CPI through the thirtieth (30th) year of the Lease as provided in paragraph (h) above. The Lease will provide a procedure for the Company to challenge appraisals of the fair market rental rates. The procedures will follow the federal guidelines.

2.3 City Undertakings. The City agrees to undertake the following:

- (a) Grant the Company the right to operate the Project at the Airport.
- (b) Complete construction of the Project in accordance with the plans and specifications with a date of beneficial occupancy to be mutually agreed upon by the Parties.
- (c) Commit all of the Grant Funds identified in Article III toward the Project Cost.
- (d) Use all reasonable efforts to secure additional public/private grant funds to be used toward the Project Cost.
- (e) Subject to the terms of existing bond resolutions, approval of Bond Counsel and in accordance with the City of Pensacola Debt Incurrence and Administration Policy, facilitate the issuance of special purpose facility financing instruments to finance the portion of the Project Costs not covered by the public grants and contributions identified in Article III below, if so requested by the Company.
- (f) Obtain FAA clearance that the Project will not obstruct or interfere with the FAA's facilities and equipment located at or near the Airport.
- (g) Provide necessary law enforcement, fire protection and emergency medical services to the Project and the Company's employees.
- (h) Extend, or cause the extension, of necessary utility services to the Project using project funds as done for Hangar 1. Such utilities include, without limitation water, sewer, electrical power, natural gas and telecommunications.
- (i) Conduct an environmental baseline study of the Project Site, in which the study will form the basis for agreement between the Parties as referenced in Section 2.2(f) above.

2.4 Company Undertakings. The Company agrees to undertake the following:

- (a) Operate the Project at the Airport.

(b) Use best efforts to establish a training center within the hangar or ancillary facility for use by a secondary education provider to offer aviation maintenance technology programs to prepare students for a career in the commercial or general aviation industry.

(c) Upon full implementation of the Project, employ 1,200 full time employees or equivalents in Northwest Florida, at an average annual salary of not less than \$44,461; and in addition, employ 50 full time equivalents in the Administration Building. As a result of the additional MRO services and activities at the MRO campus, an additional 75 MRO related and ancillary jobs are likely, for a total of approximately 1,725 Aircraft MRO-related jobs, including Phase I. It is recognized that with an optimal aircraft mix and scheduling of services there could be as many as 2,000 MRO jobs at the Airport when combined with Phase I.

(d) Comply with all applicable laws, ordinances and regulations.

ARTICLE III

FINANCIAL RESPONSIBILITIES TOWARD CONSTRUCTION OF THE PROJECT

3.1 Grant Funds. It is anticipated that grant funds (the "Grant Funds") will be secured to offset a portion of the Project Cost. The City will take the lead in securing Grant Funds, and the Company will use its best efforts to support the City's efforts. The sources and amounts of Grant Funds will be determined during project development and prior to the execution of the Lease.

3.2 Company Financial Commitment. The Company will make a financial contribution toward the Project Cost (the "Company Financial Commitment"). The Company Financial Commitment will be determined during project development and prior to execution of the Lease and may take the form of (a) a capital contribution; (b) special purpose facility financing/project financing where the Company is solely and ultimately responsible for payment of debt issuance costs and the repayment of the debt service; or (c) a combination of (a) and (b). The form of the Company Capital Commitment shall be at the sole discretion of the Company.

3.3 Use of Grant Funds and Company Financial Commitment. The City will use 100% of the Grant Funds and the Company Financial Commitment toward the Project Cost.

3.4 Recovery of Grant Funds. The Lease will include provisions for recovery of Grant Funds from the Company in the event that the Company does not meet agreed performance requirements and/or conditions of the Grant Funds.

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3.5 City's Funding Plan. The City plans to seek funding from the following sources, each of which is prospective in nature and will be finalized in future negotiations and applications:

State - FDOT
Florida Job Growth Fund
Local
Company
Triumph Fund
Other Funding Sources

ARTICLE IV

WORKFORCE DEVELOPMENT; TRAINING GRANTS; TAX INCENTIVES

4.1 Training Grants.

(a) The City will use its best efforts to optimize customized industry training through Workforce Escarosa, Inc. The Parties acknowledge that said training requires a 50% in-kind match.

(b) The City will use its best efforts to optimize customized industry training through the Quick Response Training Program operated by Workforce Florida, Inc. The Parties acknowledge that said training grant will be based upon the Company maintaining an agreed employment level.

4.2 Qualified Target Industry Tax Refund. The Company will use its best efforts to qualify for the Qualified Target Industry Tax Refund Program (QTI). Based upon the Company's employment of 1,200 persons, the Company's QTI is estimated to have a value of at least \$3,600,000.

4.3 Educational Programs. The City will use its best efforts to assist the Company and educational institutions to establish and continue aircraft maintenance technician programs (college) and career academy programs (high school). These programs will provide opportunities to local students. The Company will use its best efforts to provide the students of these programs jobs.

4.4 EDATE. The City will use its best efforts to assist the Company with the process to obtain an Economic Development Ad Valorem Tax Exemption (EDATE) from the County.

4.5 Sales and Use Tax Exemptions. The City will use its best efforts to assist the Company in obtaining Sales and Use Tax exemptions from the State of Florida.

4.6 Capital Expenditure Tax Reimbursement. The City will use its best efforts to assist the Company in obtaining Capital Expenditure Tax reimbursement from the State of Florida.

4.7 Support of Utility Providers. The City will use its best efforts to assist the Company in recruiting economic support for the Project from utility providers.

ARTICLE V

PHASE III

The Parties have discussed the possibility of a future expansion of the Project referred to as "Phase III." Should the Company decide to pursue the development of Phase III, the Parties agree to enter into good faith negotiations toward the execution of a memorandum of understanding and a lease agreement containing provisions materially similar to the terms and conditions found in this MOU and the Lease, respectively.

When and if the Company notifies the City of its intent to proceed with Phase III, the City will enlist the assistance of the State of Florida, Escambia County, Florida and others in an initiative to generate financial grants to fund the construction of the additional Project and the recruitment of other incentives. The City will use its best efforts to generate funding from these sources to support approximately fifty percent (or more, if available) of the project costs recognizing that public support for the Phase III will be based upon the number and quality of jobs being created, scope of Project to be constructed and the status of economic development incentive programs available at that time.

ARTICLE VI

PUBLIC RECORDS LAW; PUBLIC ANNOUNCEMENTS

The Florida Public Records Law, as contained in Chapter 119, Florida Statutes, is very broad. As a result, this MOU as well as any written or electronic transmission, communication or document created or received by City or any other public agency or entity (including but not limited to Triumph Gulf Coast, Inc.) will be made available to the public and the media, upon request. For the avoidance of doubt, all applications for funding, including without limitation all supporting materials, made or provided by City to any federal, state or local public entity or agency (including but not limited to Triumph Gulf Coast, Inc.) will be made available to the public and the media, upon request. Company understands and agrees that City's applications for funding may include references to this MOU and/or Company and its relationship to the Project and that the Company's relationship to the Project must necessarily be disclosed (verbally as well as in writing) to various individuals in order to attempt to secure funding, as well as to engineers, architects, contractors, attorneys, consultants, City personnel and others

November 14, 2017

involved in the Project. Subject to the foregoing and except as otherwise provided by the provisions of any applicable law, order, rule or regulation, City agrees that it will not make any use of the corporate or trade name of Company or its affiliates or any of its or their trademarks or logos in connection with any advertising, promotion, publicity or other printed material without the written consent of an officer of Company and that the City will make reasonable efforts not to publicly disclose or describe the Company's relationship to the Project without the prior written consent of an officer of the Company. For the avoidance of doubt, press releases regarding this MOU must be mutually agreed to in advance of release.

IN WITNESS WHEREOF, the parties have executed this MOU as of the date first written above.

COMPANY:

VT MOBILE AEROSPACE
ENGINEERING, INC.

CITY:

CITY OF PENSACOLA, FLORIDA

By: Brian L. H.
Its: President

By: Ashton J. Hayward, III
Mayor, City of Pensacola

MEMORANDUM OF UNDERSTANDING

VT MOBILE AEROSPACE ENGINEERING, INC

AND

CITY OF PENSACOLA, FLORIDA

EXHIBITS

Exhibit A



Exhibit B
Pensacola International Airport
Construction of MRO Facilities and Associated Buildings - Fact Sheet

PROJECT: Construction of three MRO Hangar Facilities and construction of related Office, Shop and Material Handling buildings.

OWNER: City of Pensacola – Pensacola International Airport

TARGET USER: VT Mobile Aerospace Engineering

BACKGROUND: VT MAE has an existing 30-year lease with the City of Pensacola to operate its MRO activities in Hangar 1, a 173,000-square foot facility that is currently under construction and scheduled for completion in Spring 2018. Based on input from VT leadership, they would like to significantly expand their business presence in Pensacola beyond Hangar 1. The project described below represents a significant expansion of their MRO business activities in Pensacola.

■ **Scope:** Construct Three Aircraft Maintenance Hangars, and related structures and Administration Building

- 3-aircraft hangars - 555,000 s.f. (Hangars 2, 3 & 4)
- Situated on 53+/- Acres of Airport land
- Associated aircraft parking apron
- Airside/landside Ingress and egress – aircraft/cars
- Accommodates up to a B-777 aircraft
- Office, Shops and Material Handling – 100,000 s.f.
- Administration Building – 120,000 s.f.
- Projected Cost \$200 million

■ **New Jobs**

- New Jobs in Florida range from 1,200+ full time jobs
- Average annual compensation is projected to be \$45,000 per job
- Annual direct payroll projected to be \$51.8 to \$58.5 million without regard to other direct and indirect economic impacts such as construction payrolls, demand for housing, goods, and services and sales and ad valorem taxes



■ **Potential Sources of Funding**

- Florida Job Growth Fund
- State of Florida/FDOT
- Local - City
- VT MAE
- Triumph Fund
- Other funding sources

■ **Schedule**

- Project Hangar 1: March 2018
- Completion of Hangar 2: Fall 2020
- Completion of Hangar 3, 4 & support facilities 2021-2022

Exhibit C
Typical Hangar Layout

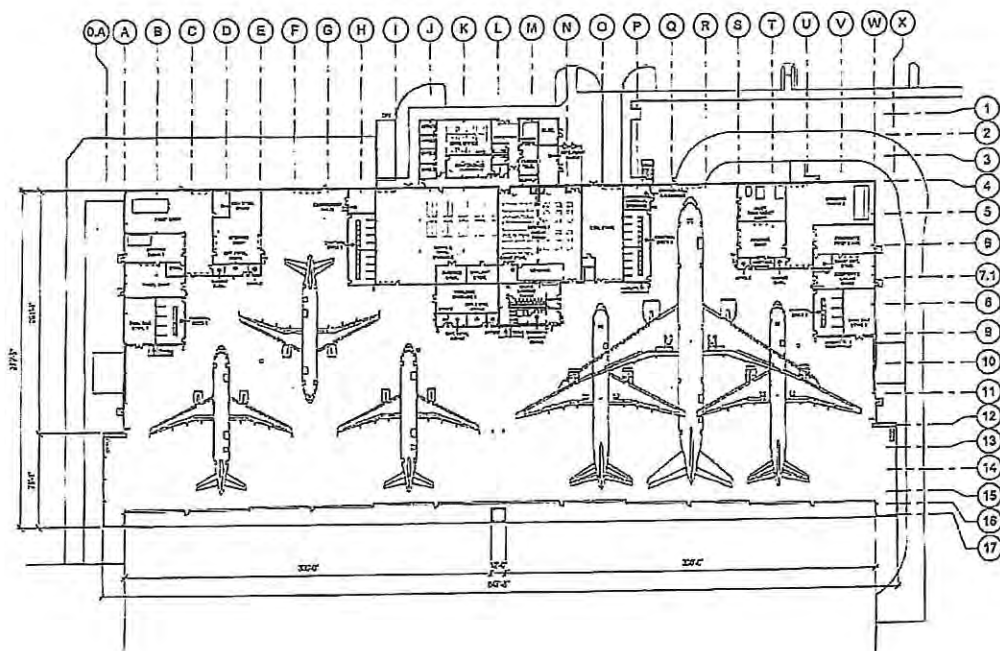


Exhibit D

VTMAE Development Program
Potential Program Expense
Pensacola International Airport

Facility	Occupancy	Square Feet	Pro Forma Cost Per S.F.*	Potential Total Funding Requirement
Hangar 2	2020	173,000	\$ 283	\$ 49,000,000
Hangar 3	2021	191,000	288	55,000,000
Hangar 4	2022	191,000	288	55,000,000
Shops/Warehousing/Support	2022	100,000	170	17,000,000
Administrative Building	2022	120,000	200	24,000,000
Total		775,000		200,000,000
* Escalated 3.5% per year from Phase 1				
Source: City of Pensacola				

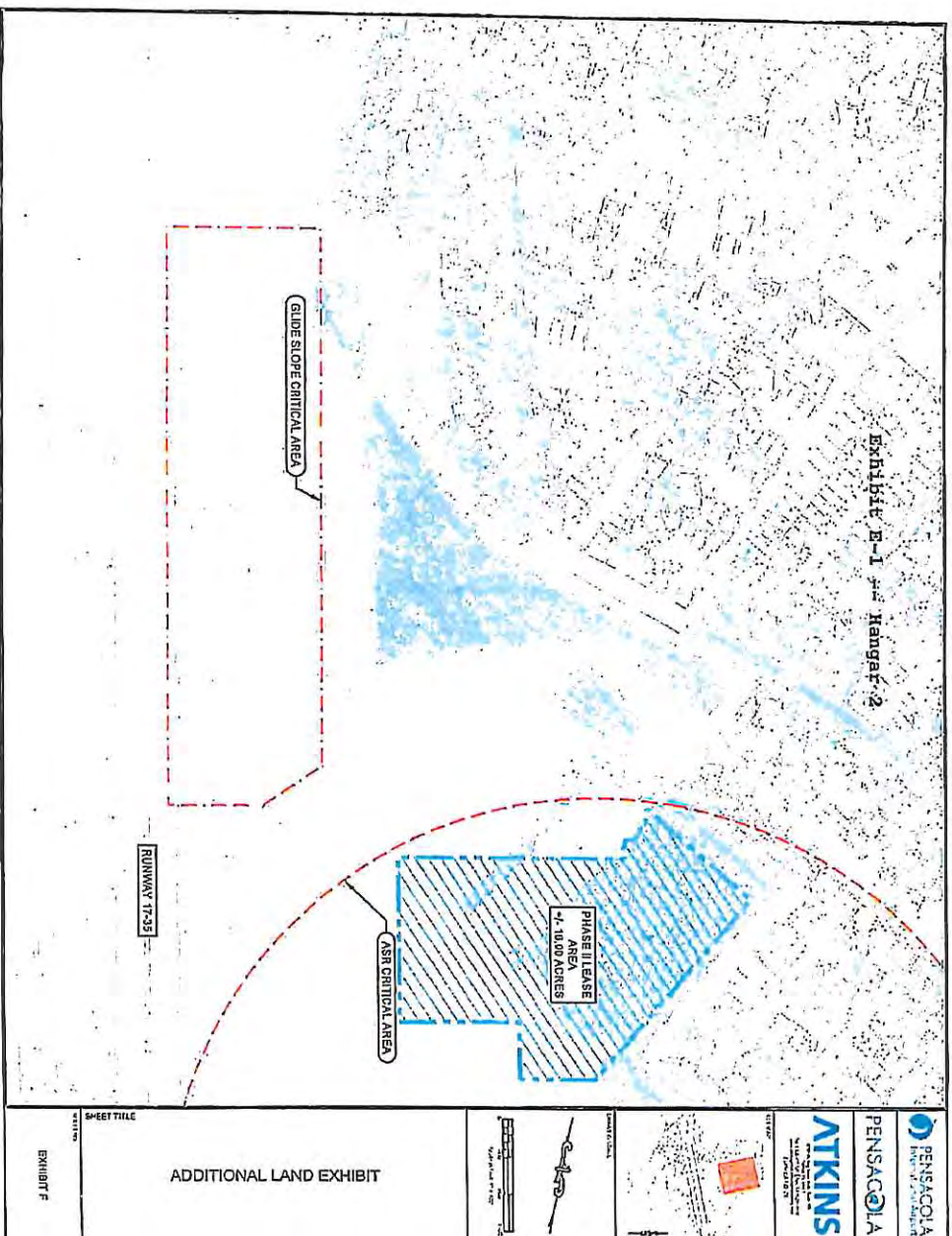


Exhibit B-2 – Hangars 3 and 4

Leased Area to be determined.



Hangars 3 and 4 are to be 191,000 Square Feet in size as of the date of this Memorandum of Understanding.

Exhibit F
Proposed Development Schedule
Pensacola Commercial Aviation Campus
Pensacola International Airport
For State of Florida Fiscal Years ending June 30

Task	2018				2019				2020				2021				2022													
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
Hangar No. 2*																														
Plans/Specification/Bidding																														
Construction																														
Prerequisites for Hangar 3, 4,																														
Support Facilities & Headquarters																														
Environmental Assessment																														
Plans/Specification/Bidding																														
Hangar No. 3* Construction																														
Hangar No. 4* Construction																														
Warehousing/Shops Construction																														
Headquarters																														

* Notes:

1. Hangars 1 is substantially the same in design and finish as Hangar No. 1 -- currently under construction.
2. Hangars 3 and 4 are 191,000 square feet to accommodate anticipated new service lines and create maximum flexibility of facility use.
3. Leases for each project element are executed prior to the construction start dates shown.
4. There are no extraordinary Airport Infrastructure or facility mitigation required.
5. The schedule assumes that there are no labor or material shortages due to market disruption from major storms during the construction period.

VTMAE MRO COMMITMENT LETTER



March 15, 2018

The Honorable Ashton J. Hayward III
Mayor, City of Pensacola
222 West Main Street
Pensacola, Florida 32502

Re: Development of Commercial Aircraft Maintenance, Repair and Overhaul
(MRO) Campus at Pensacola International Airport - Project Titan

Dear *Mayor Hayward,*

As you know, the City of Pensacola (City) and VT Mobile Aerospace Engineering, Inc. (Company) have previously come to agreement on the terms of a Memorandum of Understanding (MOU) that outlines a general working arrangement for proceeding with the development of an MRO Campus (Project) at Pensacola International Airport. As envisioned, the campus would include three new MRO hangars, an administrative office building and a warehouse and shop space. The anticipated construction cost is \$200 million to be incurred over an approximate 5-year period. We are aligned with the City's strategic vision to create a nationally recognized MRO service center of excellence that will achieve critical mass in attracting clients for MRO services.

Over the last several months, City and Company has had several substantive discussions to narrow the scope of the business requirements, and we continue to have substantive discussions to determine and concur on a framework for proceeding toward a final definitive agreement.

We acknowledge that a requirement for the Project to advance is the ability of the City to obtain funding for the entire Project. We understand the grant funding sources and amounts currently being sought by the City include the following:

- | | |
|-----------------------------|---------------|
| • Triumph Gulf Coast, Inc. | \$130 Million |
| • State of Florida/FDOT/DEO | \$25 Million |
| • Local Funds | \$10 Million |

If the City is successful in obtaining the above funds, a total of \$165 million of the total \$200 million required for the Project will have been committed.



VT MAE

A company of VT Systems

Co-Confidential

To advance this Project and to demonstrate our financial support, Company commits to make a co-investment of up to \$35 million toward the cost of the Project. This financial commitment may take the form of a cash contribution, special purpose financing where the Company is solely and ultimately responsible, or a combination thereof, subject to final board approval. The Company's financial commitment is contingent upon the City's ability to obtain grant funding sufficient in amount to pay for the balance of costs associated with the Project and the execution of a final Development Agreement that defines the legal rights and responsibilities between the parties regarding the entire Project. Once these conditions are met, Company will deposit funds into an escrow account, the terms of which will be negotiated between the parties.

Notwithstanding our financial commitment herein, we recognize that there are many other business terms to be negotiated in good faith between the parties and we look forward to discussing those in the near future. Ultimately we believe these issues will be resolved through the Development Agreement or the Real Property leases.

We look forward to continuing and expanding our relationship with the City and others in Northwest Florida on this exciting and transformational project.

Yours truly,

Stephen Lim
Executive Director

UNIVERSITY OF WEST FLORIDA
ECONOMIC IMPACT OF PROPOSED EXPANSION
PENSACOLA INTERNATIONAL AIRPORT

Economic Impact of Proposed Expansion of Pensacola International Airport
August 31, 2017

The Haas Center was engaged to assess the economic impact of a proposed expansion of the city-owned Pensacola International Airport. The proposed infrastructure project with a capital investment of \$171 million over three years would result in three new hangars totaling 543,000 square feet. These hangars (Hangar 2, Hangar 3 and Hangar 4) are in addition to Hangar 1 which is nearing completion. Hangars 2, 3 and 4 will be used for Aircraft Maintenance, Repair and Overhaul (MRO) activities. Because the hangars will be used primarily for overhaul of aircraft rather than maintenance and repair, the activity is within the Aerospace Product and Parts Manufacturing Industry (NAICS code 3364).

Econometric Modeling Assumptions:

- The activity occurs within and the impact is measured relative to the State of Florida.
- Employment is within Aerospace Product and Parts Manufacturing (NAICS code 3364).
- Construction of Hangar 1 (already underway) will be completed and begin operation in 2018, which will employ 400 workers through at least 2031¹.
- Capital expenditures for Hangars 2, 3 and 4 will be complete by 2020.
- Hangar 2 will be operational in 2020 and will employ 400 workers through at least 2031.
- Hangars 3 and 4 will be operational in 2021 and will employ 800 workers combined through at least 2031.
- Hangars 2, 3 and 4 are substantially similar to each other and to Hangar 1.

These inputs were run through an econometric simulation model² in order to determine the impact on the state of Florida should Hangars 2, 3, and 4 proceed as outlined above. Results for the project, including the one-time impact of capital expenditures and the continuing effects of the newly created jobs, are provided below. A list of modeling assumptions, a description of the model used and definitions of terms can be found after the project results tables.

¹ 2031 is selected because it is ten years of operation after the 1,200 jobs related to Hangars 2, 3 and 4 are underway beginning in 2022.

² REMI PI+ Version 2.1.1

Table 1: Hangars 2, 3 and 4 combined Impact (543,000 square feet; 1,200 direct jobs; \$171 million in total capital investment)

	2018	2019	2020	2021	2022	2023	2024-2031 (average) ³
<i>Total Employment (Jobs)</i>	1,163	1,156	2,687	4,719	4,810	4,892	4,699
<i>Gross Domestic Product (Millions of Fixed 2009 \$)</i>	\$ 75.1	\$ 76.6	\$ 243.6	\$ 516.0	\$ 536.6	\$ 555.6	\$ 596.9
<i>Output (Millions of Fixed 2009 \$)</i>	\$ 119.3	\$ 121.8	\$ 434.7	\$ 965.9	\$ 1,002.0	\$ 1,034.4	\$ 1,117.9
<i>Personal Income (Millions of Current \$)</i>	\$ 67.2	\$ 75.0	\$ 193.4	\$ 377.3	\$ 419.5	\$ 456.1	\$ 581.5

As stated in the assumptions, Hangars 2, 3 and 4 will be employing 1,200 workers beginning in 2022. From that point, in addition to the 1,200 jobs directly related to the new hangars, the activity will support an additional 3,422 to 3,692 jobs in the state. Each year, this activity is expected to produce more than \$400 million in Personal Income and an increase in Florida's GDP of almost \$600 million.

These values are independent of the economic activities flowing from the capital investment and employment related to Hangar 1. Therefore, these figures only represent the economic activity related to the capital investment and employment related to Hangars 2, 3 and 4.

³ 2024-2031 average annual data is presented as an average here for clarity. Full yearly data is provided below.

Table 2: Sector Level Employment

Category	2018	2019	2020	2021	2022	2023	2024-2031 (avg.)⁴
<i>Manufacturing</i>	27	27	496	1,407	1,397	1,388	1,355
<i>Retail Trade</i>	87	84	224	417	417	430	439
<i>Construction</i>	658	648	779	513	572	572	374
<i>Professional, Scientific, and Technical Services</i>	38	48	156	334	343	350	350
<i>Health Care and Social Assistance</i>	60	57	154	288	286	298	325
<i>Administrative and Waste Management Services</i>	38	38	131	281	281	285	278
<i>Accommodation and Food Services</i>	43	43	117	221	227	243	271
<i>Real Estate and Rental and Leasing</i>	33	31	87	163	166	173	172
<i>Management of Companies and Enterprises</i>	6	6	59	160	159	160	160
<i>Other Services, except Public Administration</i>	40	33	99	185	168	166	152
<i>Finance and Insurance</i>	32	28	83	160	150	147	132

REMI model

Econometric simulation models combine the sector detail and geography detail of input/output models but provide for functioning economic linkages between sectors and regions over time. The current study uses REMI PI+ Version 2.1.1 (Regional Economic Models Inc.), a structural econometric model of the state of Florida. It incorporates the basic input/output linkages, but

⁴ 2024-2031 average annual data is presented as an average here for clarity. Full yearly data is provided below.

also uses econometrically estimated county-specific parameters, for example, interregional migration in response to changes in economic opportunities, in generating impact results. Because of these between-sector linkages, the model incorporates general equilibrium tendencies as the economy responds to shocks over time. That is, changes in spending in a region affect not just conditions in that market, but also in other markets within the region (economists term this a "general equilibrium") and outside the region (via trade and also via migration in response to changes in economic opportunities). This describes the phenomenon whereby, for example, a new manufacturing facility opens in a county, and other manufacturers and related industries may have to increase their pay or benefits in order to prevent their workers from leaving to take a job at the new facility. A traditional input-output model description of the economic impact would have held other economic factors fixed (including manufacturing wages across the county) and simply documented the employment and job creation effects resulting directly at the new manufacturing facility and indirectly via businesses in its supply chain, as well as household spending induced by the new income flows.

A simulation model such as REMI captures not only the spending effects flowing from the new manufacturing facility and its local suppliers and employees and owners, but also the spillover effects into other markets as wages and prices change due to competition for the same employees and other resources. These effects are the general equilibrium (equilibrium across all markets simultaneously) tendencies of the model. It also simulates the adjustment path over time of these market responses, using historical parameters estimated specifically for that county (the dynamic component).

Glossary of terms

Analysis of economic impact. The assessment of a change in overall economic activity that occurs as a result of a corresponding change in one or more components economic activities, such as the addition of new businesses and jobs.

Employment. Employment comprises estimates of the number of jobs, full-time plus part-time, by place of work. Full-time and part-time jobs are counted at equal weight. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included.

Multiplier. The multiplier is the ratio of the change in equilibrium divided by the original change in spending that causes the change. Each industry that produces goods and services generates demands for other goods and services. These demands ripple through the economy, multiplying the original economic impact.

Income. Income received by persons from all sources. It includes income received from employment or investments as well as government or employer transfer payments.

Transfer payment. A payment of money for which no money, good, or service is received in exchange. Examples include social security, old age or disability pensions, student grants, unemployment compensation, etc.

Table 3: Impact Summary

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Total Employment	1,163	1,156	2,687	4,719	4,810	4,892	4,872	4,808	4,745	4,686	4,644	4,624	4,622	4,635
Gross Domestic Product (Millions of Fixed 2009\$)	\$ 75.1	\$ 76.6	\$ 243.6	\$ 516.0	\$ 536.6	\$ 555.6	\$ 566.4	\$ 572.7	\$ 578.2	\$ 584.1	\$ 591.9	\$ 601.6	\$ 612.8	\$ 625.3
Output (Millions of Fixed 2009\$)	\$ 119.3	\$ 121.8	\$ 434.7	\$ 965.9	\$ 1002.0	\$ 1034.4	\$ 1053.3	\$ 1066.7	\$ 1078.7	\$ 1092.0	\$ 1108.5	\$ 1128.5	\$ 1151.5	\$ 1176.9
Personal Income (Millions of Current \$)	\$ 67.2	\$ 75.0	\$ 193.4	\$ 377.3	\$ 419.5	\$ 456.1	\$ 484.6	\$ 508.9	\$ 531.4	\$ 553.4	\$ 576.5	\$ 601.8	\$ 628.8	\$ 658.1

Table 4: Employment by Sector

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
<i>Manufacturing</i>	27	27	496	1,407	1,397	1,388	1,378	1,369	1,362	1,356	1,350	1,345	1,342	1,339
<i>Retail Trade</i>	87	84	224	417	417	430	434	435	436	436	437	440	444	448
<i>Professional, Scientific, and Technical Services</i>	38	48	156	334	343	350	350	349	348	348	348	350	352	356
<i>Health Care and Social Assistance</i>	60	57	154	288	286	298	305	309	314	320	326	334	342	352
<i>Accommodation and Food Services</i>	43	43	117	221	227	243	253	259	265	270	274	279	283	287
<i>Administrative and Waste Management Services</i>	38	38	131	281	281	285	284	281	279	277	276	276	277	278
<i>Construction</i>	658	648	779	513	572	572	537	483	426	375	332	300	277	262
<i>Real Estate and Rental and Leasing</i>	33	31	87	163	166	173	175	174	172	171	170	171	172	173
<i>Management of Companies and Enterprises</i>	6	6	59	160	159	160	160	160	160	160	160	161	161	162
<i>Other Services, except Public Administration</i>	40	33	99	185	168	166	162	157	153	151	149	148	148	149
<i>Finance and Insurance</i>	32	28	83	160	150	147	142	137	134	131	129	128	129	129
<i>Wholesale Trade</i>	24	24	67	131	131	132	131	129	128	127	126	125	125	126
<i>Transportation and Warehousing</i>	16	15	44	88	85	82	79	75	71	69	66	65	63	63
<i>Information</i>	8	8	25	50	49	49	49	48	48	48	48	48	48	49
<i>Arts, Entertainment, and Recreation</i>	11	9	29	55	51	50	48	47	46	45	45	45	45	46
<i>Educational services; private</i>	6	6	16	30	31	32	33	33	33	33	33	33	34	34
<i>Mining</i>	2	1	6	15	16	16	16	15	14	14	13	12	12	12
<i>Utilities</i>	1	1	3	6	6	6	6	6	6	6	6	5	5	5
<i>Forestry, Fishing, and Related Activities</i>	1	1	4	8	7	7	6	6	5	5	4	4	4	4

MINUTES OF THE PUBLIC FORUM WORK SESSION AND
REGULAR MEETING OF
THE BOARD OF COUNTY COMMISSIONERS
HELD DECEMBER 14, 2017

MINUTES OF THE PUBLIC FORUM WORK SESSION AND REGULAR MEETING OF
THE BOARD OF COUNTY COMMISSIONERS
HELD DECEMBER 14, 2017
BOARD CHAMBERS, FIRST FLOOR, ERNIE LEE MAGAHA GOVERNMENT BUILDING
221 PALAFOX PLACE, PENSACOLA, FLORIDA
(4:33 p.m. – 7:38 p.m.)

Present: Commissioner Jeffrey W. Bergosh, Chairman, District 1
Commissioner Lumon J. May, Vice Chairman, District 3
Commissioner Douglas B. Underhill, District 2
Commissioner Grover C. Robinson IV, District 4
Commissioner Steven L. Barry, District 5
Susan A. Woolf, General Counsel, Clerk and Comptroller's Office
(Regular Board Meeting only)
Jack R. Brown, County Administrator
Alison Rogers, County Attorney
DeLana Allen-Busbee, Office Assistant III, Clerk and Comptroller's Office
Jessica Whittle, Legal Assistant, Clerk and Comptroller's Office
Judy H. Witterstaeter, Program Coordinator, County Administrator's Office

PUBLIC FORUM WORK SESSION

Chairman Bergosh called the Public Forum Work Session to order at 4:33 p.m.

1. FOR INFORMATION: The Board heard comments from the following individuals concerning privatization of land on Pensacola Beach:

Lorrie Newman ►
Sarah Hall ►
Dianne Krumel ►

2. FOR INFORMATION: The Board heard a proposal from Shirley Stone concerning a re-entry transitional housing program. ►

5:05 P.M. – PUBLIC FORUM ADJOURNED

5:34 P.M. – REGULAR BOARD MEETING CONVENED

REGULAR BCC AGENDA

1. Call to Order

Chairman Bergosh called the Regular Meeting of the Board of County Commissioners to order at 5:34 p.m.

2. Invocation

Tim Coleman of Point Baptist Church delivered the Invocation.

PUBLIC FORUM WORK SESSION AND REGULAR BCC MEETING MINUTES – Continued

COUNTY ADMINISTRATOR'S REPORT – Continued

III. FOR DISCUSSION

1. Escambia County Disability Awareness Committee ►

Motion made by Commissioner Barry, seconded by Commissioner Robinson, and carried unanimously, appointing Lisa Autrey Hopkins to the ECDAC, to serve as one of the two "At Large" appointees, for a four-year term, effective January 2, 2018, through January 1, 2022.

Motion made by Commissioner Underhill, seconded by Commissioner May, and carried unanimously, appointing Kenneth R. Holt to the ECDAC, to serve as one of the two "At Large" appointees, for a four-year term, effective January 2, 2018, through January 1, 2022.

Escambia County's Community & Media Relations Office posted a General Alert on the County's website for two weeks, from October 25, 2017, to November 8, 2017, to seek volunteers to fill one of the "At-Large" positions on the Escambia County Disability Awareness Committee; Lisa Autrey Hopkins, Kenneth R. Holt, Mary Lynn Williams, and Julia Kaple responded to the General Alert.

Arthur R. Nunamaker, one of the two "At Large" appointees on the ECDAC, whose term will expire on January 1, 2018, has indicated that he would like to be considered for reappointment.

2. Shepherds Place Intact Transitional ►

Motion made by Commissioner Robinson, seconded by Commissioner Barry, and carried unanimously, approving the contribution of \$10,000 of discretionary funds by Commissioner Grover Robinson to the 501(c)(3) non-profit Shepherds Place Intact Transitional (Funding: Fund 001, General Fund, Discretionary Money, Cost Center 110101, Object Code 58201).

3. City of Pensacola TRIUMPH Ask ►

Motion made by Commissioner Robinson, seconded by Commissioner May, and carried 4-1, with Commissioner Underhill voting "no," approving to submit an affirmative position in the preliminary application for the City for this particular project with VT MAE.

MINUTES OF THE PUBLIC FORUM WORK SESSION
AND REGULAR MEETING OF THE
BOARD OF COUNTY COMMISSIONERS
HELD APRIL 17, 2018

MINUTES OF THE PUBLIC FORUM WORK SESSION AND REGULAR MEETING OF THE
BOARD OF COUNTY COMMISSIONERS
HELD APRIL 17, 2018
BOARD CHAMBERS, FIRST FLOOR, ERNIE LEE MAGAHA GOVERNMENT BUILDING
221 PALAFOX PLACE, PENSACOLA, FLORIDA
(4:30 p.m. – 7:38 p.m.)

Present: Commissioner Jeffrey W. Bergosh, Chairman, District 1
Commissioner Lumon J. May, Vice Chairman, District 3
Commissioner Steven L. Barry, District 5
Commissioner Grover C. Robinson IV, District 4
Commissioner Douglas B. Underhill, District 2
Honorable Pam Childers, Clerk of the Circuit Court and Comptroller
(Regular Board Meeting Only)
Susan Woolf, General Counsel, Clerk and Comptroller's Office
(Regular Board Meeting Only)
Jack R. Brown, County Administrator
Charlie Peppler, Deputy County Attorney
DeLana Allen-Busbee, Office Assistant III, Clerk and Comptroller's Office
Judy H. Witterstaeter, Program Coordinator, County Administrator's Office

PUBLIC FORUM WORK SESSION

Chairman Bergosh called the Public Forum Work Session to order at 4:30 p.m.

1. FOR INFORMATION: The Board heard comments from Ernest Stanberry, Jr., regarding issues with his property in Ensley. ►
2. FOR INFORMATION: The Board heard comments from Dr. Gloria Horning concerning the passing of Gary Sansing and a request to re-name Public Forum in his honor. ►
3. FOR INFORMATION: The Board heard comments from the following individuals concerning the re-instatement of payments to outside agencies:

Walter B. Watson Jr. ►
Laura Gilliam ►
4. FOR INFORMATION: The Board heard comments from the following individuals regarding an Ordinance allowing the sale of liquor within a specified number of feet from churches, schools, and residences:

Pastor Bill Adams ►
Robert Love ►

PUBLIC FORUM WORK SESSION AND REGULAR BCC MEETING MINUTES – Continued

COUNTY ADMINISTRATOR'S REPORT – Continued

I. TECHNICAL/PUBLIC SERVICE CONSENT AGENDA – Continued

8. Adoption of a Resolution ►

Motion made by Commissioner Robinson, seconded by Commissioner Underhill, and carried unanimously, adopting the Resolution [R2018-37] approving the plan of finance therein described and the issuance and sale of not-exceeding \$6,600,000 Multi-family Housing Revenue Bonds (the "Bonds") by the Escambia County Housing Finance Authority (the "Authority"), to be used to finance or refinance the Affordable Housing Project located in Taylor County, Florida.

Speaker(s):

Patricia Lott

9. Triumph Applications ►

Motion made by Commissioner Robinson, seconded by Commissioner Underhill, and carried unanimously, approving to drop the application for the Downtown Sports Complex and Events Venue, submitted by Escambia County and Pensacola Arena Development Partners [Item A of the recommendation on the agenda].

Motion made by Commissioner Robinson, seconded by Commissioner Underhill, and carried unanimously, acknowledging submittal and reaffirming support for the following Triumph Applications [Items B and C of the recommendation on the agenda], to the Triumph Gulf Coast Board (Note: the complete applications can be found at the MyFloridaTriumph.com website):

- A. Diversifying the Economy via Sector Workforce Development, submitted by the Escambia County School Board; and
- B. Innovation Network Project at Downtown Technology Park, submitted by the University of West Florida.

Motion made by Commissioner Robinson, seconded by Commissioner May, and carried 4-1, with Commissioner Underhill voting "no," acknowledging submittal and reaffirming support for the Triumph Application Commercial Aircraft Maintenance Campus, submitted by the City of Pensacola, to the Triumph Gulf Coast Board [Item D of the recommendation on the agenda] (Note: the complete application can be found at the MyFloridaTriumph.com website).

(Continued on Page 13)

PROJECT SUPPORT LETTERS

May 10, 2018

Honorable Mayor Ashton Hayward
City of Pensacola
222 West Main Street
Pensacola, Florida 32522

Mayor Hayward:

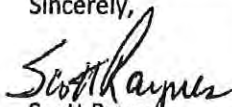
We are pleased to support your application to the Triumph Gulf Coast Board of Directors and applaud your success and continued efforts to expand our economic diversity, workforce opportunities and improve the quality of life for not just the City of Pensacola but for the entire panhandle region. The Pensacola International Airport MRO Expansion project will do just that. It leverages on current start up activity and inertia with VT Aerospace and partners with various educational institutions on education and workforce training and certification programs.

The project is holistically designed to succeed in transforming the area economy and industrial development while leveraging on exiting military personnel from Eglin, Hurlburt, Tyndall, Whiting and NAS Pensacola military bases. The programs delivered through the Escambia County School District, Pensacola State College and the University of West Florida also give young people, entering the workforce, the opportunity of a high paying career.

The additional 1,325 direct and over 4,000 indirect jobs with payroll of \$400,000,000 coupled with the current 400 new jobs at the MRO facility truly transform our regional economy and career offerings. The MRO campus, once complete will be the fifth largest private employer in Escambia County. It will help draw a national corporate headquarters and establish the second largest and most modern MRO facility in North America.

This is a once in a generation opportunity for any community and as stated above, we are pleased to support your application.

Sincerely,


Scott Raynes

EVP/President of Baptist Hospital, Inc.



1717 North E Street, Suite 320
Pensacola, FL 32501
Phone: 850-469-2338 Fax: 850-434-4841

May 10, 2018

The Honorable Ashton Hayward
City of Pensacola
222 West Main Street
Pensacola, FL 32502

Dear Mayor Hayward:

I am pleased to provide this letter of support for the City Pensacola's application to the Triumph Gulf Coast, Inc. for the commercial aircraft Maintenance, Repair and Overhaul (MRO) campus as this project promises to impact the international deficit of qualified and well-trained airplane mechanics while bringing positive economic changes to our community.

Our region will be significantly impacted by the project as it is planned to provide 4,725 direct and indirect jobs that create \$400 Million in annual personal income. A project of this magnitude will also provide for generational change as more of our citizens become trained in airplane mechanics and similar programs not currently at the forefront of our economy. I also believe that your excellent relationship with VT Aerospace Engineering provides viability and sustainability for the request.

We look forward to collaborating with you, VT Aerospace and the City to provide qualified employees who can take advantage of the many opportunities that this project will make available including educational institution business, accounting, marketing, engineering and computer graduates. I am always happy working to provide more opportunities for our workforce development and the MRO will do just that. I congratulate you on this exciting project and wholeheartedly support your application.

Please do not hesitate to contact me should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Faulkner', written over a horizontal line.

Mark Faulkner
President & CEO



Board of County Commissioners • Escambia County, Florida

January 8, 2018

Florida Triumph Gulf Coast, Inc.
P.O. Box 12007
Tallahassee, FL 32317

REF: City of Pensacola – Commercial Aircraft Maintenance Campus

Dear TRIUMPH Gulf Coast Board Members,

At our regularly scheduled board meeting on December 14, 2017, the Escambia County Board of County Commissioners (BOCC) voted to support the City of Pensacola – Commercial Aircraft Maintenance Campus Project.

The City of Pensacola – Commercial Aircraft Maintenance Campus Project represents a transformational opportunity for new jobs, economic diversification, and economic improvement for the citizens of Escambia County and Northwest Florida. The project will build upon the presence of VT Mobile Aerospace Engineering at the Pensacola International Airport and will provide additional hangars, shops and warehouses, engineering and training facilities, as well as taxiways and aircraft parking ramps. This project will firmly establish an Aerospace and Aviation industry sector in the regional economy and diversify economic activity in the region. The facility will be a catalyst for the co-location of partner companies, startups and future growth in the high-tech aerospace engineering industry in Northwest Florida.

Thank you for considering Escambia County's group of supported projects for funding. Please let us know if we can provide any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Bergosh", is written over the word "Sincerely,".

Jeff Bergosh, Chairman
Escambia County Board of County Commissioners

Cc: Commissioner Douglas B. Underhill
Commissioner Lumon May
Commissioner Grover C. Robinson, IV
Commissioner Steven Barry



CareerSource Escarosa

3670-2A North L Street Pensacola, FL 32505
p: 850.473.0939 | f: 850.473.0935

Careersourceescarosa.com

Sheryl Rehberg
Executive Director

Steve Rhodes
Board Chairman

May 10, 2018

Honorable Mayor Ashton Hayward
City of Pensacola
222 West Main Street
Pensacola, Florida 32522

Dear Mayor Hayward:

On behalf of CareerSource Escarosa, your local Regional Workforce Development Board, I am pleased to support your application to the Triumph Gulf Coast Board of Directors and applaud your success and continued efforts to expand our economic diversity, workforce opportunities and improve the quality of life for not just the City of Pensacola but for the entire panhandle region. The Pensacola International Airport MRO Expansion project will do just that. We have been engaged with VT Aerospace in recruiting their workers, and are familiar with the need for workforce in this particular industry sector.

The project is holistically designed to succeed in transforming the area economy and industrial development while providing additional concentration on the talent available here in exiting military personnel from Eglin, Hurlburt, Tyndall, Whiting and NAS Pensacola military bases. The programs delivered through the Escambia County School District, Pensacola State College and the University of West Florida also give young people entering the workforce the opportunity of a high paying career. Added jobs give the parents of students in our schools opportunities for training and advancing in careers as well.

The additional 1,325 direct and over 4,000 indirect jobs with payroll of \$400,000,000 coupled with the current 400 new jobs at the MRO facility truly transform our regional economy and career offerings. In my long history of working with Economic Development, representing workforce needs and impact of job creation and training, I do not hesitate to say recruiting more jobs in this advancing manufacturing sector of aerospace are critical to the success of creating a more thriving economy for the Northwest Florida region, and fits exactly the goals of economic and workforce development at this moment in time and into the future.

Thank you for the opportunity to help make the case for this important leap forward!

Sheryl Rehberg, CEO

A handwritten signature in cursive script that reads "Sheryl Rehberg".
CareerSource Escarosa



The Honorable Ashton Hayward
City of Pensacola
222 West Main Street
Pensacola, FL 32502

Dear Mayor Hayward:

The Greater Pensacola Chamber of Commerce is pleased to provide this letter of support for the City of Pensacola's application to Triumph Gulf Coast, Inc. for the commercial aircraft Maintenance, Repair and Overhaul (MRO) campus at Pensacola International Airport. This transformative project promises to provide stable, well-paying jobs while bringing positive economic changes to our community.

Our region will be significantly impacted by the project as it is planned to provide 4,725 direct and indirect jobs creating \$400 Million in annual personal income. A project of this magnitude will also provide for generational change as more of our citizens become trained in the highly specialized field of airplane mechanics and similar programs not currently at the forefront of our economy. We also believe that the excellent current working relationship with VT Aerospace Engineering provides viability and sustainability for the request.

The timing of this project also coincides well with the recently approved Escambia County Workforce Development project approved by Triumph Gulf Coast last month. That project, which was also supported by the Greater Pensacola Chamber of Commerce, is focused on providing the future workforce necessary for projects such as this. The creation of good, well-paying jobs and the development of skills for these jobs are what makes this project so appealing to our Board of Directors.

The Greater Pensacola Chamber of Commerce Board of Directors congratulates you on this exciting project and wholeheartedly supports your application.

Please do not hesitate to contact me should you have any questions or if we can assist.

Respectfully,

A handwritten signature in black ink, appearing to read "Stephen R. Moorhead". The signature is fluid and cursive, with a large, sweeping "S" and "M".

Stephen R. Moorhead
Chairman of the Board, Greater Pensacola
Chamber of Commerce

About the Greater Pensacola Chamber

Founded in 1889, the Greater Pensacola Chamber is driven to create a climate of growth and success, to ensure economic prosperity and to enhance the quality of life in Greater Pensacola. For additional information, please visit www.pensacolachamber.com, facebook.com/pensacolachamber, linkedin.com/company/greaterpensacolachamber or follow @pcolachamber.



"Making A Positive Difference"

May 10, 2018

THE SCHOOL DISTRICT OF ESCAMBIA COUNTY

75 NORTH PACE BOULEVARD

PENSACOLA, FL 32505

PH. 850/432-6121 • FAX: 850/469-6379

<http://www.ecsd-fl.schoolloop.com>

MALCOLM THOMAS, SUPERINTENDENT

Honorable Mayor Ashton Hayward
City of Pensacola
222 West Main Street
Pensacola, Florida 32522

Mayor Hayward:

We are pleased to support your application to the Triumph Gulf Coast Board of Directors and applaud your success and continued efforts to expand our economic diversity, workforce opportunities and improve the quality of life for not just the City of Pensacola but for the entire panhandle region. The Pensacola International Airport MRO Expansion project will do just that. It leverages on current start up activity and inertia with VT Aerospace and partners with various educational institutions on education and workforce training and certification programs.

The project is holistically designed to succeed in transforming the area economy and industrial development while leveraging on exiting military personnel from Eglin, Hurlburt, Tyndall, Whiting and NAS Pensacola military bases. The programs delivered through the Escambia County School District, Pensacola State College and the University of West Florida also give young people, entering the workforce, the opportunity of a high paying career.

The additional 1,325 direct and over 4,000 indirect jobs with payroll of \$400,000,000 coupled with the current 400 new jobs at the MRO facility truly transform our regional economy and career offerings. The MRO campus, once complete will be the fifth largest private employer in Escambia County. It will help draw a national corporate headquarters and establish the second largest and most modern MRO facility in North America.

This is a once in a generation opportunity for any community and as stated above, we are pleased to support your application.

Sincerely,

Malcolm Thomas



May 10, 2018

Honorable Mayor Ashton Hayward

City of Pensacola

222 West Main Street

Pensacola, FL 32522

Mayor Hayward:

First Place Partners believes the Pensacola International Airport MRO expansion is one of the most transformational projects ever for the economic development of our region. As such, we are very pleased to endorse wholeheartedly your application for funding from the Triumph Gulf Coast Board of Directors.

The recent approval by the Triumph Board of more \$3 million for workforce skills training – including aviation maintenance, repair and overhaul certification – was the perfect precursor for the addition of another 1,325 direct jobs and a major reason this request should be approved. What good is the training without the jobs?

We also believe these new high-income jobs will provide a seamless transition for our exiting military personnel from Eglin, Hurlburt, Tyndall, Whiting and NAS Pensacola, further strengthening the region's ties with the military.

Expanding the VT Aerospace presence in our region also sends a strong signal to other aviation companies that Northwest Florida is an excellent choice for doing business. It will help us create a cluster of high-pay, high-tech, and high-impact jobs – a generational opportunity for years to come.

On behalf of the 51 businesses and organizations that make up First Place Partners, I strongly encourage the Triumph Board to approve this application. We look forward to continuing to work with you to bring good jobs to our region.

Sincerely,



John L. Hutchinson
Director, First Place Partners

Phone: 850-324-0099

email: JohnLucasHutchinson@gmail.com

FloridaWest
Economic Development Alliance
117 West Main Street
Pensacola, FL 32502

Florida
West

January 2, 2018

Mayor Ashton Hayward
City of Pensacola
222 West Main Street
Pensacola, FL 32502

Dear Mayor Hayward

FloridaWest Economic Development Alliance is pleased to submit this letter of support for the City of Pensacola's grant proposal to the Triumph Gulf Coast Board of Directors. The investment will allow for the building of three additional hangars and support offices that will bring more jobs to Pensacola International Airport.

Once completed, the VT MAE project will not only provide jobs, but will also be instrumental in drawing further aerospace industry to the region. The jobs provided by many of these types of companies are typically above the regional and national averages, a key data point emphasized by the Triumph Gulf Coast Board of Directors. Once completed, the project will also help diversify the economy of Escambia County and Northwest Florida by bringing in new industries.

We look forward to working with the City to continue to improve and diversify the economy of Northwest Florida.

Sincerely,



Wendell Smith
President, FloridaWest Board of Directors



May 14, 2018

The Honorable Ashton Hayward
City of Pensacola
222 West Main Street
Pensacola, FL 32502

Dear Mayor Hayward:

I am pleased to provide this letter of support for the City Pensacola's application to the Triumph Gulf Coast, Inc. for the commercial aircraft Maintenance, Repair and Overhaul (MRO) campus. This project promises to provide a positive economic impact to our community.

The region will be significantly affected by the project, as it plans to provide 1,325 direct and over 4,000 indirect jobs with a payroll of \$400,000,000, coupled with the current 400 new jobs at the MRO facility. A project of this magnitude will provide for generational change as more of our citizens become trained in airplane mechanics and similar programs not currently at the forefront of our economy.

Once complete, the airport MRO expansion project will provide regional jobs for those in Walton, Okaloosa, Santa Rosa, and Escambia Counties. It will be instrumental in drawing further aerospace industry to the region. The jobs provided by many of these types of companies are typically above the regional and national average wages, a key data point emphasized by the Triumph Gulf Coast Board of Directors. Once completed, the project will also help diversify the economy of Escambia County and Northwest Florida by bringing in new aerospace and aeronautical industries.

We look forward to working with the City to continue to improve and diversify the economy of Northwest Florida. Please do not hesitate to contact me should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Debbie Calder", written over a horizontal line.

Debbie Calder
Executive Vice President
Greater Pensacola Operations

DC:ccl



PENSACOLA STATE COLLEGE

May 11, 2018

Office of the President

Pensacola State College
1000 College Boulevard
Pensacola, FL 32504-8998
850-484-1700
Fax 850-484-1840
www.pensacolastate.edu

Honorable Mayor Ashton Hayward
City of Pensacola
222 West Main Street
Pensacola, Florida 32522

Dear Mayor Hayward:

We are pleased to support your application to the Triumph Gulf Coast Board of Directors and applaud your success and continued efforts to expand our economic diversity, workforce opportunities and improve the quality of life for not just the City of Pensacola but for the entire panhandle region. The Pensacola International Airport MRO Expansion project will do just that. It leverages on current start up activity and inertia with VT Aerospace and partners with various educational institutions on education and workforce training and certification programs.

The project is holistically designed to succeed in transforming the area economy and industrial development while leveraging on exiting military personnel from Eglin, Hurlburt, Tyndall, Whiting and NAS Pensacola military bases. The programs delivered through the Escambia County School District, Pensacola State College and the University of West Florida also give young people, entering the workforce, the opportunity of a high paying career.

The additional 1,325 direct and over 4,000 indirect jobs with payroll of \$400,000,000 coupled with the current 400 new jobs at the MRO facility truly transform our regional economy and career offerings. The MRO campus, once complete, will be the fifth largest private employer in Escambia County. It will help draw a national corporate headquarters and establish the second largest and most modern MRO facility in North America.

This is a once in a generation opportunity for any community and as stated above, we are pleased to support your application.

Sincerely,

Edward Meadows
President



5151 N. Ninth Avenue • P.O. Box 2700
Pensacola, Florida 32513-2700
850-416-7000
www.sacred-heart.org

The Honorable Ashton Hayward
City of Pensacola
222 West Main Street
Pensacola, FL 32502

May 15, 2018

Dear Mayor Hayward:

I am pleased to provide this letter of support for the City Pensacola's application to the Triumph Gulf Coast, Inc. for the commercial aircraft Maintenance, Repair and Overhaul (MRO) campus as this project promises to impact the international deficit of qualified and well-trained airplane mechanics while bringing positive economic changes to our community.

Our region will be significantly impacted by the project as it is planned to provide 4,725 direct and indirect jobs that create \$400 Million in annual personal income. A project of this magnitude will also provide for generational change as more of our citizens become trained in airplane mechanics and similar programs not currently at the forefront of our economy. I also believe that your excellent relationship with VT Aerospace Engineering provides viability and sustainability for the request.

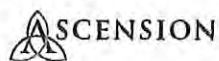
We look forward to collaborating with you, VT Aerospace and the City to provide qualified employees who can take advantage of the many opportunities that this project will make available including educational institution business, accounting, marketing, engineering and computer graduates. I am always happy working to provide more opportunities for our workforce development and the MRO will do just that. I congratulate you on this exciting project and wholeheartedly support your application.

Please do not hesitate to contact me should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom VanOsdol", written over a horizontal line.

Tom VanOsdol
President and CEO Sacred Heart Health System
Ministry Market Executive, Ascension Florida



Affiliated with:
University of Florida Health
MD Anderson Cancer Network ®
Methodist Homes for the Aging



Office of the President
11000 University Parkway
Pensacola, FL 32514-5750

March 12, 2018

The Honorable Ashton Hayward
City of Pensacola
222 West Main Street
Pensacola, FL 32502

Dear Mayor Hayward:

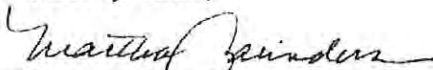
I am pleased to provide this letter of support for the City of Pensacola's application to the Triumph Gulf Coast Inc. for the Commercial Aircraft Maintenance, Repair and Overhaul campus (MRO), as this project promises to impact the international deficit of qualified and well-trained airplane mechanics while bringing positive economic changes to our community.

Our region will be significantly impacted by this project as it is planned to provide 4,725 direct and indirect jobs that create \$400 million in annual personal income. A project of this magnitude will also provide for generational change as more of our citizens become trained in airplane mechanics and similar programs not currently at the forefront of our economy. I also believe that your excellent relationship with VT Aerospace Engineering provides viability and sustainability for the request.

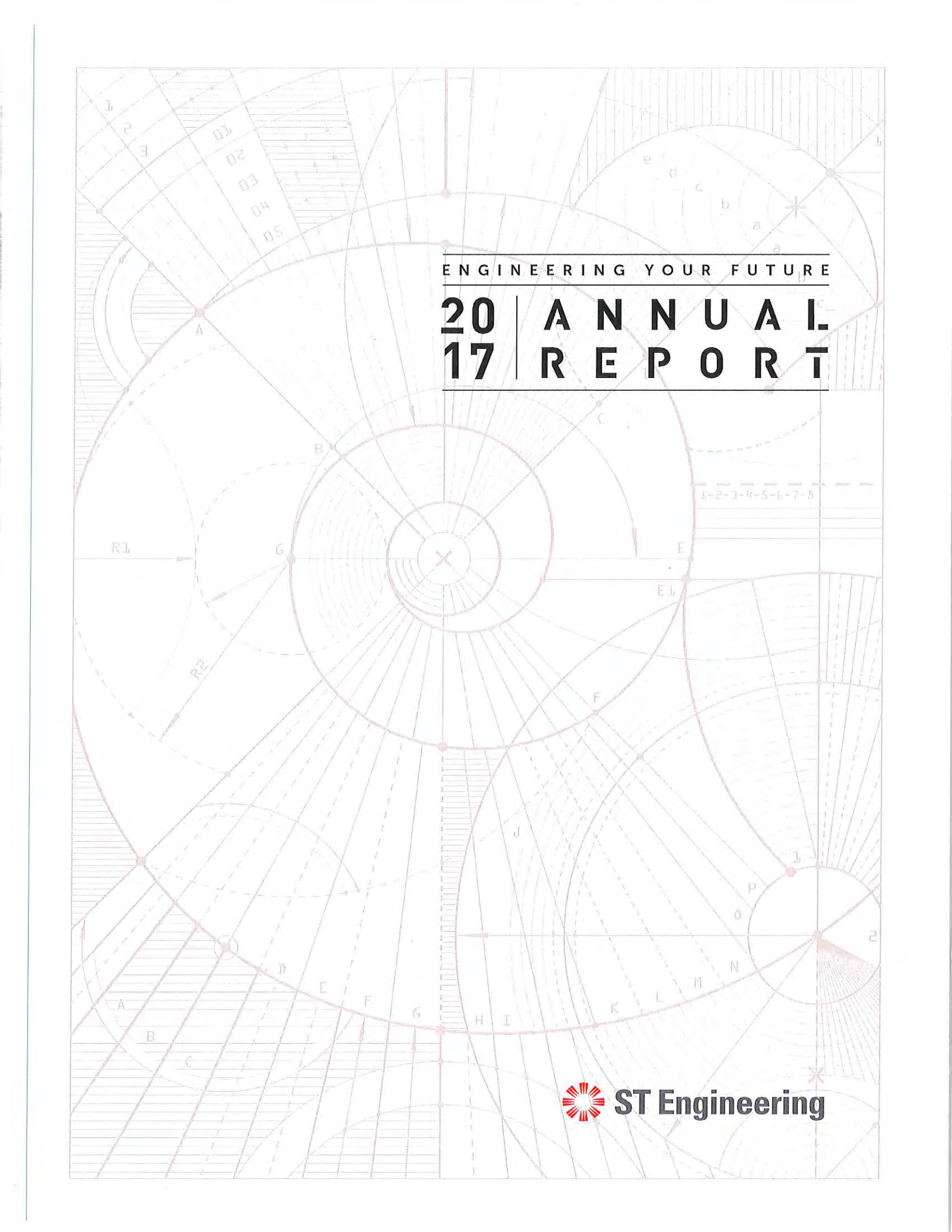
The University of West Florida looks forward to collaborating with you, VT Aerospace and the City to provide qualified employees who can take advantage of the many opportunities that this project will make available including our business, accounting, marketing, engineering and computer graduates. As President, I am always working to provide more opportunities for our students in the areas of internships, co-ops and jobs after graduation, and the MRO will do just that. I congratulate you on this exciting project and wholeheartedly support your application.

Please do not hesitate to contact me should you have any questions.

Sincerely Yours,


Martha D. Saunders
President

ST ENGINEERING 2017 ANNUAL REPORT



ENGINEERING YOUR FUTURE

2017 | ANNUAL REPORT

GROUP OVERVIEW

ST Engineering is a global technology, defence and engineering group specialising in the aerospace, electronics, land systems and marine sectors. Incorporated in 1997 and headquartered in Singapore, we rank among the largest companies listed on the Singapore Exchange, and are one of Asia's leading engineering groups.

Our global network of subsidiaries and associated companies, supported by a workforce of about 22,000, allow us to serve customers in Asia, the Americas, Europe, and Oceania. A leader in each of our core businesses, ST Engineering brings innovation and technology together to create multi-disciplinary smart engineering solutions for customers in the defence, government and commercial segments.

Our Aerospace sector offers a wide spectrum of aircraft maintenance, engineering and training services for both military and commercial aircraft operators. These services include airframe, component and engine maintenance, repair and overhaul, engineering design and development, materials support, asset management and pilot training.

Our Electronics sector specialises in the design, development and integration of advanced electronics and communications systems across all industries and segments.

Our Land Systems sector delivers customised land systems, security solutions and their related through-life support for defence, homeland security and commercial applications.

Our Marine sector provides turnkey and sustainable defence and commercial solutions in the marine, offshore and environmental engineering industries.

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FINANCIAL
HIGHLIGHTS

OPERATING CASH FLOW

\$0.76b

+0.6%

ORDER BOOK

\$13.2b

+14.0%

EARNINGS PER SHARE

16.43¢

+5.3%

DIVIDEND PER SHARE

15.0¢

RETURN ON EQUITY

22.9%

+0.7% PTS

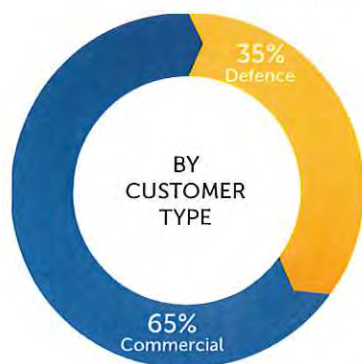
RETURN ON SALES

8.1%

+0.7% PTS

FY2017 vs FY2016

REVENUE BREAKDOWN

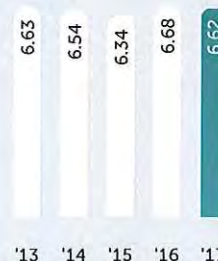


GROUP

REVENUE (\$b)

\$6.62b

-1.0%



PBT (\$m)

\$623.3m

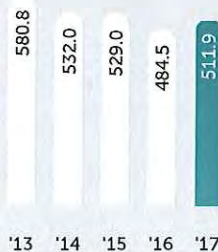
+5.5%



NET PROFIT (\$m)

\$511.9m

+5.6%

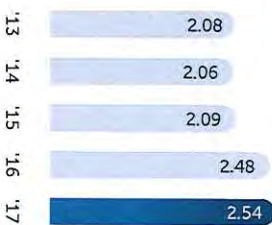


AEROSPACE

REVENUE (\$b)

\$2.54b

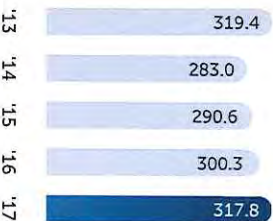
+2.0%



PBT (\$m)

\$317.8m

+5.8%

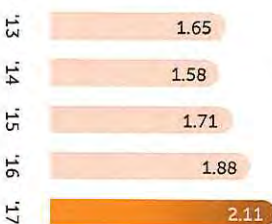


ELECTRONICS

REVENUE (\$b)

\$2.11b

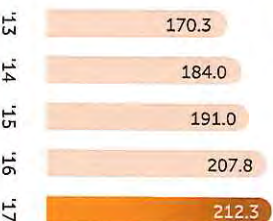
+11.8%



PBT (\$m)

\$212.3m

+2.2%

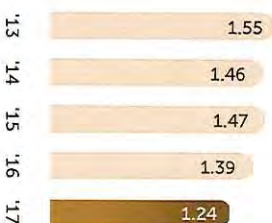


LAND SYSTEMS

REVENUE (\$b)

\$1.24b

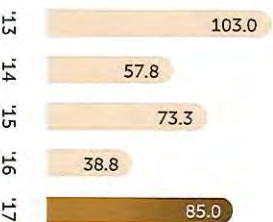
-10.5%



PBT (\$m)

\$85.0m

+119.4%

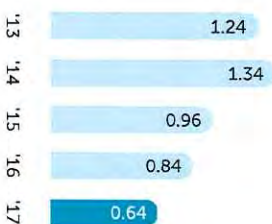


MARINE

REVENUE (\$b)

\$0.64b

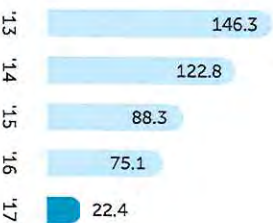
-24.2%



PBT (\$m)

\$22.4m

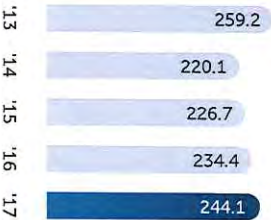
-70.2%



NET PROFIT (\$m)

\$244.1m

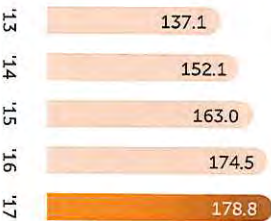
+4.1%



NET PROFIT (\$m)

\$178.8m

+2.4%



NET PROFIT (\$m)

\$87.4m

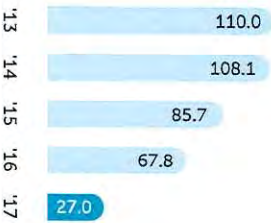
+243.3%



NET PROFIT (\$m)

\$27.0m

-60.1%



LETTER TO SHAREHOLDERS



Kwa Chong Seng
Chairman

Vincent Chong
President & CEO

Dear Shareholders,

Global GDP growth increased in 2017 to over 3%, but business recovery was not uniform across sectors. In a year that presented both opportunities and challenges, we closed 2017 with a Group revenue of \$6.62b, broadly comparable to the \$6.68b posted in 2016. With a continued focus on cost, we fared better in profits. Both Profit Before Tax (PBT) of \$623.3m and Profit Attributable to Shareholders (Net Profit) of \$511.9m were 6% higher compared to 2016.

At the business sector level, the Aerospace sector's revenue was 2% higher at \$2.54b, its PBT was \$317.8m and Net Profit was \$244.1m, up 6% and 4% respectively from 2016. Revenue for the Electronics sector was 12% higher at \$2.11b, its PBT and Net Profit were \$212.3m and \$178.8m respectively, both up 2% from 2016. At the Land Systems sector, while its

revenue lowered by 11% to \$1.24b, its PBT was up 119% to \$85.0m due to the absence of the prior year's impairment of asset carrying values and the provision of closure costs for its subsidiaries in China. Consequently, its Net Profit improved 243% to \$87.4m, also contributed by the positive impact of the tax reform effects in the US. The Marine sector's revenue was 24% lower at \$637m, and its PBT was down 70% at \$22.4m, due mainly to the weak industry conditions and its US operations. As a result, its Net Profit came down 60% lower at \$27.0m from the year before.

The Group's revenue mix by business sector shifted slightly. While the Aerospace sector was still the largest contributor at 38%, the Electronics sector's contribution increased to 32%. The Land Systems and the Marine sectors contributed 19% and 10% respectively, with the remainder

under "Others". Geographically, business units in Asia including Singapore, contributed 72% to Group revenue, while our business units in the US and Europe generated 18% and 8% of Group revenue respectively. Revenue split between Commercial and Defence remained stable at 65%:35%.

The Group's return on equity was 22.9% and our earnings per share amounted to 16.43 cents.

The Group's revenue pipeline remains healthy, with an order book of \$13.2b, about 14% higher than the year before. We expect to deliver about \$3.8b of the order book in 2018.

Our capital expenditure was \$273m compared to \$252m in FY2016. A significant portion of this expenditure was deployed in the Aerospace sector. We expanded our facility in Dresden, Germany with a new single-bay wide-body hangar to take on an expanding A330-300 Passenger-to-Freighter (P2F) conversion programme for DHL Express. We also invested in a new facility for composite panels production in Kodersdorf, Saxony. This facility will manufacture lightweight components, mainly floor panels and cargo linings, to meet the needs of Airbus' growing production of single-aisle aircraft.

We generated a strong cash flow of \$764m from operations and ended the year with \$1.3b of cash and cash equivalents, including funds under management. We are committed to maximising cash flow, maintaining capital discipline and improving value and returns.

Your Board of Directors proposes a final dividend of 10 cents per share for this financial year. Together with the interim dividend of 5 cents per

share paid in August 2017, the total dividend for the full year will be 15 cents per share, representing a total payout of \$468m to our shareholders. The dividend yield for 2017 is 4.6% compared to 4.8% for 2016.

Pursuing growth through innovation

As a technology, defence and engineering Group, we need to keep pace with the speed of technology and market changes to develop new and innovative solutions for our customers. This is why ST Engineering has consistently been making strategic R&D investments in key disciplines and technologies within our core business sectors.

However, we want to raise our innovation quotient even further. To that end, we have actively promoted a greater innovative culture especially among engineers to experiment and venture beyond their comfort zones. We have also adopted open innovation by providing a dynamic innovation platform and springboard for collaboration in new and disruptive technologies.

In 2017, we launched an Open Innovation Lab (Open Lab), an engineering-based incubator that is first of its kind in Singapore. The Open Lab has participation from our own engineers as well as individuals and start-ups from outside the Group. They come together to co-create and innovate while receiving funding support, access to advanced lab equipment, and go-to-market facilitation etc.

We also set up a Corporate Venture Capital unit with US\$150m open-ended fund to invest in promising technology start-ups and early-stage companies. The unit made its first



**OUR FOUR SECTORS
REMAIN STRONG, WITH
ESTABLISHED MARKET
POSITIONS THAT HELP
US MEET THE CHALLENGES
AND GROW THE BUSINESS.**



investment in Janus Technologies, a US-based endpoint cybersecurity provider, which helped ST Electronics launch its Black Computer, an industry-first hardware-based cybersecurity solution.

Separately, we acquired Aethon, a US-based provider of autonomous mobile robots (AMRs) which has deployed its AMRs in more than 200 sites globally, including in 140 hospitals in the US. The acquisition has since allowed us to develop new applications based on a proven robotic solution for indoor applications for the healthcare, industrial and hospitality sectors.

It is still early days, but the creation of the Open Lab and investments in Janus, Aethon and the likes have already value-added and strengthened the larger Group's core technological and engineering capabilities by complementing existing R&D efforts in our sectors and helping us to find new innovative solutions for our customers.

LETTER TO SHAREHOLDERS

Our core businesses remain strong

Our four sectors remain strong, with established market positions that help us meet the challenges and grow the business.

The **Aerospace sector** had a busy year, securing new contracts and achieving significant milestones which are the result of investments made over the years. In 2017, ST Aerospace retained its ranking as the world's largest airframe MRO service provider, with 12.5 million man-hours achieved in maintenance output, ahead of its competitors as surveyed by Aviation Week Network. Keeping pole position since 2002 is a clear demonstration of our competitive strength in an increasingly complex operating environment where airlines demand flexibility and fast turnaround in maintenance schedules and services and where aircraft OEMs eye a larger share of aftermarket services. Our competitiveness is a result of our continuous investments in capability enhancement and capacity expansion, driven by our strong desires to move up the value chain to better support our customers. Like how we have been since 2013, developing MRO capabilities to better support the global 787 Dreamliner fleet. Today, we offer comprehensive services for 787 airframe and component supports through our global network. In addition to being a Boeing-approved MRO centre for the 787's pool of components, we have developed our

San Antonio facility in the US as a Centre of Excellence for 787 airframe MRO.

Another investment taking off is our A330 and A320/321 P2F conversion programmes that started as far back as 2012. A series of milestones including completion of test flights in October, and the award of the Supplemental Type Certificate by the European Aviation Safety Agency in November led to the successful delivery of the first converted A330-300 aircraft for DHL Express in December, as part of its eight-aircraft order with an option for another 10 aircraft. The delivery augurs well for our A330-300 P2F conversion programme and we are equally optimistic about the A330-200P2F and the A320/A321 P2F conversion programmes. These programmes, when fully developed, will become a strong growth driver for the Aerospace sector.

Our **Electronics sector** continues to innovate and deliver new growth vistas. Our ability to ride on the success of TeLEOS-1 to commence the building of TeLEOS-2, Singapore's next-generation Earth observation satellite, is a testament to this. TeLEOS-2 will be Singapore's first Synthetic Aperture Radar-based imaging satellite, and will provide round-the-clock, all-weather imaging to our customers. We target to launch this satellite in 2022.

This sector has also taken a focused approach to develop and offer leading solutions to enable smart, secure and

connected cities. With new contracts sealed in 2017, it will soon have more than 18 million wireless sensors that power smart street lighting and efficient utility management in cities across China, Europe, India and the US.

In cybersecurity, we remain focused on broadening and deepening our capabilities, and are helping our customers strengthen and harden their cyber preparedness and resilience. The contract to provide consultancy to Sri Lanka to design its National Cyber Security Operations Centre is an example of the confidence which customers have in us.

Rail electronics continues to fare well in 2017, delivering cost-effective and reliable integrated smart solutions to meet the demands of rapid urbanisation, connectivity and sustainability of large cities. Thus far, we have implemented more than 100 rail electronics projects in over 30 cities, helping to move commuters with our smart mobility solutions.

We have assumed a strategic role towards achieving Singapore's Smart Mobility 2030 vision of a smart transportation network. Drawing on our systems integration capabilities and deep engineering expertise in military autonomous platforms and robots, the **Land Systems sector** has been developing its Autonomous Vehicle (AV) capabilities and technologies for commercial smart mobility applications from as early as 2015, when it deployed the Autonomous People Mover in Singapore's Gardens by the Bay. We are developing two autonomous buses for Singapore's Land Transport Authority that will undergo public road trials by mid-2020. We are also developing four Mobility-on-Demand Vehicles for Singapore's Ministry of Transport and Sentosa Development

Corporation that will be deployed in Sentosa in early 2019. This follows the completion of a front-end engineering study, which started in July 2016.

On defence business, Singapore's Ministry of Defence awarded us a contract to build the Next Generation Armoured Fighting Vehicle (NGAFV). Delivery of the NGAFVs will begin in 2019. We entered new markets in Asia and the Middle East for our 40mm munitions, further strengthening our strong foothold in this product segment globally. On the US Marine Corp ACV1.1 programme, all 16 Terrex 2 vehicles were delivered and are currently on trial by the US Marine Corps. Together with our partner, SAIC, we expect the customer to make a decision on its preferred vehicle in mid-2018. We are also building on this partnership to jointly bid for the US Army's Mobile Protected Firepower programme, using the NGAFV as the platform.

The **Marine sector** continued to operate under challenging industry conditions. We had a difficult year for our US shipbuilding operations but we remained focused on driving greater synergies from our yards in Singapore and the US. Such efforts will strengthen our foundation to benefit from the industry recovery in time to come. Despite the challenging industry environment, our US operations managed to secure contracts to build an ATB tug and America's first offshore Liquefied Natural Gas Articulated Tug and Barge unit. On the naval shipbuilding side, the eight-vessel Littoral Mission Vessel programme for the Republic of Singapore Navy is well on track to be completed in 2019.

The sector's environmental engineering business, a relatively nascent segment for us, gained some

traction in 2017. In a consortium with Tuas Power, we were selected by Singapore's national water agency, PUB, to design, build, own and operate Singapore's fifth desalination plant in Jurong Island. The consortium has since set up a concession company, in which ST Marine holds a 40% stake, to jointly undertake the project following the Water Purchase Agreement with PUB, for a concessionary period of 25 years from 2020.

You can read more about the milestones and achievements of the business sectors in the Operational Review & Outlook from page 32 onwards.

Driving the future with new growth levers

Our defence business remains core to us and we continue to strengthen and deepen the business and capabilities. Our participation in highly contested global defence programmes has helped enhance our reputation as a competitive defence business participant with advanced technologies and solutions that meet the needs and requirements of modern military and paramilitary forces. With improving global economics and stronger focus on defence and homeland security globally, we are hopeful to gain a larger share of defence and related spending, predicated on a superior value proposition and international track record.

Smart City solutions is a new strategic thrust that will drive new growth opportunities for the Group. We have already acquired strong domain expertise in Smart Mobility, Smart Security and Smart Environment. With the exponential advancement in technology, we see it as a strategic



OUR DEFENCE BUSINESS REMAINS CORE TO US AND WE CONTINUE TO STRENGTHEN AND DEEPEN THE BUSINESS AND CAPABILITIES.



imperative to leverage and harness the collective genius of the Group to capture wider global opportunities in this area. And we are in a unique position to do so - we have deep engineering expertise and wide technology capabilities across the Group to offer a comprehensive suite of Smart City solutions - be it rail or road solutions, emergency response systems, physical security or cybersecurity solutions, sensor networks for water and utility management or water treatment and waste management.

Embracing collaboration to seek multi-disciplinary opportunities

As product innovations increasingly demand multi-disciplinary expertise, we continue to strengthen industry collaboration, with like-minded institutions and organisations that are keen to co-create and develop solutions to solve real-world challenges.

The AV space is an area where we believe that individual efforts

LETTER TO SHAREHOLDERS

WE CONTINUE TO TAKE A LONG-TERM VIEW OF BUSINESS FUNDAMENTALS, UNENCUMBERED BY NEAR- TERM ABERRATIONS.

alone, notwithstanding our deep experience in robotics and autonomous solutions, are not sufficient to bring about breakthrough applications. Hence, the launch of the Singapore Autonomous Vehicles Consortium in which we are collaborating with institutes of higher learning to set common standards for the adoption of AV in real-world scenarios.

Embracing greater industry collaboration has also enabled us to accelerate our offerings of more competitive products and solutions. Our Electronics sector signed several MOUs, tapping on strategic partnerships to develop deep industry expertise and launched first-of-its-kind solutions in the areas of cybersecurity, air traffic management and maritime operations, while leveraging our domain expertise in smart sensors, threat detection and data analytics. In July, it became part of a consortium to participate in high-speed rail projects starting with the Kuala Lumpur-Singapore High Speed Rail, bringing to the consortium its proven rail electronics solutions and deep systems integration capabilities.

Investing for growth across business cycles

We continue to take a long-term view of business fundamentals, unencumbered by near-term aberrations. One upside to the

slowdown in the marine industry is that it has allowed us to acquire assets that complement our strengths at a good price. In 2017, we acquired a facility purpose-built for heavy marine fabrication, offshore oil and gas rig upgrades, repairs and conversions. This facility in the Gulf of Mexico, located just next to our Pascagoula yard, will give us scale advantages in the marine repair segment.

On another front, we acquired a 51% stake in SP Telecommunications. We now have access to an extensive network of fibre optic backhaul infrastructure and facilities in Singapore, enabling our Electronics sector to move up the ICT value chain to provide connectivity and other bundled enterprise ICT services.

These acquisitions, and that of Aethon, have validated our commitment to invest for growth across business cycles and for long-term value creation.

Steadfast commitment to governance and sustainability

Our steadfast commitment to governance and sustainability remains key. As in the past years, our Sustainability Report, from page 71 sets out the Group's environmental, social and governance performance for the year.

Doing well and doing good in our Golden Jubilee

2017 marked the 50th anniversary of the founding of our predecessor company, Chartered Industries of Singapore. We celebrated the occasion in many ways with our employees and stakeholders, many of whom contributed to the formative years of the ST Engineering Group.

Our jubilee celebration was extended to the community, consistent with our commitment to reach out to the community's underserved and underprivileged through fund raising and employee volunteerism. We are proud to report that we raised \$1.27m, of which \$1m was for the President's Challenge 2017. The rest was channelled to other charities to support people with special needs and disabilities. Our employees performed 62 Good Deeds, exceeding the 50 we had set out to do at the start of the year.

Strengthening management bench with leadership changes

As the Group strives for sustainable growth and value creation, we continue to evolve the roles of our senior leaders to strengthen our leadership bench and capacity. In 2017, several changes were made.

Dr Lee Shiang Long assumed his role as the President of ST Kinetics, taking over from Ravinder Singh who became President of ST Electronics. Eleana Tan relinquished her role as the Chief Financial Officer to become Chief Corporate Officer with functional responsibilities for IT, Procurement, Estate and Facilities Management as well as a role to oversee and ensure the smooth execution of shared services plans across the Group. Cedric Foo, previously Advisor (Corporate Development), assumed the role of Chief Financial Officer.

In July, our Deputy CEO and President of Defence Business, Lee Fook Sun, retired after 17 years with the Group. Fook Sun was a significant contributor to the Group through the key positions he held. Among other roles, he was President of ST Electronics from August 2009 to

December 2016. During that period, he played a pivotal role in driving the many successes of the Electronics sector.

Board renewal and rejuvenation

The Board underwent changes in line with its quest for board renewal and rejuvenation. Koh Beng Seng, who joined us in 2003, retired as an independent non-executive Director in April. Davinder Singh, a board member since 2007, also retired as an independent non-executive Director. Ng Chee Khern stepped down in June as a non-independent, non-executive Director after he relinquished his appointment as Permanent Secretary (Defence Development) for a new role in the government. Quek See Tiat, an incumbent member of the Audit Committee (AC), was appointed Chairman of the AC. Neo Kian Hong was appointed in June as non-independent, non-executive Director. Olivia Lum who was appointed to the Board in 2014 has indicated that she will not stand for re-election at the coming AGM due to personal business commitments.

We thank our former and retiring directors for their invaluable contributions and we look forward to working with our new directors as they expand the breadth and strength of our Board.

Unwavering dedication to succeed

While our Golden Jubilee celebrations might have ended, our unwavering dedication to succeed certainly has not.

We are well positioned for growth in 2018 and beyond. Technology and innovation continue to be our lifeblood, and we will continue to drive our own transformation as the fourth industrial revolution unfolds.



WE ARE WELL-POSITIONED FOR GROWTH IN 2018 AND BEYOND... WE WILL CONTINUE TO DRIVE OUR OWN TRANSFORMATION...



To achieve this, we need the passion and commitment of our 22,000 employees, whose collective competence, loyalty and resilience have put the Group in good stead. We will also work closer with our customers and business partners to result in win-win collaborations for all. To our shareholders, we look forward to your steadfast support as we continue our path of sustainable growth and value creation.

Sincerely,

Kwa Chong Seng
Chairman

Vincent Chong
President & CEO

致股东的信

尊敬的股东：

2017年的全球GDP增长率上升至逾3%，但各行业的复苏程度不一。在这个机会与挑战并存的一年，集团2017年营收为66.2亿元，与2016年录得的66.8亿元相差不多。我们的获利表现颇佳，集团税前利润为6.233亿元，股东应占利润（净利）为5.119亿元，比2016年均高出6%。

就业务领域而言，宇航业务录得的营收为25.4亿元，增长2%；税前利润为3.178亿元，净利为2.441亿元，分别比2016年增长6%及4%。电子业务录得的营收为21.1亿元，增长12%；税前利润及净利分别为2.123亿元和1.788亿元，均比2016年增长2%。在陆路系统业务方面，虽然营收减少11%至12.4亿元，但由于少了去年的资产账面价值减损及中国子公司的关闭成本提列，税前利润增长了119%，达到0.85亿元。另外，在美国税改的正面影响下，净利也增长243%，达到0.874亿元。海事业务录得的营收为6.37亿元，减少24%；税前利润为0.224亿元，减少70%，减少的主因是行业状况及其美国运营状况疲弱。因此，造成净利比去年减少60%，只有0.27亿元。

集团各业务类别的营收占比有细微变动。虽然营收占比最大的业务类别依然是宇航业务，占了38%，但电子业务的营收占比却已增长至32%。陆路系统业务及海事业务的营收占比分别为19%及10%，其余业务类别全部计入“其他”。就地理分布而言，亚洲（包括新加坡）的业务单位集团创造了61%的营收，美国及欧洲的业务单位则分别

创造了21%及11%的营收。商用业务与国防业务的营收比例仍稳定维持在65%: 35%。

集团的股本回报率为22.9%，每股盈余为16.43分。

集团的收入流依然稳健，订单量为132亿元。我们预估其中约有38亿元的订单量将计入2018年的营收。

我们今年的资本支出为2.73亿元（2016年为2.52亿元）。其中有很大部分的资本支出用于宇航业务。在位于德国德累斯顿的工厂，我们新扩建了一个单跨宽体机库，以因应日益扩大的DHL Express A330-300客货机改装业务。我们还在德国萨克森州的科德尔斯多夫投资兴建了一家专门用于生产合成覆板的工厂。这家工厂将负责生产Airbus单走道客机的轻质组件（主要为地板和货物衬板），以满足日益增加的Airbus生产需求。

我们的经营活动产生高达7.64亿元的强劲现金流量，2017年收报的现金和现金等价物（包括旗下管理基金）为13亿元。我们致力于实现现金流量最大化、保持资本纪律，以及提升估值和回报率。

董事会建议今年派发每股10分的末期股息。加上2017年8月派发的每股5分中期股息，全年派发的总股息为每股15分，亦即付给股东的股利总金额为4.68亿。今年的股息收益率为4.6%，2016年为4.8%。

通过创新追求增长

作为一间科技、国防和工程集团，我们必须跟上科技发展及市场变化的脚步，为客户开发创新的解决方案。这也是新科工程之所以持续不断针对我们核心业务领域内的关键学科及技术进行战略性研发投资的原因。

不仅如此，我们还要进一步提高我们的创新商数。为此，我们积极提倡更大的创新文化，尤其鼓励工程师打破常规，勇于尝试和创新。我们还采用开放式创新的做法，通过提供灵活的创新平台和跳板，协手创作颠覆性科技。

在2017年，我们建立了一间开放式创新实验室（简称开放式实验室），成为新加坡首个工程技术类的孵化基地。这间开放式实验室汇集了来自本集团内部的工程师以及其他在外的人士和起步公司，利用本集团提供的资金、先进的实验室设备和市场进入等方面的帮助，促进机制，进行共同创造和创新。

我们还设立了一个创业投资单位，负责管理1.5亿美元的开放式创投基金，专门投资于前景可行的科技起步公司和初创阶段公司。该基金的首个投资对象是Janus Technologies，一家位于美国的端点网络安全提供商，该公司曾帮助新科电子推出业界第一个基于硬件的网络安全解决方案，Black Computer L100。

另外，我们还收购了美国自主移动机器人制造商Aethon。该公司销售的自主移动机器人已经遍布全球超过200个用户应用，其中包括美国的140所医院。此

次收购让我们能够以经过验证的机器人室内应用解决方案为基础,开发适合医疗保健、工业及酒店行业使用的新的应用。

虽然仍处于初期阶段,但开放式实验室的成立以及我们对Janus、Aethon和类似公司投资,已经展现出增强集团的核心科技与工程功能的实力,并且衬托现有研发工作,有助于我们为客户提供创新的解决方案。

我们的核心业务依然强盛

我们的四个核心业务依然强盛,其稳固的市场地位让我们得以因应挑战及扩展业务。

宇航业务经历了忙碌的一年,不仅签订了新的合约,过去几年的投资更在今年开花结果,达成了重要的里程碑。2017年,新科宇航依然是全球最大的机身维修服务提供商,根据Aviation Week Network所做的问卷调查,新科宇航的维修工作量达1250万个工时,遥遥领先于其竞争对手。我们自2002年以来始终保持领先地位,这充分展现我们在日益复杂的业务环境中,也就是航空公司要求更有弹性且周转时间更快速的维修计划与服务,而飞机制造厂商放眼于更大的售后服务市场份额,所具有的强大竞争力。我们的竞争力来自于我们对增强业务能力和扩大产能的持续投资,这是因为我们强烈希望向价值链上游移动,为客户提供更上一层楼的服务。自2013年以来,我们始终坚守理念,努力发展能辅助新一代新科技飞机波音787梦幻客机的维修能力。如今,我们的全球网络已能为787客机的机身和组件提供全面性的支持服务。除了成为波音公

司认可的787组件群维修中心外,我们美国的圣安东尼奥工厂也已打造为787机身维修的卓越中心。

另一项正在发展阶段的投资是我们于2012年启动的A330和A320/321客货机改装计划。一系列的里程碑如:在十月份完成的试飞、在十一月获得的欧洲航空安全局所颁发的补充型号认证等,促成了首架A330-300改装飞机在十二月时的成功交付,而该架飞机只是DHL Express所订购的八架飞机之一,后续还能追加订购十架飞机。首架飞机的成功交付是A330-300客货机改装计划的良好开端,我们也乐观看待A330-200P2F和A320/A321客货机改装计划的前景。这些计划在全面落实时,将成为驱动宇航业务增长的强劲力量。

我们的电子业务持续创新并开创出崭新的增长局面。其中一个最佳例证是,我们在TeLEOS-1的成功基础上再接再厉,继续展开新加坡新一代地球观测卫星TeLEOS-2的建造工作。TeLEOS-2将是新加坡首个合成孔径雷达成像卫星,将可为我们的客户提供全天时且全天候的成像服务。我们预计在2022年发射这颗卫星。

电子业务也开始专注于发展和提供能够建造智能、安全与互联城市的顶尖解决方案。在2017年签订的新合约即将为中国、欧洲、印度及美国供应无线传感器,推动城市智能路灯和设施的有效管理。

在网络安全方面,我们仍将着重于能力的扩展及深化,并将协助我们的客户巩固并强化他们的网络整备度和防卫

能力。我们与斯里兰卡国家网络安全运行中心所签订的合约,为提供设计顾问服务,便充分证明了客户对我们的高度信心。

铁路电子业务在2017年持续表现优异,开发出具成本效益又可靠的整体智能解决方案,以满足大型城市快速都市化、互联和可持续发展的需求。截至目前,我们已在30多座城市实施超过100个铁路电子项目,通过智能移动解决方案协助这些城市的通勤者往返得更顺畅、便捷。

我们在新加坡政府的智能交通网络的愿景,即智能通行策略规划(Smart Mobility 2030)中扮演战略性的角色。凭借我们的系统整合能力以及在军事自主平台和机器人领域的深厚工程专业知识,陆路系统业务早从2015年在新加坡滨海湾花园部署无人驾驶客车时,便已开始面向智能运输应用的无人驾驶车辆能力及技术。我们正在为新加坡陆路交通管理局开发两辆无人驾驶巴士,预计将于2020年年中在公路上展开试运行。另外我们也正在为新加坡交通部和圣淘沙发展局开发四辆提供随需而至服务的车辆,预定将于2019年初在圣淘沙正式部署。在此之前,我们已完成一项从2016年7月启动的前端工程研究。

在国防业务方面,新加坡国防部与我们签订了一份建造新一代装甲战车的合约。这些装甲战车将从2019年开始交付。我们的40mm弹药也成功进入亚洲及中东的新市场,进一步巩固此产品在全球市场上的强势地位。为美国海军陆战队ACV1.1项目制造的16辆

致股东的信

Terrex 2战车已全部完成交付,目前正在美国海军陆战队进行试运行。我们将与合作伙伴SAIC共同预期,客户将在2018年年中就中选车辆作出决策。我们也正与SAIC加强合作关系,以新一代装甲战车作为平台,联合竞标美国陆军的机动防护火力系统项目。

海事业务持续面临具挑战性的行业条件。我们的美国造船业务经历了困顿的一年,但我们继续致力推动新加坡和美国子公司发挥更大的经营绩效。这些努力将能帮助我们巩固业务根基,以便在行业复苏时抢占先机。尽管行业环境严峻,我们的美国子公司仍成功签下了建造一艘ATB拖船以及美国首艘离岸液化天然气铰接式拖船和驳船的合约。在海军造船业务方面,为新加坡海军建造八艘巡海护卫舰的计划正在顺利进行中,并定于2019年完成。

尚处于初始阶段的环境工程业务在2017年也有不错的表现。我们与大士能源合组的联盟,获选为新加坡公用事业局(新加坡的国家水资源管理机构)设计、建造、拥有及运营位于裕廊岛的第五座海水淡化厂。本联盟为此成立了一家特许公司(新科海事持有40%的股份),与公用事业局签署从2020年起特许期限为25年的购水合约,然后共同承接此项目。

有关我们各个业务在运营及财务评鉴上取得的佳绩与成就,请参阅第32页。

利用新的增长杠杆推动未来发展

国防业务依然是我们的核心业务,我们将持续强化及深化这方面的业务与能

力。积极参与高度竞争的全球国防计划,有助于提升我们作为一家具有竞争力的国防业务企业的声誉,展现我们符合现代军事和准军事部队需求与要求的先进技术及解决方案。随着全球经济逐渐改善以及全球日益重视国防和国土安全,我们可望凭借出色的价值主张及国际业务表现,在世界国防和相关支出所带来的业务中,赢得更大的市场份额。

智能城市解决方案是新的战略方向,将为集团带来新的增长机会。我们已具备在智能移动、智能安全及智能环境领域的雄厚的专业知识。随着相关技术的快速进步,我们运用集团的集体智慧来抓住更广的全球发展机遇,把此任务视作战略要务。我们也在此方面拥有独特的优势,即我们具备跨集团的深厚工程专业知识和广泛技术能力,可以提供全面的智能城市解决方案,包括铁路或公路解决方案、紧急应变系统、物理安全或网络安全解决方案、水资源和设施管理或水处理和废水管理专用的传感器网络等。

协同合作,寻求多领域机会

鉴于产品创新越来越需要多领域的专业知识,我们将持续强化产业合作,寻找理念与我们相同,积极投入解决现实世界挑战的研发工作的机构和组织结成合作伙伴。

无人驾驶车辆领域就是我们认为单靠我们在机器人和无人车解决方案的深厚专业知识,仍不足以开发出突破性应用的一个领域。因此,新加坡无人驾驶车辆协会的成立使我们能够与大学机

构协同合作,为在现实世界场景中应用无人驾驶车辆制定共同的标准。

进行更广泛的行业协作也让我们能够加快推出更具竞争力的产品和解决方案。我们的电子业务部门签订了多个合作备忘录,目的在于借助战略合作关系厚植我们的行业技能,并结合我们在智能传感器、威胁侦测和数据分析方面的专业优势,在网络安全、空中交通管理和海事工作领域推出开创业界先河的解决方案。电子业务部门在七月份加入由新加坡国际企业发展局领导的联盟,以参与包括吉隆坡-新加坡高速铁路在内的高速铁路项目,并为联盟提供经过验证的铁路电子解决方案和深度系统整合能力。

投资于跨经济周期的增长

我们持续从长远的观点评量我们的业绩基本面,不受到近期异常波动的拖累。海事行业减速的一个好处是,它让我们能够以好的价格购入与我们的优势互补的资产。在2017年,我们购入了一个可从事重型海事设备、离岸石油和天然气勘探平台升级、维修及改装工作的专用设施。这间处在墨西哥湾的设施就位于我们的帕斯卡古拉船厂附近,有利于我们从船舶维修业务中获得规模优势。

另外,我们还收购了新能源电信公司51%的股权。此收购动作让我们得以藉由该公司大面积的光纤电缆基础设施和相关设施,达成电子业务向信息通讯技术价值链上游移动,以提供互联和其他捆绑式企业信息通讯技术服务的目标。

这些收购活动,加上对Aethon的收购动作,充分证明了我们投资于跨经济周期的增长及长期价值创造的坚定决心。

强效的管治架构和可持续发展机制

强效的管治架构和可持续发展机制依然是我们的关键要务。与过去几年一样,我们在第71页起列明了本集团在本年度的环境、社会和治理表现。

在金禧年庆祝与行善

2017年迎来了集团前身新加坡特许工业公司创立五十周年纪念日。我们与员工和股东一同以各种方式庆祝,当中一同庆祝者包括许多新科工程集团的创业功臣。我们的金禧年庆祝活动扩展至社区,体现了集团致力通过募捐和志愿者服务来照顾社区中弱势人群的宗旨。我们共募得捐款127万元,其中100万元已捐献给2017年总统慈善挑战活动,其余款项则捐给其他为特殊需求人士和残疾人士服务的慈善机构。我们的员工在今年完成了62件善举,超出我们在年初设定的50件的目标。

强化管理团队

在集团追求可持续增长及价值创造的过程中,我们继续调整领导层的职责,以强化领导团队与能力。在2017年,我们做了几项人事变动。

李香龙接替拉文德辛格担任新科动力总裁职位,而拉文德辛格则担任了新科电子总裁。陈爱桢卸下财务总监的职位,接任首席企业长一职,负责信息和通信技术、采购、产业和设施管理工作,以及集团共有服务计划的监督工作。先前的公司发展顾问符致镜则接下了财务总监的职务。

七月份,我们副总执行长与总裁(国防业务)李福桑在集团服务17年后正式退休。他曾担任过多个重要职位,为集团做出了重要贡献。他曾在2009年8月至2016年12月担任新科电子的总裁。在此期间,他在新科电子多项业务的成功中发挥了中坚作用。

董事会更新与振兴

董事会推行了其更新与振兴的计划。在2003年加入的高铭胜已在四月份卸下独立非执行董事一职。自2007年起担任董事的Davinder Singh卸任独立非执行董事的职位并退休。黄志勤在辞去常务秘书(国防发展)一职并在政府担任新职务后,于六月份卸下非独立非执行董事的职位。作为审计委员会现任成员的郭书实被任命为审计委员会主席。梁建鸿在六月份被任命为非独立非执行董事。在2014年被任命为董事会成员的林爱莲已表明因个人业务因素而不在即将举行的股东年度大会上寻求连任。

我们在此向卸任和退休的各位董事致上最深的谢意,感谢他们的宝贵贡献,并在此期许我们的新任董事能够为董事会带来新的气象。

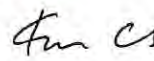
为成功不遗余力

虽然我们的金禧年庆祝活动已结束,但我们志在成功的决心未曾有任何的动摇。


我们也已备好迎进2018年及后续增长。科技与创新持续不断地维持集团的命脉。我们将与第四次工业革命与时俱进,推动集团的业务转型。

为此,我们需要全体22,000名员工都秉持着热情与决心,以他们集体的才能、忠诚和坚忍不拔的精神,协助集团立于不败之地。我们还将与客户及业务伙伴展开更密切的合作,以达到互利双赢的目的。在继续实现可持续增长及价值创造的道路上,我们希望各位股东能不断给予我们坚定的支持。

此致,



柯宗盛
主席



钟思峰
总裁兼首席执行官

BOARD OF DIRECTORS



Kwa Chong Seng

Chairman
Non-executive independent Director

Date of first appointment as a Director:
1 September 2012

Date of appointment as Chairman:
25 April 2013

Due for re-election at the 2018 AGM under
article 100 of the Company's Constitution



Vincent Chong

President & CEO
Executive Director

Date of first appointment as a Director:
1 October 2016

Date of last re-election as a Director:
21 April 2017

Profiles of Directors

The names of the directors holding office at the date of this report are set out here together with details of their academic and professional qualifications, age, date of first appointment as Director, date of last re-election as Director, as well as other directorships and principal commitments.

Kwa Chong Seng, 71, is Chairman of ST Engineering. He has more than 40 years' experience in the petroleum industry having served as Chairman and Managing Director of ExxonMobil Asia Pacific Pte. Ltd. before retiring in 2011. Chong Seng is currently the Chairman of Singapore Exchange Limited* and Deputy Chairman of the Public Service Commission, Singapore. He also serves on the board of SeaTown Holdings Pte. Ltd. and is a member of the Defence Science & Technology Agency (DSTA). Chong Seng is also the Chairman of the Advisory Committee of Dymon Asia Capital Ltd. He graduated from the former University of Singapore with a Mechanical Engineering degree. Chong Seng was awarded the Distinguished Engineering Alumni Award by the National University of Singapore (NUS) in 1994 and is a Fellow of the Academy of Engineering Singapore. In 1999, he was conferred the Honorary Ningbo Citizenship. Chong Seng was awarded the Singapore Public Service Star in 2005 and the Singapore Public Service Star (Bar) in 2016.

Vincent Chong, 48, is the President & Chief Executive Officer (CEO) of ST Engineering. Vincent joined ST Engineering Group in April 2014, first as President of Strategic Plans & Business Development at ST Aerospace and later as the Group's Deputy CEO (Corporate Development) before his appointment as President & CEO of ST Engineering. Vincent had a 20-year career in the petroleum industry holding a variety of technical, operations and senior management positions from refining & supply, product marketing, to strategic planning. His professional experience has been global with postings in Hong Kong, Japan, the United Kingdom and the US. Vincent is a Board member of Jurong Town Corporation and he is also a member of the Ministry of Trade and Industry's International Advisory Panel for Advanced Manufacturing & Engineering. He graduated with First Class Honours in Mechanical Engineering from NUS. Vincent has also attended executive leadership programmes at the Thunderbird School of Global Management and the Columbia Business School.

* Listed on the SGX-ST

**Quek See Tiat**

Non-executive independent Director

Date of first appointment as a Director:
1 July 2013

Date of last re-election as a Director:
21 April 2017

Quek See Tiat, 63, is President of the Council for Estate Agencies. Prior to this, he was Chairman of the Building and Construction Authority, Singapore until 31 March 2016. He retired as Deputy Chairman of PricewaterhouseCoopers Singapore in 2012, after a career in the firm that spanned 31 years. See Tiat is a board member of Singapore Press Holdings Ltd*, Temasek Foundation Connects CLG Limited, the Energy Market Authority and the Monetary Authority of Singapore. He was conferred the Public Service Medal in 2009 and the Public Service Star in 2014. See Tiat holds a Bachelor of Science (Economics) (Honours) from the London School of Economics and Political Science, and is a Fellow of the Institute of Chartered Accountants in England and Wales.

**Lieutenant-General Perry Lim**

Non-executive Director

Date of first appointment as a Director:
20 October 2015

Date of last re-election as a Director:
21 April 2016

LG Perry Lim, 45, is the Chief of Defence Force in Singapore's Ministry of Defence (MINDEF). LG Lim joined the Singapore Armed Forces (SAF) in 1990 and has held various command and staff positions in the SAF, including that of the Chief of Army and Commander, Headquarters 3rd Singapore Division. LG Lim holds a Bachelor of Arts (First Class Honours) from the University of Cambridge, UK and a Master of Business Administration from INSEAD, Singapore.

**Neo Kian Hong**

Non-executive Director

Date of first appointment as a Director:
30 June 2017

Due for re-election at the 2018 AGM under article 106 of the Company's Constitution

Neo Kian Hong, 53, is the Permanent Secretary (Defence Development) in MINDEF. Kian Hong was Permanent Secretary (Education Development) at the Ministry of Education until 19 June 2017. Before that, he held various command positions in MINDEF, including the Chief of Defence Force and the Chief of Army. Kian Hong is the Chairman of DSTA and DSO National Laboratories (DSO) and a member of the National Research Foundation. He is also the Chairman of the Saver Premium Fund Board of Trustees, the Singapore Youth Flying Club and SAF Care Fund. Kian Hong has a Bachelor of Engineering (Electrical and Electronic Engineering) from the University of London, UK, a Masters of Science (Management of Technology) from the Massachusetts Institute of Technology, USA and attended an Advanced Management Program at the Harvard Business School. He was awarded the Meritorious Service Medal (Military) and Public Administration Medal (Gold) (Military).

* Listed on the SGX-ST

BOARD OF DIRECTORS



Quek Gim Pew

Non-executive Director

Date of first appointment as a Director:
15 August 2016

Date of last re-election as a Director:
21 April 2017

Quek Gim Pew, 60, is the Chief Defence Scientist of MINDEF. Prior to this, he was Chief Executive Officer of DSO. He joined DSO in 1986 and had held several key appointments before joining DSTA in 2000 for a period of four years. Gim Pew is the Chairman of ATREC Pte Ltd, Governing Board for the Centre for Quantum Technologies, Temasek Defence Systems Institute Management Board (NUS), Temasek Laboratories@NUS Management Board, Temasek Laboratories@NTU Management Board and Temasek Laboratories@SUTD Management Board. He is also a member of DSO, the Agency for Science, Technology & Research Board, SMRT Trains Ltd and DSTA. Gim Pew holds a Bachelor of Engineering (First Class Honours) (Electrical Engineering) from the NUS and a Master of Science (Distinction) in Electrical Engineering from the Naval Postgraduate School, USA. He is a Fellow of The Academy of Engineering Singapore.



Dr Stanley Lai Tze Chang

Non-executive independent Director

Date of first appointment as a Director:
8 October 2009

Due for re-election at the 2018 AGM under
article 100 of the Company's Constitution

Dr Stanley Lai Tze Chang, 50, is Head of Intellectual Property & Technology Practice at Allen & Gledhill LLP. Dr Lai was appointed Senior Counsel at the Opening of the Legal Year 2010. He is an independent Director of Singapore Shipping Corporation Limited* and Stamford Land Corporation Limited. Dr Lai currently serves as Chairman of the Intellectual Property Office of Singapore. He obtained his law degree from the University of Leicester (UK) in 1992 and qualified to practise as a Barrister in England and Wales in 1993. Dr Lai is a member of Lincoln's Inn. He was called to the Singapore Bar in 1995. Dr Lai also holds a Masters in Law (LLM) and Doctorate (Ph.D) in law from the University of Cambridge, UK.

* Listed on the SGX-ST

**Khoo Boon Hui**

Non-executive independent Director

Date of first appointment as a Director:
1 September 2010Date of last re-election as a Director:
21 April 2017

Khoo Boon Hui, 63, is a Senior Fellow of the Home Team Academy and the Civil Service College. Prior to this, he was Senior Fellow of the Ministry of Home Affairs (MHA) and Senior Advisor, MHA until 30 November 2016 and 20 January 2016 respectively. Boon Hui was appointed Commissioner of the Singapore Police Force (SPF) in July 1997, and relinquished this post in January 2010 after serving 32 years in the SPF to become Senior Deputy Secretary, MHA till January 2015. He was also the President of INTERPOL from 2008 to 2012. Boon Hui is currently Chairman of Singapore Island Country Club and a Board member of Singapore Health Services Pte Ltd, Ministry of Health Holdings, the Casino Regulatory Authority, Certis CISCO and Temasek Foundation International CLG Limited. He is a member of the Palo Alto Networks Public Sector Advisory Council and the Board Financial Crime Risk Committee of Standard Chartered Bank. Boon Hui was also appointed the Commissioner of the Global Commission on the Stability of Cyberspace (Netherlands). He holds a Bachelor of Arts (Engineering Science & Economics) degree from Oxford University and a Master in Public Administration from the Harvard Kennedy School of Government. Boon Hui also attended the Advanced Management Program at the Wharton School.

**Olivia Lum**

Non-executive independent Director

Date of first appointment as a Director:
20 May 2014

Retiring at the 2018 AGM

Olivia Lum, 57, is Founder, Executive Chairman & Group CEO of Hyflux Ltd* (Hyflux). Olivia started her corporate life as a chemist in GlaxoSmithKline plc. She is a Board member of International Enterprise Singapore, a Trustee Member of The Chinese Development Assistance Council and a Council Member of the Singapore Business Federation. Olivia is the first woman to win the Ernst & Young World Entrepreneur Of The Year 2011 award in recognition of her pioneering work in the Singapore-based water-treatment company, Hyflux. Olivia holds an Honours degree in Chemistry from NUS.

**Dr Beh Swan Gin**

Non-executive independent Director

Date of first appointment as a Director:
1 September 2014

Due for re-election at the 2018 AGM under article 100 of the Company's Constitution

Dr Beh Swan Gin, 50, is Chairman of the Singapore Economic Development Board (EDB). Prior to this, he was Permanent Secretary of the Ministry of Law from 1 July 2012 to 30 November 2014. Dr Beh also serves as Chairman of EDBI Pte Ltd, EDB Investments Pte Ltd and ST Electronics, and is also a Director of Ascendas-Singbridge Pte. Ltd., Temasek Foundation Connects CLG Limited and Human Capital Leadership Institute Pte Ltd. He is a medical doctor by training and graduated from NUS. Dr Beh is also a Sloan Fellow with a Master of Science in Management from Stanford University's Graduate School of Business, and completed the Advanced Management Program at the Harvard Business School in 2012.

* Listed on the SGX-ST

BOARD OF DIRECTORS



Lim Sim Seng

Non-executive independent Director

Date of first appointment as a Director:
15 May 2015

Date of last re-election as a Director:
21 April 2016

Lim Sim Seng, 59, is currently the Group Executive, Country Head, DBS Singapore and Chairman of DBS Vickers Securities Holdings Pte Ltd. Sim Seng was a senior banker for 26 years with Citibank before joining DBS in 2010 as Country Head, DBS Singapore. With Citigroup/Citibank, he served Citigroup in various senior appointments in Kuala Lumpur, Tokyo, New York, Saudi Arabia, Singapore and Hong Kong. Sim Seng is the High Commissioner of the Republic of Singapore to the Federal Republic of Nigeria. He is the Chairman of ST Aerospace, Singapore Land Authority, Asfinco Singapore Limited, Nanyang Polytechnic Business Management Advisory Committee, and the Vice Chairman of ASEAN Business Group, Singapore Business Federation. Sim Seng is a Director of DBS Securities (Japan) Company Limited and Nikko Asset Management Co., Ltd., and sits on the Board of Governors of Nanyang Polytechnic. He was a Japanese Government Monbusho scholar and graduated with a Bachelor in Business Administration from Yokohama National University, Japan.



Lim Ah Doo

Non-executive independent Director

Date of first appointment as a Director:
10 November 2015

Date of last re-election as a Director:
21 April 2016

Lim Ah Doo, 68, was formerly the President and subsequently the non-executive Vice Chairman of RGE Pte Ltd (formerly known as RGM International Pte Ltd). Ah Doo's past working experience includes an 18-year banking career in Morgan Grenfell from 1977 to 1995, during which he held several key positions including that of Chairman of Morgan Grenfell (Asia) Limited. He is the Chairman of ST Marine and Olam International Limited* and also an independent Director of SembCorp Marine Limited*, ARA-CWT Trust Management (Cache) Limited, GP Industries Ltd*, U Mobile Sdn Bhd, GDS Holdings Limited# and Virtus HoldCo Limited. Ah Doo graduated with an Honours degree in Engineering from the Queen Mary College, University of London and a Master in Business Administration from the Cranfield School of Management.

* Listed on the SGX-ST

Listed on the Nasdaq Stock Market



Rear Admiral Alan Goh Kim Hua

Alternate Director to
Lieutenant-General Perry Lim
Date of appointment as alternate Director:
20 October 2015

RADM Alan Goh Kim Hua, 41, is Group Chief, Policy & Strategy of the Defence Policy Group in MINDEF. RADM Goh joined the SAF in 1995 and has held various command and staff positions in MINDEF/SAF since 1999, including that of Commander of the Maritime Security Task Force of the Republic of Singapore Navy (RSN), Head Naval Plans, Head Naval Personnel and Commanding Officer of the RSN's Missile Corvette Squadron, and Deputy Director in MINDEF Policy Office. He is a member of the Temasek Polytechnic Board of Governors. RADM Goh was awarded the SAF Overseas Scholarship in 1995, the SAF Overseas Postgraduate Scholarship (General Development) in 2011 and the Public Administration Medal (Bronze) (Military) in 2013. RADM Goh holds a Bachelor of Arts (Honours) (Mathematics) from the University of Cambridge, UK, and a Master of Business Administration (Sloan Fellow) from the Sloan School of Management, Massachusetts Institute of Technology, USA.

PAST DIRECTORSHIPS IN THE LAST THREE YEARS

Kwa Chong Seng

APL (Bermuda) Ltd.
APL Co. Pte Ltd
APL Limited
APL Logistics Ltd
Automar (Bermuda) Ltd.
Delta Topco Limited
Fullerton Fund Management
Company Ltd
Neptune Orient Lines Limited
NOL Liner (Pte.) Ltd
Olam International Limited*
Singapore Technologies Holdings Pte Ltd

Quek See Tiat

Building and Construction Authority
Neptune Orient Lines Limited

Lieutenant-General Perry Lim

Singapore Technologies Kinetics Ltd

Neo Klan Hong

Jurong Town Corporation

Quek Gim Pew

ST Electronics (Satellite Systems) Pte. Ltd.

Khoo Boon Hui

Home Team Academy Board
of Governors
Institute of Leadership and
Organisation
Development, Civil
Service College
International Centre for
Sport Security
The International Advisory
Board of Policing:
A Journal of Policy
and Practice (UK)

Olivia Lum

Singapore Mediation Centre

Dr Beh Swan Gin

Esplanade Co. Ltd
Human Capital Leadership
Institute (now known as
Agilead Limited)

Lim Sim Seng

ASEAN Finance Corporation
Limited

Lim Ah Doo

Bracell Limited
Linc Energy Limited
SM Investments Corporation

Rear Admiral Alan Goh

Kim Hua
Unicorn International
Pte Limited

* Listed on the SGX-ST

SENIOR MANAGEMENT



1 Vincent Chong Sy Feng

Vincent Chong Sy Feng is President & CEO of ST Engineering and a Director of the ST Engineering Board. (Vincent's profile is on page 14)

2 Lim Serh Ghee

Lim Serh Ghee, 58, was appointed President of ST Aerospace in December 2014. Prior to this, he was Chief Operating Officer from 2010 and President, Defence Business. Serh Ghee also served as Executive Vice President of Aircraft Maintenance & Modification (AMM), a business segment of ST Aerospace. He began his career with ST Aerospace as a mechanical engineer in 1984 and has held many senior management appointments within the Group. Serh Ghee holds a Second Class Upper Honours degree in Mechanical Engineering from NUS. He obtained his Master of Science in Aerospace Engineering from the University of Michigan and attended the Program for Management Development at Harvard Business School.

3 Ravinder Singh

Ravinder Singh, 53, was appointed President of ST Electronics in

January 2017 and is concurrently the President, Defence Business of ST Engineering since July 2017. Prior to this, Ravinder was President of ST Kinetics from March 2015 to April 2017. He joined the Group in August 2014 as Deputy President, Corporate and Market Development, ST Electronics. Ravinder joined the Group after a 32-year career with MINDEF and the SAF where he held various senior command and staff appointments. In his last appointment in the SAF, he served as Chief of Army. Prior to that, he was Deputy Secretary (Technology) in MINDEF. Ravinder graduated with a Bachelor of Arts in Engineering Science (First Class Honours) in 1986 and a Master of Arts in Engineering Science in 1992, both from the University of Oxford, UK. He also completed his Master of Science in Management from Massachusetts Institute of Technology, USA in 1996 and attended the Wharton Advanced Management Program in 2014.

4 Dr Lee Shiang Long

Dr Lee Shiang Long, 52, was appointed President of ST Kinetics in April 2017. Prior to this, he was President, Defence Business of ST Kinetics and Deputy Chief

Technology Officer of ST Engineering. Dr Lee joined ST Kinetics in March 2016 after leaving the Institute of Infocomm Research at A*STAR. Prior to that, he served in the SAF for 23 years and his last appointment was Head of Joint Communications and Information Systems Department, and Chief Information Officer. Dr Lee holds a Master in Business Administration from Cambridge University and PhD in Mechanical Engineering from Nanyang Technological University, as well as a Master Degree in Science (IT) from NUS.

5 Ng Sing Chan

Ng Sing Chan, 57, was appointed President, ST Marine in May 2010. Prior to this, Sing Chan was Deputy President and President, Defence Business of ST Marine. He joined ST Marine in 1987 as an engineer. Sing Chan left in 1991 and later became the Deputy General Manager of Pan-United Shipyard Pte Ltd. He subsequently took on the positions of President of Changshu Xinghua Changjiang Dev Co and Executive Director of Pan-United Marine Ltd (now known as DDW-PaxOcean Shipyard Pte. Ltd.). Sing Chan re-



joined the Group in March 2008 as Executive Vice President, Special Projects, ST Engineering and moved to ST Marine as Deputy President in April 2009. Sing Chan holds a Master of Business Administration (Finance & Banking) from NTU, Singapore and a Masters in Engineering from the University of Hamburg, Germany.

6 General (Ret.) John G Coburn

General (Ret.) John G Coburn, 76, was appointed Chairman and CEO of ST Engineering's US subsidiary, VT Systems, in December 2001. Gen (Ret.) Coburn joined the Group after an illustrious 39-year career with the US Department of Defense, where he commanded at all levels, including as Commanding General of the US Army Materiel Command. Gen (Ret.) Coburn is the recipient of many medals, and is a notable author and speaker. He holds a Juris Doctor from the University of Missouri, a Doctor's Degree from Eastern Michigan University and many other degrees. He is also a member of the bars of the Kentucky Supreme Court, the Michigan Supreme Court and the Supreme Court of the United States.

7 Cedric Foo Chee Keng

Cedric Foo Chee Keng, 57, was appointed Chief Financial Officer of ST Engineering in July 2017. Prior to this, Cedric was Advisor (Corporate Development) of the Group since October 2016. He had previously served as Chief Financial Officer and in senior management roles in large-cap companies, and was also Chairman of JTC Corporation and SPRING Singapore. He holds a Bachelor of Science in Engineering (Naval Architecture and Marine Engineering) from the University of Michigan, Ann Arbor, USA and received his Master of Science (Ocean Systems Management) from the Massachusetts Institute of Technology, Cambridge, USA. Cedric also attended Executive Programs at Harvard and Kellogg Business Schools.

8 Eleana Tan Ai Ching

Eleana Tan Ai Ching, 55, was appointed Chief Corporate Officer of ST Engineering in July 2017 when she relinquished her role as the Chief Financial Officer, a position she had held since March 2008. She was previously Managing Director, Finance, Temasek Holdings (Private) Limited (Temasek). Prior to that, Eleana was

Director of Finance at Singapore Technologies Pte Ltd (STPL) from August 2003 until December 2004, when STPL was restructured, and its assets transferred to Temasek. Prior to 2003, she had held various key finance positions in the ST Engineering Group over a period of 13 years and last held the position of Group Financial Controller of ST Engineering. Eleana holds a Bachelor of Accountancy (Honours) from NUS and attended the Harvard Business School's Advanced Management Program in 2013. She is a member of the Institute of Singapore Chartered Accountants.

GROUP HIGHLIGHTS

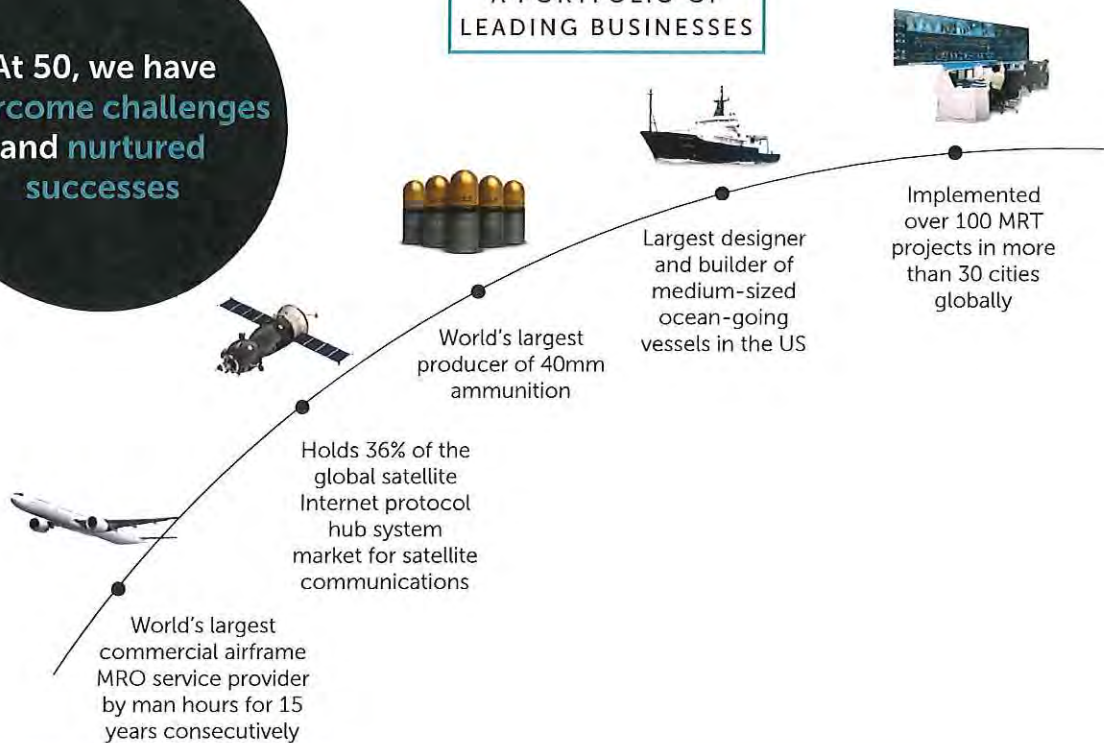
50 YEARS OF ENGINEERING EXCELLENCE



ST Engineering was formed through the amalgamation of engineering-related companies under the Singapore Technologies group in 1997. However, ST Engineering traces its roots back 50 years with a rich history of delivering innovative engineering solutions.

At 50, we have overcome challenges and nurtured successes

A PORTFOLIO OF LEADING BUSINESSES



STAY AHEAD WITH CUTTING-EDGE DESIGN AND TECHNOLOGY

Contributed to Singapore's Top 50 Engineering Achievements



Bionix Infantry Fighting Vehicle



SAR 21



Infrared Fever Scanning System



AIR+ Smart Mask



Delivered the Group's first A330-300 passenger-to-freighter conversion to DHL Express



Battle-proven platform, Warthog, deployed in Afghanistan



Terrex 2 vehicles undergoing trials by the US Marine Corps



Deployed Auto Rider, Asia's first fully operational autonomous vehicle



Developed in-house designed aircraft seats tailored specifically for narrow-body aircraft and medium-haul flights



Over 15 million wireless sensors deployed in smart cities globally



Launched TeLEOS-1, Singapore's first commercial Earth observation satellite



Vessels supported navies in maritime security and related initiatives

At 50, we remain **passion-driven** to engineer your future

Grow in and beyond **Singapore**

Invest in **Technologies** and innovation in pursuit of further growth

Build a pool of **Engineering** talent passionate about making a difference

GROUP HIGHLIGHTS



GOLDEN JUBILEE LAUNCH

A grand launch held at the Group's headquarters in Ang Mo Kio, Singapore, kickstarted our Golden Jubilee celebrations. Graced by Guest-of-Honour Ho Ching, Executive Director and CEO of Temasek Holdings, the founding Chairman of ST Engineering from 1997-2003, the event was attended by more than 300 guests - customers, business partners, directors and senior management team, as well as the ST Engineering team of past and present.



INNOVATION SHOWCASE

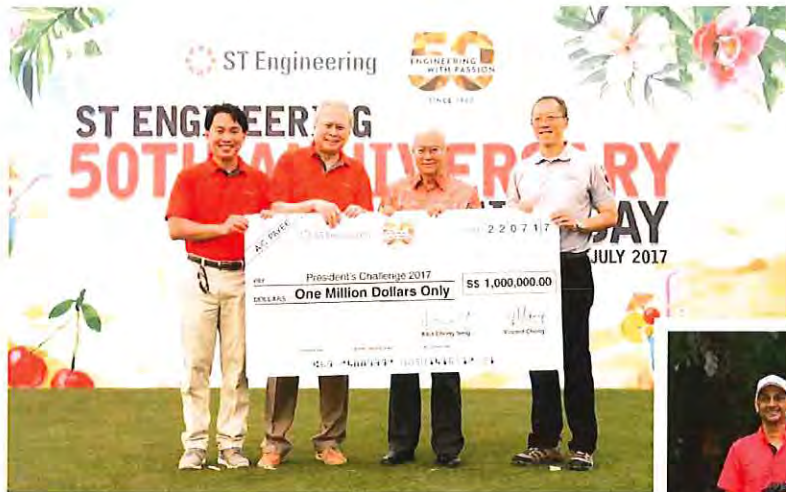
Collective showcase of our most innovative and world-class solutions from the Aerospace, Electronics, Land Systems and Marine sectors at the launch event.



50TH ANNIVERSARY BOOK "ENGINEERING WITH PASSION"

Stories of the Group's 50-year journey, innovations and unwavering passion were all captured in a commemorative book and shared with our employees, customers and partners.

GOLDEN JUBILEE CELEBRATION MILESTONES

**\$1.27M RAISED FOR CHARITY**

We surpassed our goal and raised a total of \$1.27 million for charity, of which \$1 million went to the President's Challenge 2017. Achieved through our Charity Golf tournament and contributions from employees, the amount raised was for selected charities under the care of Community Chest and our supported charities focused on children and youth with special needs, youths-at-risk and people with disabilities.

**FUN-FILLED FAMILY DAY**

14,000 employees and their families celebrated our Golden Jubilee at the ST Engineering Family Day at Sentosa Island, Singapore, and 22 employees were also acknowledged for their 40 years of service with the Group.

**AUGMENT BRAND AWARENESS**

ST Engineering was the co-presenter of the movie "Ah Boys to Men 4" which topped Singapore's local box-office charts over its opening weekend in November. The Group's brand and key defence solutions for the Singapore Armed Forces were prominently featured to our target audiences.

COMMUNITY OUTREACH THROUGH GROUP EFFORTS



At 50, we focused not only on doing well, but also on doing good. We set out to do 50 Good Deeds to celebrate our Golden Jubilee and we surpassed our goal. Our community outreach activities were organised with more than 50 organisations in Singapore, Germany and the US.

62 Good Deeds

2,982 staff

9,450 volunteering hours



PAYING IT FORWARD

In the US, employees at VT Systems filled food packs for Arlington Food Assistance Centre and San Antonio Food Bank. In Singapore, employees cooked warm meals for Apex Day Rehabilitation Centre for the Elderly.



REMEMBERING OUR PIONEERS AND BRINGING JOY TO COMMUNITIES

Our employees connected with children and youth with special needs, people with disabilities and the elderly in selected charities under the care of Community Chest, Assumption Pathway School, YMCA, Yishun Community Hospital and other organisations.

From spending an afternoon with children at the River Safari on Sharity Day to packing and delivering hundreds of goodie bags and "Fu Dai" (festive packs), our employees gave their time to bring joy and necessities to the communities.



SUPPORTING SOCIAL CAUSES

Our employees volunteered for many worthy social causes to help raise awareness, funds and resources.



NURTURING YOUTHS

We support programmes that fuel youths' learning, self-esteem and character development. We engaged youths at Metta School through batik painting, spent time with young boys at the Boys' Town Adventure Centre and participated in other activities with youths.



BUILDING INCLUSIVE AND SUSTAINABLE COMMUNITIES

We create smart solutions for liveable and sustainable cities, hence our employees came forth and helped clean up beaches and waterways in Singapore. We also accompanied people with disabilities at the Heartstrings Walk in support of inclusive communities.

GROUP HIGHLIGHTS

INNOVATIVE ENGINEERING

WE HAVE ABOUT
8,000 EMPLOYEES
GLOBALLY WHO
ARE INVOLVED
IN ENGINEERING
WORK, OF WHOM
6,600 ARE BASED IN
SINGAPORE.

ST Engineering's innovation approach starts with the market. We find out what problems there are and design world-class solutions to solve real-world problems.

Over 50 years, we are continuously delivering sustainable innovations integral to our core businesses. We strive for innovation in all aspects of business and consciously carve out creative work environments based on employees' multidisciplinary perspectives, fresh ideas and constructive discourse so as to deliver pronounced improvements in our products and services. We rigorously examine the entire value chain of innovation in creating and capitalising their intellectual properties.

Our sense of urgency for sustaining innovation and constant R&D has distinguished us as innovative engineers and global leaders in the technology, defence and engineering space. We have formed the basis of our competitive advantage by championing various technological endeavours through the Group's Advanced

Engineering Centre, the business sectors' Engineering Design Centres, and technological partnerships.

With an increasingly disrupted world, we adopt a fast-fail-fast-iterate approach when designing breakthrough and disruptive innovations for the market. Speed to market is key, and we leverage our strategic partnerships and global networks to expedite this process.

With technology and innovation as our lifeblood, we believe in co-creation and the power of collective genius. We open our doors to our engineers and individual/startup innovators, rolling out our Open Innovation Architecture in the form of a through-train incubator programme through our Open Innovation Lab, providing continuity of funding and resources, multidisciplinary engineering expertise and innovation capabilities to fast track ideas to market within 18 months or less. Tapping on and collaborating with global best-in-class, we invest in promising technology start-ups and help them scale their cutting-edge technologies through our Corporate Venture Capital unit and international networks.

Internationally and nationally, ST Engineering advocates and champions Open Innovation, while positioning ourselves for the future economy. As industry leaders across multiple sectors, we lead industry transformation by building communities both eager and able to innovate with us. From sustaining innovations to R&D, all the way to creating breakthrough and disruptive innovations, innovation is built into our DNA. We are all set to redefine engineering innovation with co-creators in the broader ecosystem.





WE SOLVE PROBLEMS

With technology and innovation in our DNA, ST Engineering is a globally agile & multidisciplinary workforce creating world-class solutions to solve real-world problems.

CORPORATE VENTURE CAPITAL

Tapping on and collaborating with global best-in-class, we invest in promising technology start-ups and help them scale their cutting-edge technologies through our Corporate Venture Capital and international networks.



CHAMPIONING OPEN INNOVATION

Our Open Innovation Lab, Innosparks, offers funds, resources, a pool of skilled engineers, advanced equipment & global networks via a through-train incubator programme to work with intrapreneurs and entrepreneurs to fast-track ideas to market within 18 months.



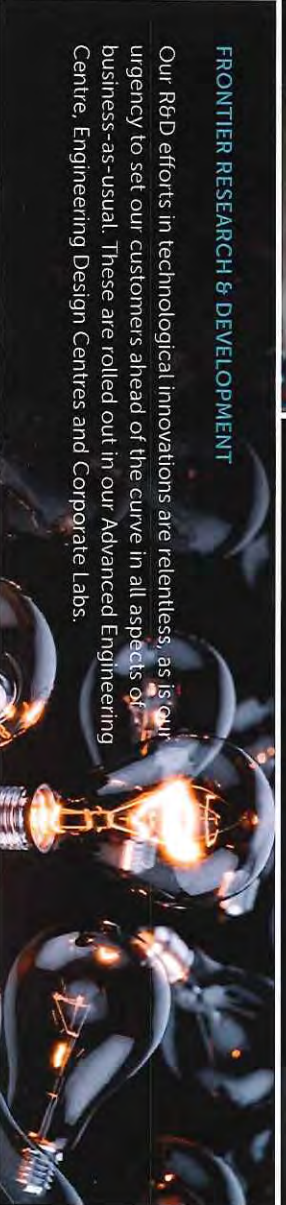
HARNESSING COLLECTIVE GENIUS

Our solutions come not from silos, but from collective engineering expertise, technology partnerships & global networks across our Group, and with various collaborators from the industry, government and academia across the world.



FRONTIER RESEARCH & DEVELOPMENT

Our R&D efforts in technological innovations are relentless, as is our urgency to set our customers ahead of the curve in all aspects of business-as-usual. These are rolled out in our Advanced Engineering Centre, Engineering Design Centres and Corporate Labs.



INNOVATION HIGHLIGHTS 2017

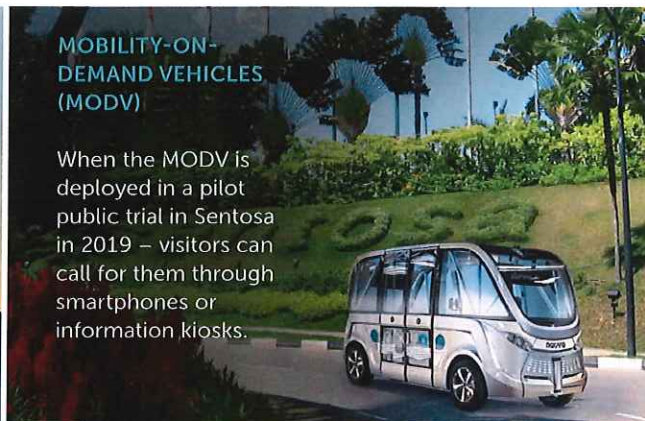
DEFENCE INNOVATION

The Next Generation Armoured Fighting Vehicle (NGAFV) offers enhanced firepower, protection, mobility and situational awareness.



MOBILITY-ON-DEMAND VEHICLES (MODV)

When the MODV is deployed in a pilot public trial in Sentosa in 2019 – visitors can call for them through smartphones or information kiosks.



SMART MRO

Smart technologies incorporated into Maintenance, Repair and Operations (MRO) enhance performance and create value for our customers.



NEXT GENERATION COMMERCIAL EARTH OBSERVATION SATELLITE

Propelling the growth of Singapore's space industry, we are developing the TeLEOS-2, the first made-in-Singapore Synthetic Aperture Radar-based Imaging Satellite.



AIRCRAFT SEATS

Our aircraft seats are among the lightest in its class, engineered and designed for cost efficiency and travelling comfort.



FIRST-OF-ITS-KIND CYBERSECURITY SOLUTION

As an industry-first technology co-created through our Corporate Venture Capital, the Black Computer L100 enables safe access to secure and unsecure networks concurrently from the same computer.



Black Computer L100

DATA-DRIVEN SMART SHIPS

Making ships smarter with our proprietary Ship Management System and SenseMaking System (SMS²).



AUTONOMOUS MOBILE ROBOTS

TUG[®] Autonomous Mobile Robots are equipped with autonomous indoor navigation and are capable of carrying up to 635kg of load.



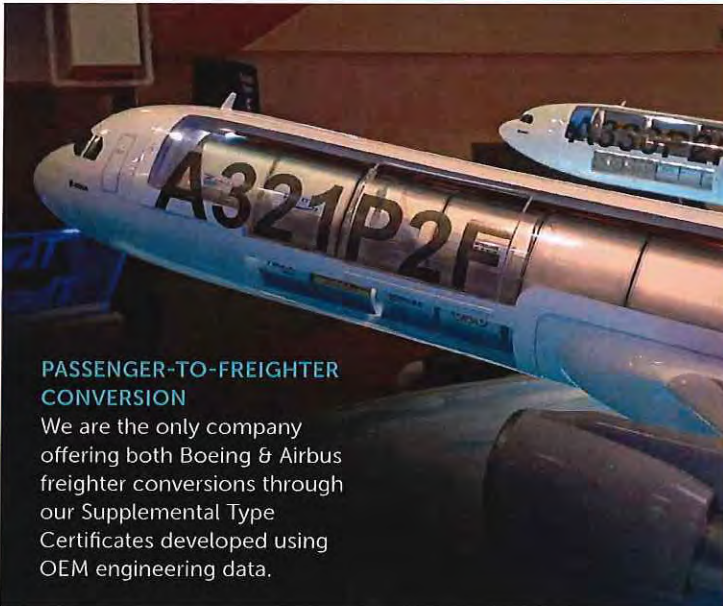
ALL-ROUNDED VESSEL

The Heavy Fire Vessel we are building for the Singapore Civil Defence Force counts all types of fire and rescue missions amongst its capabilities.



PASSENGER-TO-FREIGHTER CONVERSION

We are the only company offering both Boeing & Airbus freighter conversions through our Supplemental Type Certificates developed using OEM engineering data.



ST ENGINEERING

OPERATING REVIEW & OUTLOOK

DESPITE FIERCE GLOBAL COMPETITION, OUR AEROSPACE SECTOR DID WELL. WE EXPANDED OUR PRESENCE IN KEY MARKETS TO BETTER SERVE OUR CUSTOMERS, CONTINUED TO UPHOLD HIGH QUALITY STANDARDS AND LEVERAGED TECHNOLOGY TO ENHANCE OUR SOLUTIONS.

AEROSPACE

WHAT WE ACHIEVED IN 2017

- 1** Awarded Overall MRO of the Year 2017 at the Aviation 100 MRO Global Awards
- 2** Retained ranking of world's largest airframe MRO in Aviation Week Network's survey
- 3** Set up Boeing 787 airframe maintenance capabilities in the US and secured a multi-year contract for 787 component support for Gulf Air
- 4** Secured additional orders from DHL Express for A330-300P2F and redelivered the first freighter after being awarded the Supplemental Type Certificate by EASA



2017 REVIEW

While the aerospace Maintenance, Repair and Overhaul (MRO) landscape remains challenging with intensifying competition, the long-term prospects of the industry remain positive. Overall, 2017 was a good year for the aviation industry with both air traffic and cargo volumes doing well. To take advantage of this, we continued to invest in our Passenger-to-Freighter (P2F) conversion programmes, and made progress in the aircraft seats business when we secured a launch customer. We will continue to strengthen our core competency as a total aviation support provider and invest in capabilities such as data analytics to enhance our service offerings.

Aircraft Maintenance & Modification (AMM) - Better Serve Customers with Strengthened Capabilities

In 2017, our AMM business redelivered 4,038 aircraft for airframe maintenance and modification work. We also continued to expand our capacity and range of capabilities to better serve our customers in key markets.

During the year, we expanded our MRO capacity in China with the opening of a second hangar at our airframe MRO station in Guangzhou. The new hangar can accommodate two wide-body and two narrow-body aircraft at any one time and its capacity will reach one million man hours per annum when operations at the expanded facility reach steady state.

We increased our support for the global fleet of Boeing 787 Dreamliner by developing our facility in San Antonio, US into another Centre of Excellence for the platform. We redelivered our first Boeing 787 to Air Canada after conducting C1-checks during the year, becoming the first MRO service provider in the Americas to perform heavy maintenance on this aircraft platform.

Our VIP completion business division, AERIA Luxury Interiors (AERIA), passed a new



The new hangar at the airframe MRO facility in Guangzhou, China.

milestone when it redelivered its first full VIP wide-body aircraft. AERIA also secured a contract for the completion of a Boeing Business Jet BBJ 737-700. To enhance the competitiveness of the VIP completion business, we corporatised AERIA as a new subsidiary, AERIA Luxury Interiors, LLC which now operates under its own Part 145 Repair Station certificate issued by the Federal Aviation Administration.

We secured a number of training contracts in 2017, including a 3-year agreement to further support existing customer Xiamen Airlines' pilot training needs, and a 3-year agreement from new customer, Air China to train up to 100 cadet pilots per year for the airline.

Component/Engine Repair & Overhaul (CERO) - Expand Solution Offerings to Increase Global Support

Our growing global support for the Boeing 787 also extends to components maintenance. As a Boeing-approved MRO centre for components work, we continued to work closely with the original equipment manufacturer (OEM) to add new MRO capabilities that now cover more than 450 individual part numbers – including flaps, slats, leading edge, spoilers and ailerons – in all major flight controls for Boeing 787. This has allowed us to better support the

5 Secured launch customer for A321-200P2F and our proprietary aircraft seats

OPERATING REVIEW & OUTLOOK



Signing ceremony of the multi-year component MRO contract to support Gulf Air's new fleet of Boeing 787-9.



Redelivery of the first A330-300 converted freighter to DHL Express.

787 global fleet, and secured multi-year contracts from airlines such as Gulf Air for its new fleet of Boeing 787-9.

As for our engine MRO business, we secured a number of contracts to service CFM56-7B engines for European and Asian airlines. Overall, we had seen shop visits for CFM56 engines increase by more than 30% as compared to last year, as more of these engines get scheduled for servicing. We have ramped up our capacity in manpower at our workshops as we anticipate the demand for CFM56-5 and -7 engines maintenance to continue to be strong.

During the year, our component repair and overhaul facilities delivered 45,417 components and 236 landing gears, while our engine repair and overhaul businesses completed 145 engines and 9,964 EcoPower® engine washes.

Engineering & Materials Services (EMS) - Leverage Engineering Expertise to Provide Innovative Solutions

By building on its engineering expertise and

aircraft assets, our EMS business continues to provide innovative solutions in aircraft modification programmes, cabin retrofit and unmanned aerial systems, as well as aircraft leasing services.

Passenger-to-Freighter Conversions

The A330-300P2F programme gained further traction when we secured an additional four firm and 10 optional P2F conversions from DHL Express in June. To take on the expanded conversion programme, we ramped up our capacity in Dresden, Germany with a new single-bay wide-body hangar that was completed in early 2017.

In December, we redelivered our first A330-300 converted freighter successfully to DHL Express after being awarded the Supplemental Type Certificate by the European Aviation Safety Agency (EASA).

Cabin Interior and Manufacturing

We further grew our cabin interior business when we secured a launch customer for our proprietary aircraft seats with a contract to refresh and reconfigure the cabin interior of two A320 aircraft.

In addition, we obtained a number of certifications from international aviation bodies for our aircraft seats. These include the AS9100 Quality Management System certification from DNV GL, and the European Technical Standards Order for lightweight economy class seat for the A320 platform from EASA.

Precision Product Singapore (PPS), a subsidiary which manufactures precision casting parts and mould tooling for aerospace, oil and gas and other industrial applications, broke ground on an expanded facility. In addition to expanding its facility, PPS will also introduce more automation and the use of robotics to the production process to enhance its capabilities and competitiveness.

In Germany, we expanded our capacity in aircraft component manufacturing when Elbe Flugzeugwerke broke ground for a new facility in Kodersdorf, Saxony. When completed, the facility will add 200,000 composite panels production capacity per annum which will help meet rising demand from the growing A320 and A321 fleets.

Aircraft Leasing

We added two aircraft – an A320 and Boeing 737NG – to our aircraft leasing portfolio in 2017. We will continue to grow our portfolio of mid-life aircraft assets that best align with our technical capabilities and service offerings so as to complement

our core MRO, P2F and aircraft modification businesses.

Unmanned Aerial Systems

We are investing in the development of innovative unmanned aerial systems, one of which is Drone Network (DroNet), an autonomous end-to-end drone solution that can be deployed by users such as the police and large-scale facilities management to carry out facility or perimeter security, building or site inspections or deliveries.

A number of such autonomous drone networks can be integrated for city-wide implementation to create a Drone City, addressing increasingly pressing concerns of city life such as environmental management and public safety.

Smart MRO initiatives

In our drive to create even greater customer value, we are making significant investments in Industry 4.0 Smart MRO initiatives to further enhance operations and services. We have been investing in Smart MRO solutions on three broad fronts – digitisation & data analytics, automation and additive manufacturing.

In digitising our hangar and shop floor operations, we will be able to conduct data analytics not only to improve internal operational efficiencies but also to raise our quality and safety performances. We also aim to leverage digital technology to provide value-added services to our customers. For instance, by using vast maintenance data gathered from similar aircraft operated by our broad customers base, we will be able to advise customers on the maintenance needs of their own fleet.

At the same time, we are leveraging technologies in automation to improve our consistency and efficiency through the use of robotics and unmanned vehicles, as well as additive manufacturing to create virtual warehouse for spare parts, thereby helping to improve cost efficiency for our customers. This will ensure that we stay competitive in today's MRO landscape.

The Aerospace sector signs on a launch customer for its proprietary aircraft seats.



OPERATING REVIEW & OUTLOOK



The Aerospace sector will leverage its strong engineering capabilities and nose-to-tail MRO solutions to capture greater market share as the global aircraft fleet grows.

INDUSTRY OUTLOOK

Globally, the airlines did well in 2017 and they are expected to remain profitable. The International Air Transport Association has forecasted that the global airline industry net profit will increase to US\$38.4b in 2018.

Stable global GDP growth, relatively low commodity prices including crude oil, and strong passenger travel demand, especially in the Middle Eastern and Asia Pacific regions, is likely to continue to drive growth in the commercial aerospace sector.

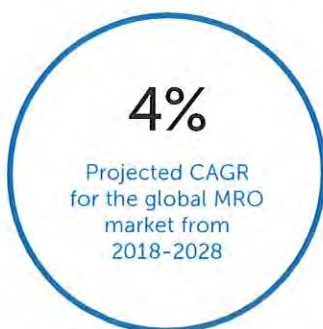
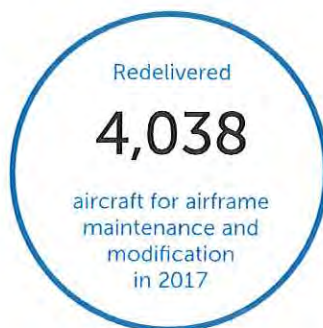
While ongoing macro concerns regarding aviation safety, health scares, terrorism, geopolitical conflicts and economic uncertainty in different regions could potentially derail growth, long-term confidence in air traffic growth remains. Consultancy firm, Oliver Wyman projected global air transport MRO market to grow at 4% Compound Annual Growth Rate over a 10-year period from 2018 to 2028, rising to US\$115b.

With global aircraft fleet expansion, the industry should see a growth in maintenance and outsourcing as well.

Looking ahead, we will remain focused on strengthening our core MRO capabilities while moving upstream in the areas that focus on Intellectual Property (IP) investment such as freighter conversion and cabin interior.

Asia, as has been the case for years, remains the driver of MRO growth. Global and regional companies including OEMs are investing more in aircraft MRO, resulting in talks and plans for numerous new MRO service centres and aviation infrastructure being set up in neighbouring countries.

While this will lead to a more competitive landscape, our capabilities and Singapore's aviation sector are years ahead of the regional competition. Our suite of nose-to-tail aircraft MRO solutions, coupled with our strong engineering capabilities, make our level of comprehensive and value-added services unmatched in the region. We also have a broad customer base with many being longstanding customers who prefer to continue working with us due to our excellent track record of safety and quality in redeliveries.



At the same time, we will continue to work closely with OEMs to be their service centre or part of their MRO network, and to also access their IP, spares and rotables; thereby building scale and range to make ourselves more attractive to customers.

As the global air travel market grows, airlines are refreshing their cabins and increasing comfort in air travel to compete. Despite being a new entrant in the aircraft seats market, we are confident that the synergy of our design and engineering expertise, aircraft modification capabilities and rich experience in product certification and support will provide a compelling proposition to the airlines, especially those who prefer turnkey solutions in cabin retrofits.

As with air traffic, the air cargo market has also been showing growth. Global air freight tonne kilometres grew by a solid 9% in 2017, which is consistent with an uptick in global trade, rising export orders and upbeat business confidence. About 1,950 freighters will be needed by 2036, of which more than half will be converted freighters.

To capture a significant share of this pie and retain our market leadership, we will continue to invest in our freighter conversion programme, and increase capacity in accordance with the schedule of our customers. Our A330P2F programme provides a good solution in the medium-sized freighter segment, and we have received increased enquiries after obtaining EASA's certification for our A330-300P2F in November.

In the narrow-body freighter segment, we believe our A320/A321P2F solutions provide a unique proposition in being able to accommodate pallets or containers in the lower deck, and offer the best ratios of containerised cargo volume to external dimensions.

We expect the strongest initial demand for our A320/A321P2F solutions to come from cargo operators in emerging economies where there are no dominant cargo airlines, as well as combination carriers that are most likely to use freighters to carry general freight and some express package cargo.

Given the good range of conversion programmes we have developed to cater to operators' different needs, we are hence in a strong position to benefit from the global growth in air freight.

KEY FOCUS IN 2018

1 Stay focused on safe and quality redeliveries to provide strong support to our customers

2 Secure launch customer for our A320P2F programme and develop our DroNet solution

3 Strengthen core capabilities and continue to enhance services through Industry 4.0 Smart MRO initiatives

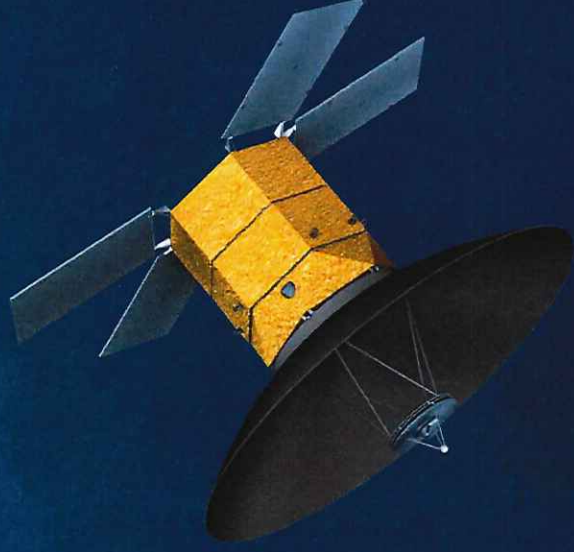
4 Grow our aircraft business by strengthening portfolio



Smart MRO initiatives such as robotics to carry out sanding and polishing work will create greater customer value.

OPERATING REVIEW & OUTLOOK

THE ELECTRONICS
SECTOR EXCELS IN
TRANSFORMING CUTTING-
EDGE TECHNOLOGIES INTO
INNOVATIVE PRODUCTS AND
SERVICES AND DOING SO IN A
COST-EFFECTIVE MANNER.



ELECTRONICS

WHAT WE ACHIEVED IN 2017

- 1** Commenced development of TeLEOS-2, Singapore's first Synthetic Aperture Radar-based imaging satellite
- 2** Acquired SP Telecommunications, expanding our network of fibre optic backbone infrastructure and facilities
- 3** Launched industry-first cybersecurity product that enables safe access to all networks from a single device



2017 REVIEW

Undaunted by rapid technological shifts that continue to challenge global businesses, especially the Industry 4.0 evolution, the Electronics sector continues to advance its global track record and forge ahead with its growth strategy. Building on our deep technological expertise and indigenous capabilities, we have stayed focused on developing innovative, industry-leading products and solutions that meet the increasingly complex needs of businesses, and help them keep pace with the fast-changing technological landscape.

Large-Scale Systems Group – Steady Global Growth

We have established a strong track record in delivering smart, cost-effective and reliable integrated rail solutions which are necessary to meet the demands of rapid urbanisation and sustainability of large cities. We have implemented more than 100 rail electronics projects in over 30 cities.

2017 saw a healthy demand for our rail electronics solutions, as we further expanded our regional footprint with numerous contracts secured. These included the delivery of the Communications System, Automatic Fare Collection (AFC) System, Passenger Screen Doors (PSD), Supervisory Control and Data Acquisition (SCADA) and Passenger Information System (PIS) for the Bangkok Blue Line and Blue Line Extension. We secured contracts to supply PIS for 400 Chicago Transit Authority's 7000 Series rail cars, Hong Kong's Shatin to Central Link railway line, Wuhan Metro Line 11, as well as Saudi Arabia's Mecca Metro Line. In Taiwan, our rail electronics solutions were deployed in Taipei's MRT and Taoyuan Airport MRT line, strengthening our already strong market position in these cities.

Completed rail projects in 2017 included the communications systems for Downtown Line 3 and four stations under the Tuas West Extension MRT in Singapore, the AFC for Bangkok's Green Line Extension Phase 1, as well as the Power SCADA and PSD for Klang Valley MRT Line 1 in Kuala Lumpur.



The Smart Metrol Control Centre uses Big Data Analytics and Machine Learning to predict metro system abnormalities, providing early warnings of potential service disruptions to rail operators.

To capitalise on the growing demand for rail transportation in the Middle East, we set up a subsidiary in Riyadh, Saudi Arabia, adding to an extensive global network, so as to capture new opportunities in the targeted region.

We also formed a partnership with international players to jointly participate in high speed rail projects starting with the Kuala Lumpur-Singapore High Speed Rail.

Communications & Sensor Systems Group – Strengthened Position with Enhanced Solutions

Further propelling the growth of Singapore's space industry and strengthening our position in the global space market, we partnered the Defence Science and Technology Agency (DSTA) in February to develop our next-generation commercial Earth observation satellite, TeLEOS-2, which is also Singapore's first Synthetic Aperture Radar-based imaging satellite. Building on the successful completion and launch of TeLEOS-1, TeLEOS-2 will enhance the sector's commercial satellite imagery services, providing multi-modal and high responsive features to its customers.

Our US satellite communications company, VT iDirect continues to advance its market share. For the 11th year running, VT iDirect secured the leading enterprise Very Small Aperture Terminal (VSAT) systems manufacturer position with over 36% market share, according to the 14th edition of the Comsys VSAT Report.

VT iDirect made significant progress in enabling leading satellite operators such

OPERATING REVIEW & OUTLOOK



SPTel's pervasive network that enables cloud service delivery and IoT connectivity.

as SES and Inmarsat to launch their highly anticipated high throughput services based on the iDirect Velocity platform. The industry migration toward VT iDirect's DVB-S2X satellite transmission standard was another notable focus throughout 2017 and the iDirect network made global inroads, delivering enhanced connectivity to the populations in Russia, Ukraine, Mexico, Brazil and Somalia.

Expanding our enterprise ICT business, we acquired a 51% equity interest in SP Telecommunications (SPTel), which owns, builds and operates communications infrastructure services in Singapore. Our ICT expertise, coupled with SPTel's extensive fibre optic network, will enhance our capabilities and enable us to market smart city solutions to government and enterprise customers in Singapore.

We continued to make headway in the segment of Public Safety and Security, securing wins for the deployment of a public safety system for the local market, and the design and deployment of tactical vehicles equipped with high-tech communications capabilities.

Cybersecurity is becoming an increasingly urgent need for our customers around the

world, and we achieved several significant milestones in our cybersecurity business, which we have identified as a strategic growth area for the Group.

We won a contract with the Information and Communication Technology Agency of Sri Lanka for a design consultancy of Sri Lanka's first National Cyber Security Operations Centre (SOC), as well as to provide training and conduct awareness programmes to strengthen the cyber readiness of Sri Lanka's digital team and other key partners such as Sri Lanka's Computer Emergency Readiness Team | Coordination Centre.

Through our Corporate Venture Capital unit, we invested in Janus Technologies, an endpoint cybersecurity provider based in the US, enabling a synergistic collaboration and the delivery of the Black Computer L100. An industry-first hardware-based cybersecurity solution, it allows users to safely access secured and unsecured networks at the same time, from a single computer. The Black Computer also possesses a unique ability to remove malware from an infected network with a simple reboot of the system.

We joined forces with IBM Security and Siemplify™ to build ST Electronics' new Cyber Security Command and Control Centre, transforming a traditional SOC into a next-generation SOC equipped with cognitive capabilities driven by threat intelligence and artificial intelligence.

We remain committed to developing and upskilling our cybersecurity professionals, empowering them with the domain knowledge and engineering expertise to play a part in enhancing Singapore's cyber defence and readiness. We signed an Memorandum of Understanding (MOU) with Nanyang Polytechnic and Headquarters Signals and Command Systems, which includes the Singapore Armed Forces (SAF) training institute for cyber defence, to strengthen the SAF's training for cyber defence.

With these noteworthy achievements in this high-value sector, the Group is well positioned for long-term and sustainable growth.

\$2.28b

contract wins
for FY2017

More than

100

rail electronics
projects implemented
globally

Software Systems Group — Steady Delivery of Solutions

In the face of increased demands on airports and the civil aviation industry, we were awarded a contract to supply Taiwan's Taoyuan International Airport Terminal 1 and 2 with an Airport Operation Control System to strengthen airport operations and enhance user experience. We also collaborated with Saab Digital Air Traffic Solutions to establish Southeast Asia's first Centre of Excellence for airport digital towers in Singapore, in a bid to enhance airport operations through digitalisation and integration of airport control tower functions.

As a leading provider of advanced simulation and training solutions, we launched MobiC, a game-changing mobile classroom. MobiC delivers virtual reality scenario-based training to help Singapore's Home Team officers hone their judgment and incident management skills.

Overseas, we inked an agreement with Sky Seven to promote a Virtual Aerodrome Laboratory, a first of its kind simulation-based learning system for the aviation industry in the Sultanate of Oman.

Our US-based VT MAK's simulation software was adopted by the Joint Strike Fighter and Predator Unmanned Aircraft Systems programmes. The US Navy is also using VT MAK's innovative software to model novel literal combat environments.

In Europe, our subsidiary, Antycip Simulation, won the Best Education Project in the Install Awards 2017 for their installation in the Glasgow University's School of Simulation and Visualisation.

Powering Smart Cities Globally

We continued to expand our global reach in the Smart City business, with our subsidiary, Telematics Wireless winning a contract from Israel-based company Arad Technologies, for the supply of a smart sensor network that will transform global cities including China, Europe, India and the US. When fully deployed at the end of 2023, the sector will have more than 18 million wireless sensors installed globally, enabling more efficient

town planning and cost savings to smart cities.

Paving the way for developing smart, secure and connected cities globally, we launched the WISX IoT Platform, which integrates multiple Smart City and Internet of Things (IoT) solutions into a common platform that facilitates data exchange and analysis, generating valuable insights to enhance city services and improve the quality of life for city dwellers.

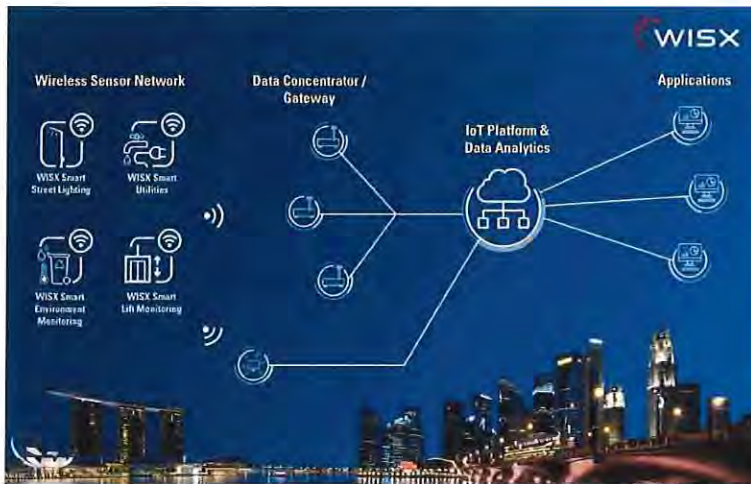
Besides developing smart solutions in-house, we believe in forging synergistic smart solutions with industry partners. With this in mind, we embarked on several industry collaborations on smart industry transformation. These included an MOU signing with the Civil Aviation Authority of Singapore and GomSpace to study the feasibility of space-based Very High Frequency communications and tracking initiative, marking a significant step in exploring the application of space-based technology to enable smart air traffic operations in Singapore and the region.

To advance efforts in maritime technology, we inked an agreement with Singapore's Maritime and Port Authority to collaborate on R&D projects, focusing on areas such as next-generation capabilities for Vessel Traffic Management Systems, smart data analytics capabilities and intelligent systems for shipping operations, as well as autonomous



Pioneering seamless end-to-end broadband wireless solutions for diverse communications needs.

OPERATING REVIEW & OUTLOOK



Enabling smart cities globally with the WISX platform that facilitates seamless data exchange and intelligent analysis.

harbour-craft operations within Singapore's port.

We also signed an MOU with Alpha Ori to co-create smarter maritime fleet management solutions such as a smart data platform equipped with communications connectivity, ship and environment converged data, data analytics and machine learning. This will enhance efficiency in port and shipping operations in Singapore and globally.

In addition, we endorsed an agreement with Siemens to co-create future digital applications, bringing together expertise and innovations in IoT to build Southeast Asia's digital ecosystem.

INDUSTRY OUTLOOK

While we continue to face increased competition globally, we are confident of weathering these challenges, bolstered by our financial stability and our diverse customer base of defence, government, industrial and large enterprise customers as well as the diversity of the industries that we support. We will continue to innovate and produce industry-leading high-tech products that serve local and international markets.

Satellite and Broadband Communications Business

The satellite industry is changing rapidly where we are seeing more private launchers, high-capacity satellites and flexible payloads. The demand for broadband data and the emergence of IoT has driven innovations in the satellite industry and led to reduced costs. High Throughput Satellites (HTS) offering higher bandwidth and high capacity will create pressure to meet the market demand.

The increased supply of capacity at reduced cost will enable satellite services to increase its penetration in existing and new market segments. This will drive demand for satellite services in cellular backhaul, maritime, aviation and rural communications. Customers will demand satellite ground terminals that are more compact, portable and at lower price points than the current generation of products.

These are positive developments for us and as a leader in the satellite-based IP communications technology, we expect to continue delivering cost-effective satellite solutions and best of breed products that have already been sold to more than 100 countries.

Transportation Solutions Business

Rapid urbanisation and digitalisation continue to drive strong global demand for enhanced rail infrastructure with new technology and innovations such as automation and digital information management that improve reliability of rail services and meet increased commuter expectations and experience. These technological advances have also fostered the demand for predictive capabilities that can enable operators to achieve greater work efficiency and productivity.

At the same time, a growing global population is relying on their mobile devices, tech gadgets, credit cards and even fitness wearable devices to carry out everyday transactions. Rail operators have been quick to embrace more innovative hands-free fare collection systems which incorporate technologies such as facial recognition, contactless cards and devices, and long-

range radio-frequency identification (RFID), enabling convenient, hands-free access for commuters.

With our proven ability of adopting new ways to use existing infrastructure more efficiently through digitalisation, as well as embed next-generation technologies in our rail electronics solutions such as our AFC, we are well-positioned to help global rail operators transform their business and address the mobility needs of citizens in global urban cities.

Advanced Electronics & ICT Business

Public Safety & Security

Global terrorism is soaring with the number of attacks increasing rapidly by more than 25% every year. This is forcing governments and security agencies to modernise public safety policies and regulations. As a result, there will be a strong demand for effective public safety and security solutions to protect citizens, organisations and critical infrastructure from terrorist threats. Besides physical security, there is also a need to detect radicalisation early through the effective use of technology to prevent a full-scale development to terrorism.

In response to the volatile security landscape worldwide, we have developed robust, flexible and secure Public Safety & Security solutions with a holistic approach of deterrence, detection and response to protect key installations, critical infrastructures and strategic assets. Implemented in over 12 global cities, our public safety & security solutions will help homeland security agencies optimise workflows and resources for enhanced communications response time and outcomes.

Data Analytics & Enterprise ICT

The push towards automation and digitisation of the economy will result in people, businesses, devices, machines and systems being constantly interconnected, anywhere in the world. There will continue to be an increasing demand for IoT devices for Machine-to-Machine (M2M), Human to Human (H2H), and Machine to Human (M2H)

applications. This has enabled the delivery of streaming, operational and transactional data in real time, triggering a need for smart data analytics with the power to maximise operational efficiency in every industry sector from healthcare to city planning.

The rapid growth of Machine Learning and Deep Learning has also sparked a need for smart intelligence systems that can to a certain degree, automate decision making.

Backed with robust, enterprise-wide, cross domain data analytics capabilities, we are able to help our customers generate actionable insights for enhanced and accurate decision making, improving the operational efficiencies of city services and other key industries.

Cybersecurity

Interconnectivity will bring about many benefits to our society; greater convenience, efficiency and productivity. Data-driven insights will enable people to make informed decisions. But with connectivity comes increased exposure to cyber threats. The convergence of the cyber and physical space brings new threats – protection of critical infrastructures such as land transport, energy and water reclamation plants from cyber attacks will be a key focus area.

Critical infrastructure operators are vulnerable on two fronts when it comes to cyber hackers: losing control of the essential services and the increasingly large data they possess. Going forward, there will be a demand for cyber protection of both the Information Technology and Operational Technology as part of critical infrastructure operations.

With our cyber defence capabilities encompassing the entire cyber landscape, bolstered by our deep domain knowledge in building critical information infrastructures, we are able to deliver a comprehensive suite of indigenous, trusted and robust cybersecurity products and solutions to serve the customised security needs of government agencies and large enterprises in Singapore and abroad.

KEY FOCUS IN 2018

1 Renew focus of global business in High Throughput Satellite Communications and Intelligent Rail Transportation

2 Strengthen Public Safety & Security solutions to meet heightened global security needs

3 Enhance capabilities and offerings in Data Analytics, Enterprise ICT and Cybersecurity

ST ENGINEERING

OPERATING REVIEW & OUTLOOK

WE INTENSIFIED EFFORTS TO
BUILD OUR CAPABILITIES IN
AUTONOMOUS AND ROBOTICS
ENGINEERING FOR MULTIPLE
INDUSTRY APPLICATIONS.

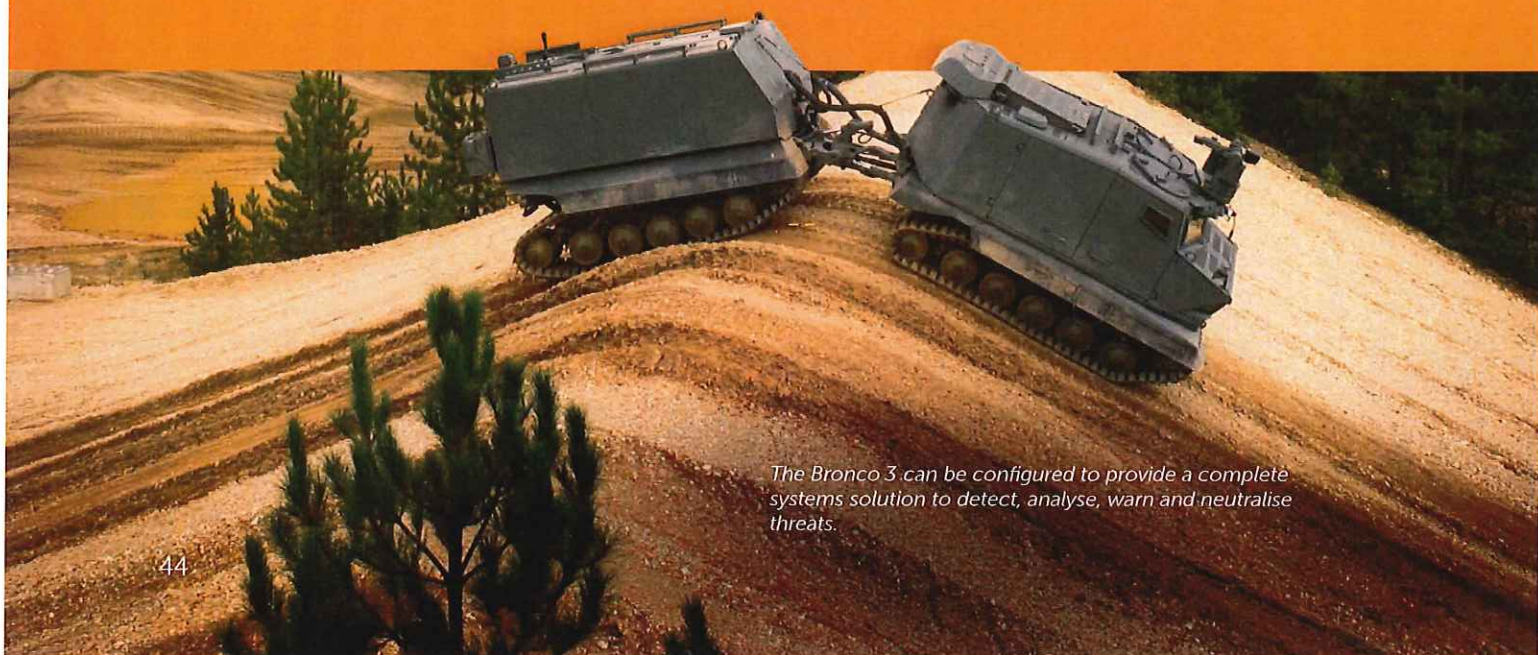
LAND SYSTEMS

WHAT WE ACHIEVED IN 2017

1 Completed delivery of 16
Terrex 2 vehicles to the US
Marine Corps

2 Awarded contract by
the Ministry of Defence
for the supply of the Next
Generation Armoured
Fighting Vehicle

3 Continued to
drive development in
autonomous vehicles, in
preparation for road trials



*The Bronco 3 can be configured to provide a complete
systems solution to detect, analyse, warn and neutralise
threats.*

2017 REVIEW

We remained focused on fulfilling the requirements of our customers and pursued new opportunities in the global defence market. We also intensified efforts to build on our strengths and capabilities in autonomous and robotics engineering for multiple commercial and industry applications.

Automotive – Defence - Pursuing New Opportunities Globally

The Next Generation Armoured Fighting Vehicle (NGAFV) is the latest addition to the Land Systems sector's stable of advanced armoured vehicles. In March, we were awarded a contract by Singapore's Ministry of Defence (MINDEF) for the supply of the NGAFV to replace the ageing M113 fleet.

The NGAFV is also the platform of choice by our partner, Science Applications International Corp. (SAIC) to compete for an Engineering and Manufacturing Development (EMD) contract to build prototypes that incorporate a lightweight combat vehicle design for the US Army's Mobile Protected Firepower (MPF) programme. This is the second teaming arrangement between ST Kinetics and SAIC.

In partnership with SAIC, we completed delivery of 16 Terrex 2 vehicles to the US Marine Corps for testing as part of the EMD contract for the US Marine Corps' (USMC) Amphibious Combat Vehicle Phase 1, Increment 1. Testing is underway and the USMC is expected to make its decision in 2018.

The strong working partnership with SAIC continued when SAIC selected our Canada-based land systems subsidiary, Kinetics Drive Solutions (KDS) for the USMC's Amphibious Assault Vehicle (AAV) Survivability Upgrade (SU) programme. KDS' MD500 marine drive power-take-off and InfiniDrive HMX3000 transmission systems that enhance both land and water mobility will be installed in the vehicles.

Our All Terrain Tracked Carrier, Bronco 3, made its maiden appearance in Europe at the Defence and Security Equipment International 2017 held in London. At the exhibition, the Bronco 3 was mounted with the Green Rock Tactical C-RAM radar system, Othello fire-source location system, ST Kinetics' 120mm Super Rapid Mortar System (SRAM) and a 12.7mm MG Remote Weapon Station, forming a complete systems solution for a variety of ground force protection missions to detect incoming mortar fire, analyse, warn and neutralise threats.

There is increasing interest in the Bronco family of All Terrain Tracked Vehicles and its commercial variant, the ExtremV, for humanitarian and disaster relief missions. In July, the ExtremV marked its first successful deployment in Japan during the floods in Fukuoka and Oita. The ExtremV, or locally known as Red Salamander, generated much interest from the Japanese media with its mobility over difficult terrain and versatility.

We continue to pursue innovation in autonomous solutions including the development of Unmanned Ground Vehicles (UGVs) for military and homeland security applications. The UGVs can be used to support forward-deployed tactical force elements including surveillance or reconnaissance missions, logistical support and fire support. We are also focusing our efforts on cybersecurity to ensure the integrity of the vehicles' systems and data in an increasingly digitalised world.

Automotive – Commercial - Building Up Autonomous Vehicles and Robotics Capabilities

We announced the formation of the Singapore Autonomous Vehicles (AV) Consortium to identify protocols and standards for the adoption of AVs in real-world scenarios; and to develop niche AV technologies such as automotive cybersecurity, advanced autonomy and platform-agnostic AV kits.

OPERATING REVIEW & OUTLOOK

Members of the consortium include A*STAR's Institute for Infocomm Research, National University of Singapore's Faculty of Engineering, Singapore University of Technology & Design, Nanyang Technological University (NTU) through the ST Engineering-NTU Corporate Lab and Singapore Institute of Technology.

The sector worked on the development of autonomous buses in preparation for road trials in partnership with Singapore's Land Transport Authority (LTA). The 40-seater buses, powered by our AV technology and integrated with various diagnostics, cyber security and localisation technologies, will navigate Singapore's urban mixed traffic conditions under normal and adverse weather conditions. The autonomous buses, measuring 12m long with maximum speeds of 60km/h, will be developed over 42 months in three phases.

Four MODVs will go on a pilot public trial in Sentosa in 2019.



Other than AV buses, the sector also announced the development of four Mobility-on-Demand-Vehicles (MODVs), and is working together with Sentosa Development Corporation and the Ministry of Transport to deploy them for trials in 2019.

The four MODVs, each with a seating capacity ranging from 15 to 20 passengers, will be deployed in a pilot public trial to provide autonomous mobility-on-demand services to visitors to serve their intra-island travel needs on Sentosa Island, Singapore. Visitors will be able to call for the MODV via their smartphones or information kiosks located across the island.

Extending our service offerings in autonomous vehicles, the sector signed a three-year exclusive dealership with France's NAVYA, an autonomous vehicles specialist, to distribute the NAVYA ARMA autonomous shuttle. The partnership also allows both parties to collaborate and deploy ST Kinetics' autonomous technologies, such as the fleet management systems, rain filter and platooning, onto the NAVYA ARMA.

In 2017, we acquired Aethon, a leading provider of autonomous mobile robots (AMRs) for material transportation and delivery, for US\$36m (about S\$50m). Based in Pittsburgh, Pennsylvania, Aethon is best known for its TUG® smart AMR which helps automate intra-logistics in industrial, healthcare, hospitality and other commercial environments.

With the acquisition of Aethon, the sector forged collaborations with partners to extend its proven indoor robotic applications for the industrial, healthcare and hospitality sectors.

One such collaboration is the partnership with StarHub, Laundry Network and Republic Polytechnic to offer robotics solutions that will transform laundry and housekeeping operations in the hospitality sector. The autonomous transportation

of linen and automated tracking of linen inventory by the TUG® robots will streamline the supply chain process, reducing a seven-step manual process to a three-step automated one.

This holistic solution was one of the successful projects of the Tourism Innovation Challenge for the Hotel Industry organised by the Hotel Innovation committee and the Singapore Tourism Board. There is already a pipeline of hotel pilot users, including Capri by Frasers Changi City, Four Points by Sheraton Singapore and Grand Copthorne Waterfront.

Specialty Vehicles

Most major regional equipment markets are expected to see growth this year. Global construction equipment sales are expected to increase by 16% this year, according to the updated Global Volume & Value Service from Off-Highway Research.

In the US, the North American market saw slow to moderate growth in the commercial paving sector. The expected infrastructure funding has yet to materialise and this translated to a muted impact on equipment spending.

VT LeeBoy expanded its dealer equipment rental business and introduced new products such as the 8520 Paver and the RB50 Broom to meet customers' requirements.

VT Hackney delivered six prototype electric vehicles to the United States Postal Service (USPS) for trials. The prototype development is for USPS' Next Generation Delivery Vehicle Acquisition Program. A decision by the USPS is expected in the first half of 2018, and will involve the replacement of over 160,000 vehicles over the next few years.

LeeBoy India launched two new products – the 18- and 22-tonne motor graders at the EXCON exhibition. It also launched the Common Rail Direct Injection or



LeeBoy India launched its new 18- and 22-tonne motor graders at the EXCON exhibition in India.

CRDI versions of the 985 Grader (Series 2) with a host of other advances. These new products are suitable for the mining industry. It also successfully exported its excavators, backhoe loaders and motor graders to new markets including Bahrain, Bhutan and the Philippines.

In Brazil, the economy kept a slow pace in 2017, though there were signs of a gradual improvement in the second half of the year, leading to a slight improvement in business and consumer confidence.

LeeBoy Brazil kept its positive outlook as it awaits a recovery in the local market, and continued to focus on its exports. It launched new products and made further inroads in Latin America, adding Panama to its list of customer markets.

The amphibious Humdinga continued to generate interest in the homeland security segment and has resulted in several orders from customers around Asia.

Aethon's TUG® robots are deployed at more than

200 sites

globally

MODV trials on Sentosa will begin in

2019

OPERATING REVIEW & OUTLOOK



The NGAFV is the latest addition to our stable of advanced armoured vehicles.

Munitions & Weapons **- Offering Reliable and Effective Solutions**

The battle-proven SRAMS continued to generate interest in mobility fire power in overseas markets. In response to customers' requirements, the sector now offers its customers the option to produce in-country, with a list of special ammunition.

The sector's 40mm ammunition solutions saw steady demand around the world, with many repeat orders from customers who value their reliability and effectiveness.

The sector also used the latest technologies and advanced materials to develop new products. One such example is the Army Individual Eco-Lightweight Equipment (ARIELE™) Soldier System, which comprises several innovative systems to provide soldiers maximum comfort, protection, mobility and enhanced capabilities.

Another new development is CleARMOUR, a lightweight transparent ceramic material

that offers crystal clear transparency. Extremely strong and scratch-resistant, it has multi-hit mitigation capability to withstand armour piercing threats.

Services, Trading & Others **- Offering New Transportation Solutions**

In March, we put Singapore's first three-door bus on the road. The double-decker bus was operated by Tower Transit Singapore on Service 143 to gather commuter feedback. A second three-door bus, a single decker, was put into service by SMRT in June on service 190, and then on service 901.

In a move towards clean technology, we inked a partnership with an Original Equipment Manufacturer (OEM) for electric buses to distribute electric buses in right-hand drive countries in Asia Pacific, including Singapore, Australia, Hong Kong, Indonesia, Malaysia, New Zealand and Thailand. We also won an LTA tender to retrofit a single-deck electric MAN bus as proof-of-concept.

In addition to electric buses, we are working with BYD, a leading Chinese automobile manufacturer, on other electric commercial vehicles. We will distribute BYD electric vans, and provide after-sales support for BYD electric vehicles in Singapore.

Leveraging the sector's strong capabilities in testing and repair, maintenance, engineering and obsolescence management, we made inroads into rail electronics when we secured a contract with transport operator, SBS Transit, to support its rail operations. The collaboration covers a suite of services for the repair, refurbishment and reconditioning of electronics cards.

INDUSTRY OUTLOOK

Defence

Global defence and homeland security continue to be priorities of many countries around the world. Governments are expected to increase spending on

equipment and capabilities for counter-terrorism, cybersecurity, intelligence gathering, as well as autonomous and unmanned systems.

As armed forces continue to modernise, major vehicular platform acquisitions are expected, particularly for 8x8 armoured vehicles and for all-terrain tracked vehicles.

We will pursue these programmes based on our proven platforms such as the Terrex Infantry Fighting Vehicle, the Bronco All Terrain Tracked Carrier and the NGAFV, as well as weapons such as SRAMS.

We continue to extend our reach globally through partnerships, collaboration, licensing and distribution to provide customers with options that would best meet their requirements.

Commercial

Technologies in autonomous systems and robotics are expected to grow in both the military and commercial sectors. The adoption of such systems in sectors including transportation, healthcare and security, as well as in manufacturing applications, is expected to gain traction in the coming years.

The sector will continue to enhance its capabilities in robotics and autonomous vehicles as it meets milestone deliveries for ongoing projects including the MODVs and AV buses.

Aethon will tap on the Group's global network to grow the Asia Pacific and European markets, and build on the global innovation network for rapid product development to integrate the AMR with other payloads e.g. robotics arms for multiple applications in different industries.

In the US, federal funding for infrastructure is expected to materialise, and should boost the recovering US



The TUG® AMR is capable of carrying loads up to 635kg.

economy. Besides the local market, VT LeeBoy and VT Hackney continue to look to international markets in the face of increasing competition, especially in the commercial paver segment.

Likewise in Brazil, the focus is on exports as LeeBoy Brazil develops new products for the Latin American market, and newer markets like Eastern Europe and Asia. The new products include its 9100 paver, the Maximizer 10 Asphalt Distributor Kit and the CF120 Single Chassis Asphalt Plant.

The city bus segment will continue to see growth in demand, due to upcoming bus replacement tenders, as well as the planned growth of buses to meet the target of 6,000 city buses by 2021. From 2018, the LTA will also conduct trials for electric buses and diesel hybrid buses as part of feasibility studies for the LTA-led technology road map for the deployment of electric vehicles by 2050. By that time, as many as 30-50% of vehicles in Singapore could be electric vehicles.

KEY FOCUS IN 2018

1 Pursue local and overseas defence acquisition programmes with a proven suite of platforms and weapon systems

2 Continue to develop effective and innovative defence solutions using latest technologies and advanced materials

3 Accelerate product development of the TUG® AMR for applications in multiple industries, including hospitality, healthcare and logistics

OPERATING REVIEW & OUTLOOK



MARINE

WHAT WE ACHIEVED IN 2017

1 Good progress for both defence and commercial shipbuilding programmes in Singapore and the US

2 Acquired rig repair assets in a prime location in the Gulf of Mexico to augment repair business

3 Tuas Power-ST Marine consortium secured a contract to design, build, own and operate Singapore's fifth desalination plant

THE MARINE BUSINESS
CONTINUES TO BE
CORE TO THE GROUP.

2017 REVIEW

2017 has been a challenging year for the marine industry. In line with our expectations, the oversupply situation for the commercial segment persisted at the shipyards, leading to mounting pressure on capacity management. However, we have mitigated the impact with new contract wins, and streamlining of our business operations.

Defence remains core to our marine business as we continue to build on our position as a total naval solutions provider. Besides achieving significant milestones in our ongoing shipbuilding projects, we look to provide long-term cycle support services to navies we have built ships for, as well as market our services to other navies that use Singapore as their base in Southeast Asia.

We continued to make inroads in our environmental engineering segment, achieving milestones for existing and new projects. We also enhanced our marine repair capabilities with a strategic asset acquisition.

Despite the competitive landscape that we operate in, we have established an excellent track record in project management and system integration, delivering our projects well and on schedule. With Group-scale synergies and resources, we continued to discover and exploit business and growth opportunities amidst the challenging environment.

To sustain our global marketing outreach, we showcased our comprehensive range of solutions at prominent trade events, including LAAD Defence and Security in Brazil, Naval Defence Exhibition in the UAE and International Maritime Defence Exhibition in Singapore.

We undertook rightsizing efforts of our US operations to negotiate the downturn of the industry in the US – our Singapore units are working closely with the units in the US to improve project management processes. While we are addressing process efficiency and productivity issues, we are stepping



LMV Indomitable, the fifth of the series of eight Littoral Mission Vessels built for the Republic of Singapore Navy, was named and launched in September.

up sales and marketing efforts to pursue new contracts such as offshore wind farm support vessels, commercial fishery vessels, bunkering tankers, LNG or dual-fuelled Roll-on/Roll-off ferries and power barges.

SHIPBUILDING

- Delivering on our Promise

2017 was a year in which we attained several key milestones in our newbuild projects. Through our eight-vessel Littoral Mission Vessel (LMV) programme for the Republic of Singapore Navy (RSN), we delivered Independence and Sovereignty in 2016, Unity and Justice in 2017 and launched Indomitable during the year. Construction of the remaining three vessels is progressing on schedule. The LMVs are a new generation of smarter, faster and sharper ships designed to replace the Fearless-class Patrol Vessels previously designed and built by us in the 1990s. These ships strengthen the RSN's ability in the seaward defence of Singapore.

Also in mid-year, the ST Marine-Penguin International consortium began construction of three para-military vessels – Heavy Fire Vessel, Heavy Rescue Vessel and Marine Rescue Vessel, for the Singapore Civil Defence Force. We are on track for a 2019 delivery. Over in the US, we launched two LNG-powered Container Roll-on/Roll-off (ConRo) vessels for Crowley Maritime.

Being one of the world's first combination of LNG-powered ConRo ships, these

Heavy Fire Vessel

OPERATING REVIEW & OUTLOOK

vessels feature significant emission reductions – including a 100% reduction in Sulphur Oxide (SOx) and particulate matter (PM); 92% reduction in Nitrogen Oxide (NOx); and reduction of more than 35% in Carbon Dioxide (CO₂) per container, as compared to using current fossil fuels.

VT Halter Marine has a strong record of having built more cars and passenger ferries than most US shipyards for the states of Virginia, New York, Texas, Louisiana, North Carolina, Alaska, California, Washington, and the territory of Puerto Rico. The latest 499-passenger/70-vehicle Passenger Ferry which is being built for the Virginia Department of Transportation is in the final stages of construction, and will be launched in the first half of 2018.

Over the course of the year, we secured key contract wins as well, including an industry and analysis design study contract for US Coast Guard's Heavy Polar Icebreaker programme, and an Articulated Tug Barge (ATB) for a repeat customer. We were also contracted to construct America's first

offshore LNG ATB for marine transportation company Q-LNG – the ATB Tug will supply LNG to marine customers along the southern East Coast of the US, and support growing cruise line demand for LNG marine fuel.

As part of our efforts to augment our shipyard capabilities, we started the construction of a new integrated blast and paint facility at our shipyard in Mississippi. It features complete indoor and environmentally-controlled surface preparation and final painting of ship sections prior to final erection, while ensuring particles from the facility are not released into the environment. The facility will be able to accommodate ship sections as large as 105' (W) x 80' (L) x 40' (H), weighing up to 500 tonnes each. Among the features is a "flow-thru" configuration, which allows for ship sections to be completely prepared, blasted and painted within the facility.

SHIPREPAIR

- Investing in the Future

Amidst a pervasive competitive environment where the industry was beset by low charter rates leading to reduced maintenance budgets, our Shiprepair business held steady and undertook forward-looking measures by exploiting the opportunities amidst the downturn in the offshore and marine industry.

One key manoeuvre was the acquisition of a purpose-built facility for offshore oil and gas rig upgrades, repairs and conversions. Located in the prime location in the Gulf of Mexico, next to VT Halter Marine's existing yard in Pascagoula, Mississippi, these assets enable us to leverage resources and derive greater synergies in optimising production resources and facilities between both yards. They also generate long-term value in enhancing our capabilities while offering scale advantages in the marine repair segment.

This acquisition pays testament to our commitment as a premier turnkey provider of holistic marine solution – a strength which we have established over past decades.



El Taino is the first American-flagged LNG-powered Container Roll-on/Roll-off ship.

Another focus area for us in 2017 was to tap on the growing trend of ship conversion, against the background of Offshore Supply Vessels (OSV) declining in demand. One highlighted project was the major conversion of 'Pacific Harrier' to a seismic functional vessel in Indonesian waters, completed on schedule within 102 days. We also conducted significant retrofitting work for Luisella Cosulich, a newly-acquired vessel for Fratelli Cosulich Bunkers, as well as the redelivery of Volvox Terranova, a trailing suction hopper dredger. Another highlight was the repair and maintenance work done on Rem Etive, which was completed ahead of a tight schedule.

We augmented our track record in super yacht repairs with the successful redelivery of three super yachts – MY Paraffin, MY Tiara and MY Charley in July 2017. The scope of work included the glass reinforced plastic hull modification and marine systems repair.

ENVIRONMENTAL ENGINEERING

- Healthy Demand Amidst Good Potential

In the environmental engineering segment, 2017 was a landmark year where numerous milestones were achieved. STSE Engineering successfully completed the Engineering, Procurement and Construction (EPC) expansion of the Kranji NEWater plant in August to produce an additional 22,730 cubic metres of water per day. Its China subsidiary, ST Environment Services and Technologies, engaged to design, build and operate and transfer (DBOT) a Pneumatic Waste Collection System in Tianjin Eco-City, commenced the operations and maintenance phase of the project in the fourth quarter, and is slated to deliver the system in 2025.

In September, Tuas Power-ST Marine consortium was named by Public Utilities Board, Singapore's national water agency, as the preferred bidder to design, build, own and operate (DBOO) Singapore's fifth desalination plant on Jurong Island for a concessionary period of 25 years from 2020. Tuas Power and ST Marine have since formed a 60:40 concession company that will contract an EPC consortium and a jointly-held Operation and Maintenance



America's first offshore LNG ATB will support growing cruise line demand for LNG marine fuel along its southern East Coast.

company to undertake this project. Construction of the desalination plant is expected to commence in the second quarter of 2018. When it is operational in 2020, the plant will add 137,000 cubic metres of desalinated water a day.

The combined strengths of Tuas Power and ST Marine positioned us well to win and execute this project. This new desalination plant was designed to leverage the existing infrastructure of the Tuas Power-owned Tembusu Multi-Utilities Complex in Jurong Island, which will reduce the cost of direct capital investments and operations, as well as reduce footprint in terms of space and operations. We have an established track record in EPC management in large-scale marine and environmental technology related projects.

This new desalination plant will feature Internet of Things technologies to drive smart analytics. For instance, sensor nodes will be attached to the reverse osmosis pressure vessels for conductivity profiling. These nodes, which are configured to detect and isolate membrane fouling and monitor the performance of the reverse osmosis system, will then feed real-time data to the Command and Control Operations Centre for an integrated overview of daily operations. From there, the data analytics can be used for predictive

Awarded contract to build America's

1st

offshore LNG-powered Articulated Tug Barge

Selected to design, build, own and operate Singapore's

5th

desalination plant

OPERATING REVIEW & OUTLOOK



The new Jurong Island Desalination Plant will be co-located with Tuas Power's Tembusu Multi-Utilities Complex.

maintenance to optimise productivity and efficiency.

INDUSTRY OUTLOOK - Opportunities Amidst Challenging Times

Shipbuilding

This is not the first time the shipping industry is grappling with the issue of overcapacity; although we are seeing a longer downturn this time. With the oversupply of ships in the OSV/Support Seismic Vessel segment, there is the risk of payment default by ship owners, coupled with lack of credit from financial institutions to fund new capital projects. This is exacerbated by the trend of ship owners favouring countries with lower labour and production costs, such as China.

There are opportunities to be explored further. We are tilting our focus towards total solutions for our defence segment, including para-military vessels, Shore Connectors, Frigates, Offshore Patrol Vessels and Fast Missile Crafts.

Geographically, we are intensifying sales and marketing efforts to navies and agencies in the Middle East, South Asia and the US. This includes contract bids for Frigates, Landing Platform Docks and Landing Craft. We have also identified growth potential in unmanned solutions, including Long Endurance Unmanned Surface Vessels (USVs), Unmanned Connectors and Unmanned Security Maritime Platforms.

We will also market our services for niche and highly-customised newbuilds in the commercial segment, such as bunkering tankers, wind farm support vessels, ATBs and LNG or dual-fuelled Roll-on/Roll-off Passenger vessels, to meet higher demand for cleaner fuels and greener marine solutions.

Shiprepair

Amidst a period of uncertainty in the oil and gas maintenance expenditures due to volatile oil prices, the Shiprepair segment remains keenly competitive.

To tackle these challenging times, our focus is on specialised conversion projects in the power and LNG segments.

We will also provide long-term lifecycle support services to navies we have built ships for, including the Royal Navy of Oman, and the Singapore Civil Defence Force, as well as market our maintenance services to other navies. Over in the US, we will be expanding our outreach to new customers both within and outside the country, to include LNG and Energy support and producing sectors.

Despite the uncertainties in the offshore market, we believe that our repair assets next to our existing yard in the strategic Gulf of Mexico, which were acquired at the trough of the market, will position us for greater competitiveness when the tide turns.

Environmental Engineering

This sector encompasses a multitude of disciplines and industries, with some sectors dominated by prominent players. This may

be a hurdle to relatively young players like ourselves, but given our core competency in large-scale engineering, we have the expertise to provide a comprehensive suite of sustainable environmental engineering solutions in water, wastewater, solid waste and renewable energy. In addition, we are seeing a healthy level of demand in Southeast Asia and the Middle East – these green infrastructure projects present good opportunities in our push for smart city solutions.

As we continue to evaluate the long-term potential of this business segment, we will work on building our expertise in these disciplines locally, before exporting our solutions. We will also leverage the Group's technology and innovation infrastructure to seek out potential ideas and partners for collaboration to expand our reach into DBOO/DBOT contracts for long-term recurring growth.

Gaining Competitive Edge with Smart Ships

2017 was the year when we explored more innovative initiatives towards developing a 'Smart Shipyard' to drive higher efficiency. The initiatives targeted three aspects of our shipyard operations – in terms of design, manufacturing and data analytics. We incorporated green solutions and digital technologies in optimising designs for high-performance ships, including new hull designs for both commercial and defence sectors, as well as large unmanned platforms for naval applications.

Utilising smart technologies like robotics in welding, fitting, painting and blasting, and increasing automation overall in our manufacturing processes, we are able to achieve better quality with shorter turnaround time. With data analytics, we can improve efficiency and equipment maintenance through the production data derived.

The upgraded NERVA Ship Management System and Sense Making System (SMS²) provides a centralised alarm, control and monitoring of platform sensors and systems as a key feature of a 'Smart Ship'. Integrating

technological advancements in process automation with ship building expertise, the NERVA SMS² offers a state-of-the-art ship management system solution for most vessel types.

A key feature of the NERVA SMS² is the sense making capability. Incorporating data and predictive analytics, the SenseMaking system is able to perform condition-based-monitoring and predictive diagnostics on platform machinery systems. The SMS² also comes with a Decision Support System which provides advisory to a ship's crew to help them improve their decision making.

Notwithstanding the current market uncertainties, we continue to enhance our existing technologies and processes, upgrade our assets and skill sets to sharpen our competencies for the future.

KEY FOCUS IN 2018

- 1** Introduce smart ship management system and sense making analytics for smarter ships
- 2** Intensify sales and marketing efforts to pursue defence and commercial opportunities
- 3** Increase automation and leverage robotics to improve operational efficiency
- 4** Commence construction of Jurong Island Desalination Plant in Singapore



Our in-house ship management system, NERVA, integrated with SenseMaking module applies data analytics and machine-learning techniques to provide predictive analysis.

FINANCIAL REVIEW

LONG-TERM GROWTH THROUGH INNOVATION AND COLLABORATION

In 2017, the Group embarked on several initiatives to reinforce its position as a technology and engineering leader. The Group set up a Corporate Venture Capital unit and an Open Innovation Lab to invest in promising technology start-ups to harness new technologies that will create long-term value and growth for our stakeholders.

During the year, the Aerospace sector successfully delivered our first A330-300 passenger-to-freighter conversion (P2F) following the successful completion of test flights and award of the Supplemental Type Certificate (STC) by the European Aviation Safety Agency (EASA). The Electronics sector acquired a 51% interest in

SP Telecommunications Pte Ltd (SPTel) to leverage its extensive network of fibre optic backhaul infrastructure and facilities to provide a comprehensive suite of Info-Communications Technology (ICT) expertise to government and enterprise customers.

In the Land Systems sector, the acquisition of Aethon will provide autonomous mobile robotics to the healthcare, industrial and hospitality sectors. The Marine sector together with consortium partner, Tuas Power Ltd, was selected to jointly design, build, own and operate the Jurong Island Desalination Plant in Singapore. The Marine sector also acquired selected marine repair assets for its shiprepair business.

The Group posted revenue of \$6.62b in FY2017, comparable to FY2016, while Profit before tax (PBT) of \$623.3m and Profit attributable to shareholders (Net Profit) of \$511.9m for FY2017 came in 6% higher as compared to FY2016.

The Group ended the year with a strong order book of \$13.2b.

The Group delivered strong operating cash flow in FY2017 and ended the year with cash and cash equivalents balance (including funds under management) of \$1.3b. The Economic Value Added (EVA) for the Group grew \$69.2m or 27% to \$321.6m for FY2017.

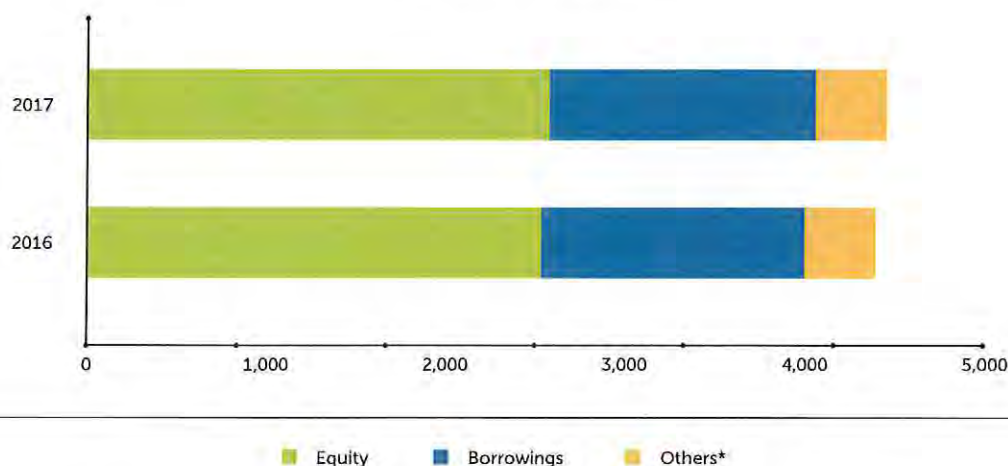
The Board proposes a final dividend of 10 cents per share. Together with the interim dividend of 5 cents per share paid in August 2017, the total dividend for FY2017 is 15 cents per share.

FINANCIAL POSITION

As at 31 December 2017, the Group's total assets increased \$108m or 1% to \$8,473m mainly from the acquisitions of SPTel, Aethon and marine repair assets.

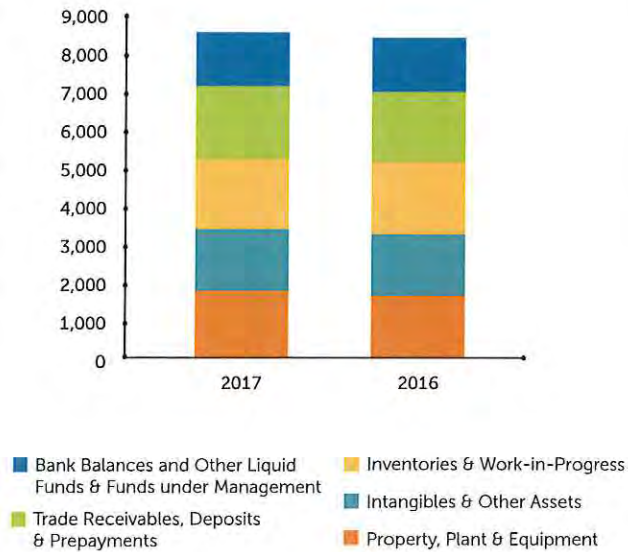
The average capital employed in FY2017 was \$4,458m as compared to \$4,426m in FY2016.

CAPITAL EMPLOYED (\$m)

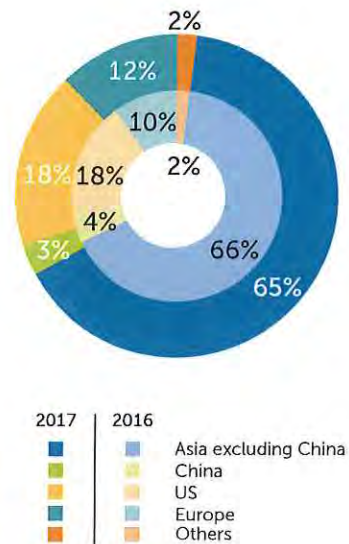


* Others include adjustments for foreign currency translation, present value of leases, etc.

TOTAL ASSETS DEPLOYMENT (\$m)



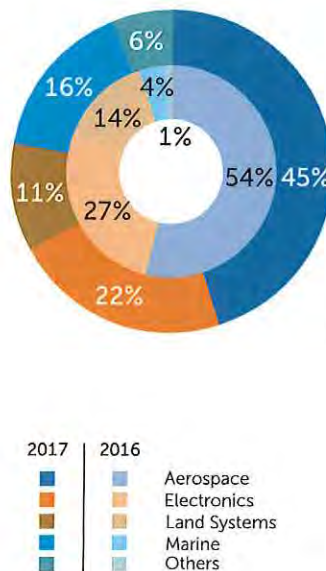
TOTAL ASSETS BY GEOGRAPHY



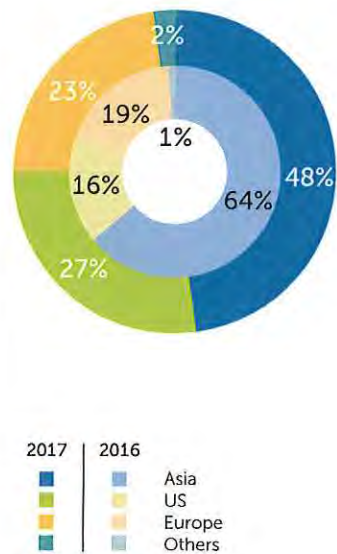
CAPITAL EXPENDITURE

In FY2017, the Group continued to invest for long-term growth with capital expenditure of \$273m (2016: \$252m), of which about 89% or \$243m was for investments in new capacity and capabilities. Major capital expenditures incurred included the ongoing construction of new hangars for capacity at the Aerospace sector to support our P2F conversion business, the construction of a new building to support the data centre business in the Electronics sector, and the acquisition of marine repair assets in the US.

CAPITAL EXPENDITURE BY SECTOR



CAPITAL EXPENDITURE BY GEOGRAPHY



FINANCIAL REVIEW

TREASURY MANAGEMENT

ST Engineering operates internationally and is exposed to financial risks, comprising currency, interest rate, credit and liquidity risks. The Group recognises that prudent management of financial risks is important and has in place a set of treasury policies and guidelines to mitigate these risks. Treasury activities are managed through the Group Treasury Division, which reviews and updates the treasury

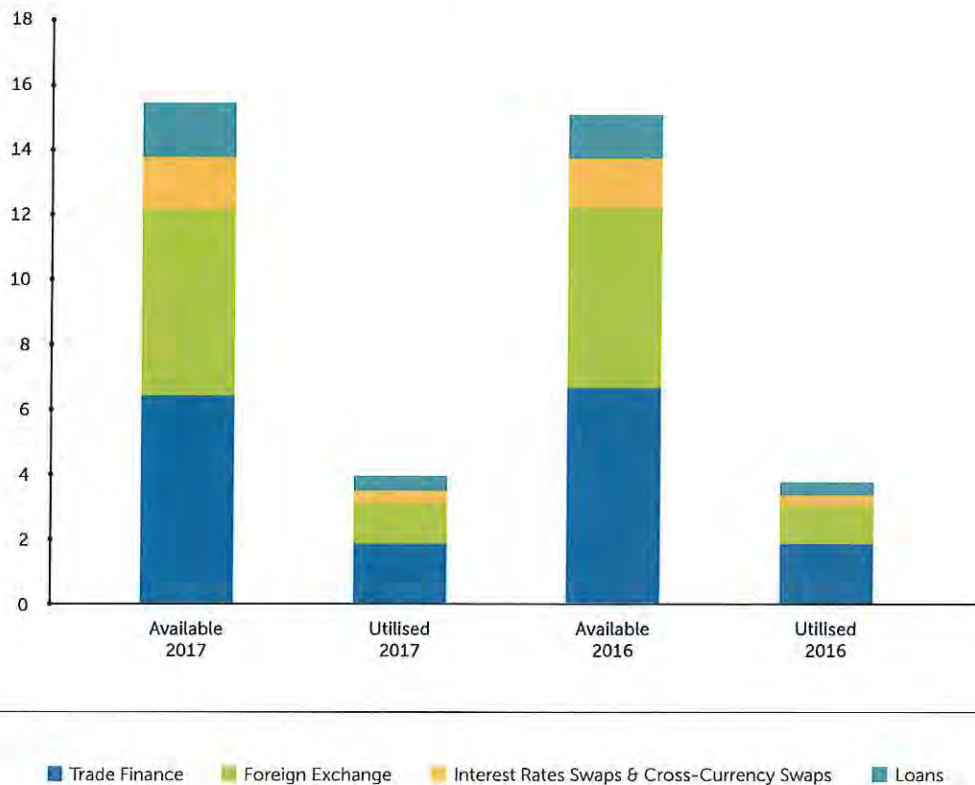
policies and guidelines to tighten liquidity management as well as better manage the Group's exposure in view of the volatile external environment. Group Treasury Division is also embarking on new technology projects such as the implementation of an electronic trading platform, a treasury management system and an electronic payment system well-interfaced with our global banking counterparties to enable straight-through processing capabilities and an in-house bank model in 2018.

Banking Facilities

The Group has banking facilities of approximately \$15.4b (2016: \$15.1b) as at 31 December 2017 to support business operations in the areas of trade finance, hedging and credit.

As at 31 December 2017, the Group has utilised \$3.9b or 25% of its total available facilities (2016: \$3.7b or 25%) with \$11.5b or 75% (2016: \$11.4b or 75%) remaining available.

BANKING FACILITIES (\$b)



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 remaining currency exposures in the market via foreign exchange forward contracts. The top three currencies in 2017 for the Group were USD, EUR and GBP.

During the year, the Group engaged in approximately \$1.5b (2016: \$0.7b) equivalent of foreign exchange transactions. As at 31 December 2017, \$0.9b (2016: \$1.2b) remained as outstanding foreign exchange transactions.

Liquidity

The Group's cash and cash equivalents, including funds under management, stood at \$1.3b as at 31 December 2017 (2016: \$1.4b).

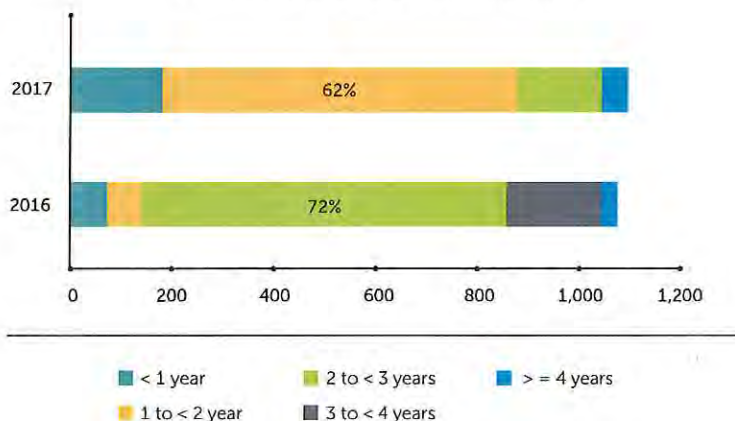
Interest rates on fixed deposits yielded an average of 0.89% in 2017 (2016: 1.05%). Funds under management were invested in SGD and USD fixed income instruments with interest rates ranging from 1.875% to 7.625% per annum (2016: 1.29% to 5.75% per annum).

Borrowings

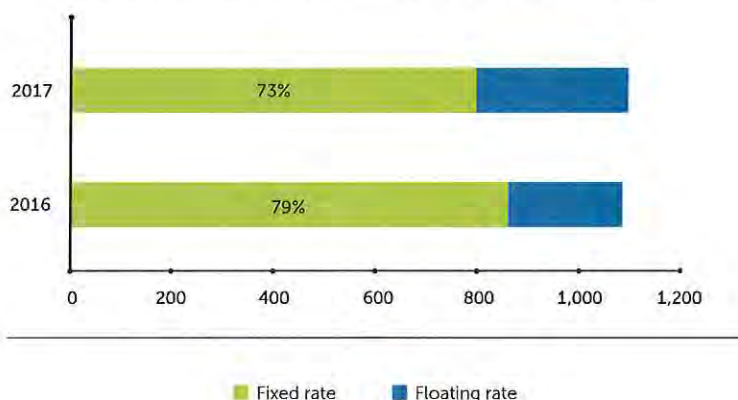
As at 31 December 2017, the Group's borrowings remained at \$1.1b (2016: \$1.1b), comprising \$0.7b (2016: \$0.7b) of 10-year bond and \$0.4b (2016: \$0.4b) of short-term and long-term loans from banks, lease obligations and other loans.

These debt obligations were taken out to support the Group's operations and comprise the following currencies and proportion of debt; USD - \$944m equivalent or 85%, SGD - \$87m or 8%, EUR - \$46m equivalent or 4% and RMB - \$39m equivalent or 3%.

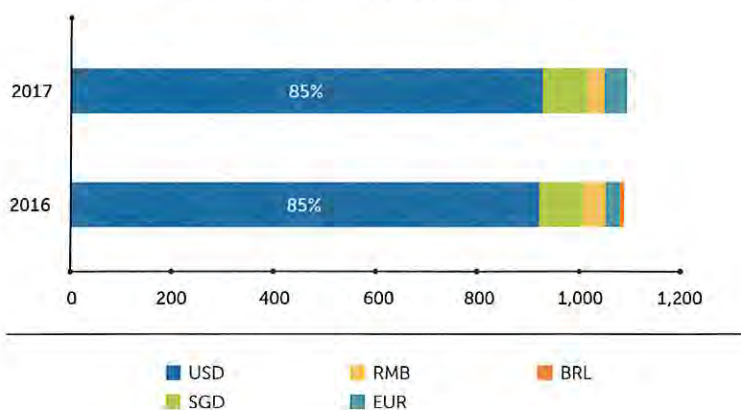
BORROWING PROFILE BY MATURITY (\$m)



BORROWING PROFILE BY FIXED AND FLOATING RATES (\$m)



BORROWING PROFILE BY CURRENCY (\$m)

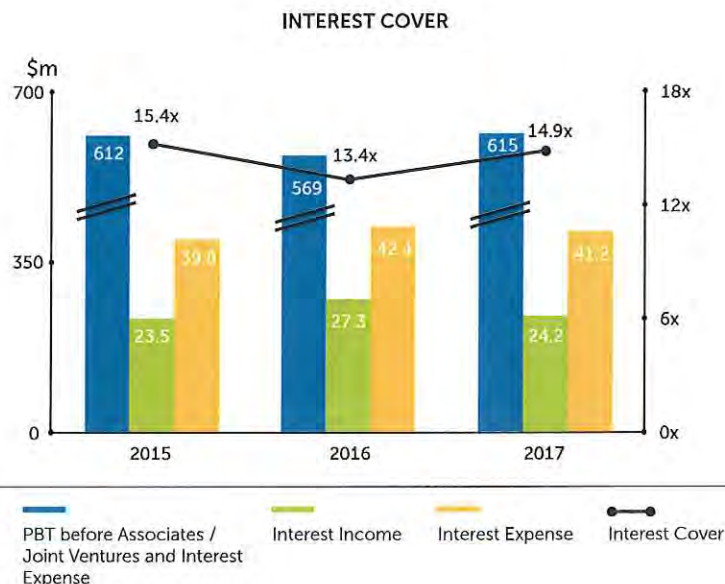


FINANCIAL REVIEW

DEBT RATIOS

Interest Cover Ratio

The Group's interest cover ratio increased to 14.9 times in FY2017 (2016: 13.4 times). The higher interest cover was due to a combination of higher profits and lower interest expense. The reduction in interest expense by \$1.2m arose from lower average borrowings and favourable USD against SGD movements.



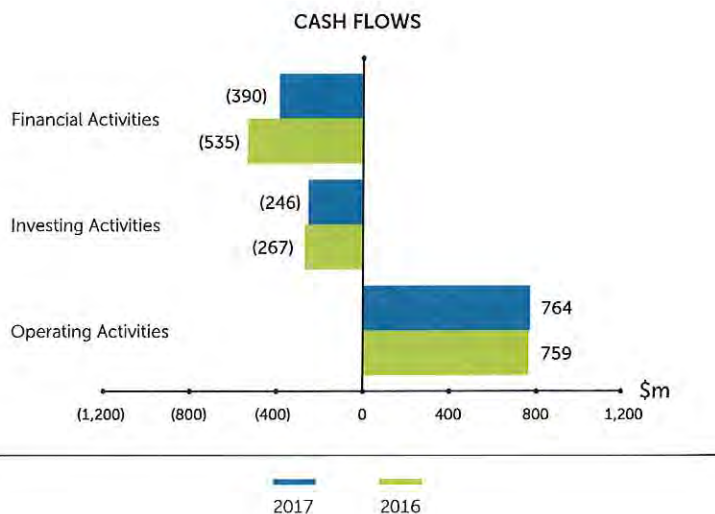
Gross Debt / Equity Ratio

Gross debt/equity ratio remained stable at 0.6 times in 2017. The Group continued to generate strong operating cash flow of \$764m in FY2017.

	2017	2016	2015
Gross Debt/Equity Ratio	0.6	0.6	0.7
Operating Cash Flow (\$m)	764	759	465
Free Cash Flow (\$m)	518	492	(12)
Net Debt (\$m)	(146)	(59)	(102)

CASH FLOWS

The Group delivered strong operating cash flow in FY2017 and ended the year with cash and cash equivalents balance (including funds under management) of \$1.3b.



Operating Activities

The Group generated net cash of \$764m in FY2017 from its operating activities compared to \$759m in FY2016. The increase in net cash from operating activities was due to improved profits, partially offset by an increase in income tax paid.

Investing Activities

Net cash used in investing activities of \$246m in FY2017 was primarily for investment in SPTel (\$55m), acquisition of Aethon (\$50m) and investment in property, plant and equipment by Aerospace (\$123m), Electronics (\$60m), Land Systems (\$30m) and Marine (\$44m) sectors, partially offset by net proceeds from sale of investments (\$144m).

Financing Activities

Net cash used in financing activities of \$390m in FY2017 was mainly attributable to the payment of both the FY2016 final dividend and FY2017 interim dividend (\$468m), partially offset by higher loans drawn down (\$106m).

TAX

During the year, the Marine sector achieved the Premium Status awarded by Inland Revenue Authority of Singapore (IRAS) following the completion of the Assisted Compliance Assurance Programme (ACAP) under the Singapore Goods and Services Tax (GST) regime. The Aerospace and Land Systems sectors achieved the Premium Status in FY2016. The GST compliance review is a voluntary risk management initiative and receiving the Premium Status is recognition of the strong compliance infrastructure put in place by the Group. The Electronics sector has also submitted the ACAP report and is awaiting review by IRAS.

The Group has also completed its voluntary submission of the Country-by-Country Reporting (CbCR) to IRAS. CbCR is a form of reporting by multinational enterprises initiated by

the Organisation for Economic Co-operation and Development. A CbCR report will include information on the global allocation of income and taxes paid in different jurisdictions and other financial data of a multinational enterprise. CbCR submitted to IRAS may be provided to tax authorities of jurisdictions with which Singapore has qualifying competent authority agreements for the automatic exchange of CbCR information.

The Group's effective tax rate for 2017 is 14% (2016: 17%). Excluding the favourable impact from the re-measurement of deferred tax balances due to the US tax reform, the Group's effective tax rate for 2017 would be 17%.

SIGNIFICANT ACCOUNTING POLICIES

The Group's financial statements are prepared in accordance with Singapore Financial Reporting Standards (FRS). The significant accounting policies are presented in Notes to the Financial Statements, Note 3 (pages 150 to 180). The Group has applied the same

accounting policies and methods of computation in the preparation of the financial statements for the current reporting period compared with the audited financial statements as at 31 December 2016 except for the adoption of FRS and INT FRS that are mandatory for financial year beginning on or after 1 January 2017. The adoption of these FRS and INT FRS has no significant impact on the financial statements.

TOTAL SHAREHOLDER RETURN

ST Engineering paid an interim dividend of 5 cents per share to shareholders in August 2017 and will recommend a final dividend of 10 cents per share to shareholders at the forthcoming Annual General Meeting. The total dividend per share (DPS) for FY2017 is 15 cents. Based on the average share price of \$3.25, the DPS of 15 cents translates to a dividend yield of 4.6%.

ST Engineering's share price ended the year at \$3.26, a 0.9% increase as compared to the prior year. With a dividend yield of 4.6%, shares of ST Engineering generated a total positive shareholder return of 5.5%.

TOTAL SHAREHOLDER RETURN



FINANCIAL REVIEW

ECONOMIC VALUE ADDED (EVA)

The Group's FY2017 EVA attributable to ordinary shareholders of \$321.6m was 27% or \$69.2m higher than that achieved in FY2016. The increase in EVA was mainly attributable to higher net operating profit after tax (NOPAT).

EVA Statement	2017 \$m	2016 \$m
Net profit before tax	574.0	526.9
Adjust for:		
Share of results of associates and joint ventures, net of tax	49.3	63.8
Interest expense	53.2	55.7
Others	15.8	7.1
Adjusted profit before interest and tax	692.3	653.5
Cash operating taxes (Note 1)	(110.8)	(124.1)
NOPAT - (a)	581.5	529.4
Average capital employed (Note 2)	4,458.0	4,426.3
Weighted average cost of capital (Note 3) (%)	5.7	5.6
Capital charge	(254.1)	(247.9)
Adjustment to capital charge (Note 4)	(2.6)	(39.3)
Adjusted capital charge - (b)	(256.7)	(287.2)
EVA - [(a) - (b)]	324.8	242.2
Non-controlling share of EVA	(3.2)	10.2
EVA attributable to ordinary shareholders	321.6	252.4

Note 1: The reported current tax is adjusted for the statutory tax impact of interest expense.

Note 2: Monthly average equity plus interest bearing liabilities, timing provision and present value of operating leases.

Major Capital Components:

	(\$m)
Borrowings	1,476.1
Equity	2,588.3
Others	393.6
	4,458.0

Note 3: The weighted average cost of capital is calculated in accordance to ST Engineering Group EVA Policy as follows:

- Cost of equity using capital asset pricing model with market risk premium at 5.0% (2016 @ 5.0%);
- Risk-free rate of 2.35% (2016 @ 2.21%) based on yield-to-maturity of Singapore government 10-years bonds;
- Ungeared beta at 0.71 (2016 @ 0.73) based on ST Engineering risk categorisation; and
- Cost of debt at 3.37% (2016 @ 3.65%) using actual cost of debt of the borrowings in US, Europe, China and Singapore.

Note 4: Adjustment on realisation of deferred capital charge on some acquisitions.

VALUE ADDED

The Group's total value added for FY2017 of \$2,865m was 1% lower compared to that of FY2016.

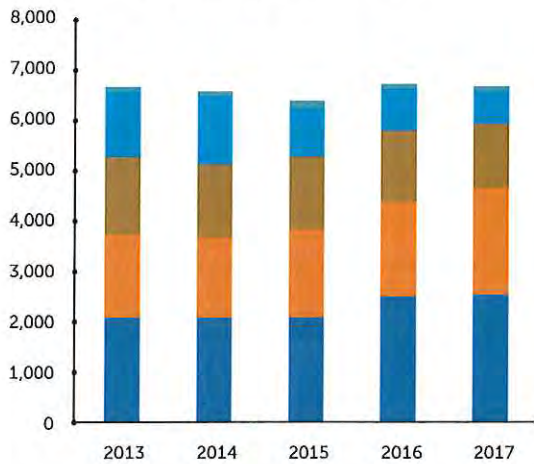
Value Added Statement	2017		2016		2015		2014		2013	
	\$m	%	\$m	%	\$m	%	\$m	%	\$m	%
Value added from:										
Revenue earned	6,619.5		6,683.7		6,335.0		6,539.4		6,633.2	
Bought in materials and services	(3,866.1)		(3,942.3)		(3,792.5)		(4,022.0)		(4,002.2)	
	<u>2,753.4</u>		<u>2,741.4</u>		<u>2,542.5</u>		<u>2,517.4</u>		<u>2,631.0</u>	
Other income	38.7		67.8		55.4		40.2		34.2	
Finance income	38.2		33.7		56.2		43.5		68.9	
Finance costs (exclude interest expenses)	(15.0)		(3.3)		(10.1)		(7.3)		(33.5)	
Share of results of associates and joint ventures, net of tax	49.3		63.8		58.3		57.2		31.1	
Total value added	<u>2,864.6</u>		<u>2,903.4</u>		<u>2,702.3</u>		<u>2,651.0</u>		<u>2,731.7</u>	
Distribution of total value added										
To employees in wages, salaries and benefits	1,945.1	68	1,941.0	67	1,807.7	67	1,739.2	66	1,783.6	65
To government in taxes and levies	109.3	4	119.2	4	118.4	4	136.5	5	157.3	6
To providers of capital on:										
• Interest paid on borrowings	41.2	1	42.4	1	39.7	2	37.9	1	44.2	2
• Dividends to shareholders	467.6	16	465.9	16	497.6	18	498.8	19	521.3	19
	<u>2,563.2</u>		<u>2,568.5</u>		<u>2,463.4</u>		<u>2,412.4</u>		<u>2,506.4</u>	
Balance retained in business										
Depreciation and amortisation	217.0		247.3		187.3		170.5		142.0	
Retained profits	44.5		58.9		36.3		48.2		62.8	
Non-controlling interests	23.5		8.3		2.6		5.0		10.7	
	<u>285.0</u>	10	<u>314.5</u>	11	<u>226.2</u>	8	<u>223.7</u>	8	<u>215.5</u>	8
Non-production costs	16.4	1	20.4	1	12.7	1	14.9	1	9.8	0
Total distribution	<u>2,864.6</u>	100	<u>2,903.4</u>	100	<u>2,702.3</u>	100	<u>2,651.0</u>	100	<u>2,731.7</u>	100
Value added per employee (\$)	132,980		132,131		120,704		116,935		119,616	
Value added per \$ of employment costs (\$)	1.47		1.49		1.49		1.52		1.53	
Value added per \$ of gross property, plant and equipment (\$)	0.77		0.81		0.78		0.83		0.91	
Value added per \$ of revenue (\$)	0.43		0.43		0.43		0.41		0.41	

FINANCIAL REVIEW

5-Year Key Financial Data

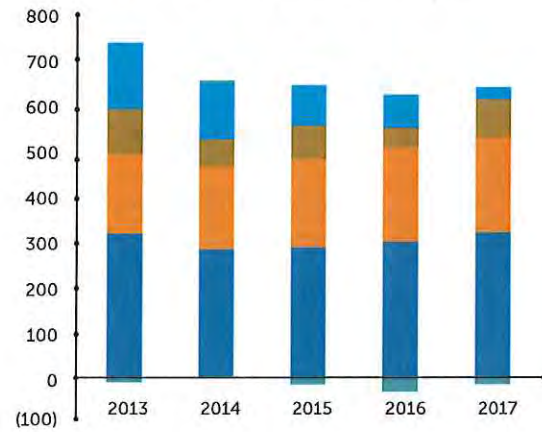
	2017	2016	2015	2014	2013
Income Statement (\$m)					
Revenue	6,619	6,684	6,335	6,539	6,633
Profit					
EBITDA	770.3	718.4	697.6	725.5	815.2
EBIT	553.3	471.1	510.3	555.0	673.2
PBT	623.3	590.6	630.3	650.7	729.7
Net Profit	511.9	484.5	529.0	532.0	580.8
Balance Sheet (\$m)					
Property, plant and equipment	1,719	1,670	1,709	1,578	1,520
Intangible and other assets	1,676	1,570	1,370	1,311	1,290
Inventories and work-in-progress	1,764	1,898	1,943	1,802	1,808
Trade receivables, deposits and prepayment	1,965	1,824	1,694	1,916	1,860
Bank balances and other liquid funds and funds under management	1,349	1,403	1,453	1,712	2,229
Current liabilities	3,901	3,801	3,720	3,716	4,094
Non-current liabilities	2,051	2,120	2,188	2,339	2,353
Share capital	896	896	896	889	853
Treasury shares	(23)	(44)	(67)	(6)	-
Capital and other reserves	52	57	48	24	71
Retained earnings	1,315	1,274	1,255	1,225	1,192
Non-controlling interests	281	262	129	132	144
Financial Indicators					
Earnings per share (cents)	16.43	15.60	17.05	17.06	18.73
Net assets value per share (cents)	71.89	70.20	68.74	68.38	68.14
Return on sales (%)	8.1	7.4	8.4	8.2	8.9
Return on equity (%)	22.9	22.2	24.8	24.9	27.4
Return on total assets (%)	6.3	5.9	6.5	6.5	6.8
Return on capital employed (%)	13.0	12.0	14.6	14.0	15.4
Dividend					
Gross dividend per share (cents)	15.0	15.0	15.0	15.0	15.0
Dividend yield (%)	4.62	4.81	4.68	4.08	3.86
Dividend cover	1.09	1.04	1.13	1.14	1.25
Productivity Data					
Average staff strength (numbers)	21,541	21,974	22,388	22,671	22,837
Revenue per employee (\$)	307,297	304,166	282,965	288,449	290,456
Net profit per employee (\$)	23,763	22,049	23,630	23,464	25,434
Employment costs (\$m)	1,951.6	1,947.5	1,813.7	1,745.8	1,789.7
Employment costs per \$ of revenue (\$)	0.29	0.29	0.29	0.27	0.27
Economic Value Added (\$m)	321.6	252.4	355.1	344.5	413.8
Economic Value Added spread (%)	7.3	5.5	8.7	8.4	10.2
Economic Value Added per employee (\$)	14,929	11,488	15,861	15,197	18,118

REVENUE BY SECTOR (\$m)



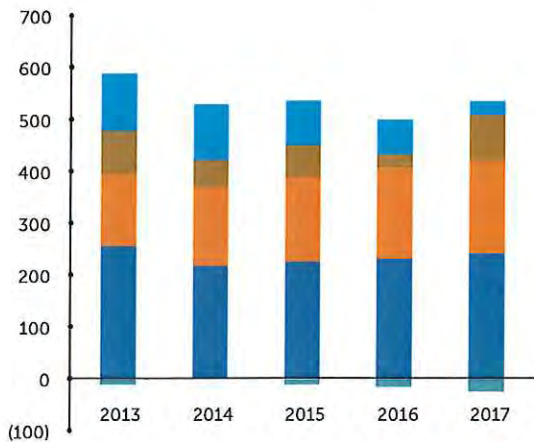
■ Aerospace ■ Land Systems ■ Others
■ Electronics ■ Marine

PROFIT BEFORE TAX BY SECTOR (\$m)



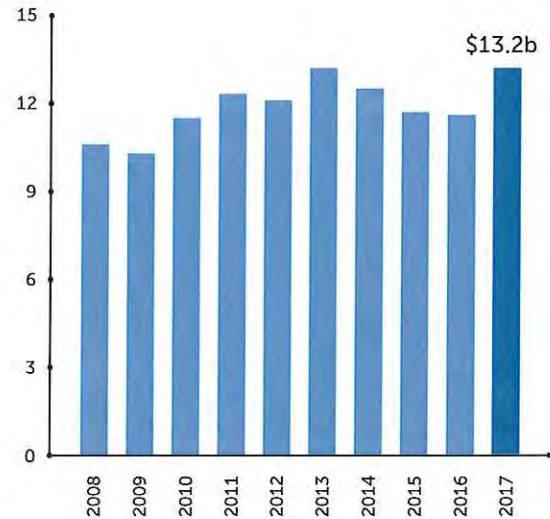
■ Aerospace ■ Land Systems ■ Others
■ Electronics ■ Marine

NET PROFIT BY SECTOR (\$m)



■ Aerospace ■ Land Systems ■ Others
■ Electronics ■ Marine

ORDER BOOK (\$b)



INVESTOR RELATIONS

ST Engineering believes it is vital to have regular, clear and open communications with the investing community, comprising both retail and institutional investors. Through a carefully planned, multi-platform investor relations programme, ST Engineering aims to ensure that all key stakeholders have the latest, most relevant information in order to make sound, accurate and informed decisions about the Group's value and long-term prospects. In communicating with the public, ST Engineering is committed to maintaining high standards of transparency and timely disclosures.

We participate actively in investor conferences, host regular non-deal roadshows, luncheons, one-on-one meetings and teleconferences to engage investors across regions including Asia Pacific, Europe and the US. At these meetings, candid discussions of the Group's various opportunities and challenges take place so that investors are aware of the circumstances under which our companies operate. We also arrange facility visits for institutional investors and analysts to better understand the Group's business offerings and operations.

All quarterly financial results briefings are webcast live and are made open to the public. Analysts and media are invited to these briefings where ST Engineering President & CEO, CFO and the Presidents of our business sectors share updates on the Group's financial performance, business operations, opportunities and challenges. The webcasts are archived on our corporate website for on-demand playback.

We ensure that investors have access to all relevant public information about the Group at all times. All SGX announcements, marketing press releases, annual reports and quarterly results materials in the last five years are archived on our corporate website. In support of SGX's move towards e-communication with shareholders, we will no longer produce CD-ROMS. Printed

copies of our Annual Reports will still be available upon request and investors can visit our corporate website for a library of archived annual reports. Investors can also subscribe to email alerts to obtain latest updates on the Group or reach out to the investor relations team via dedicated contact information published on our corporate website.

Through these various channels, we offer avenues for long-term and open dialogues with our stakeholders so that they understand our business better, and at the same time, allow us to address their concerns.

We are constantly looking for ways to enhance our communication platforms as new technology becomes available and we will continue to refine our communication efforts to ensure that the information needs of analysts, the media and our institutional and retail investors are met, if not exceeded.

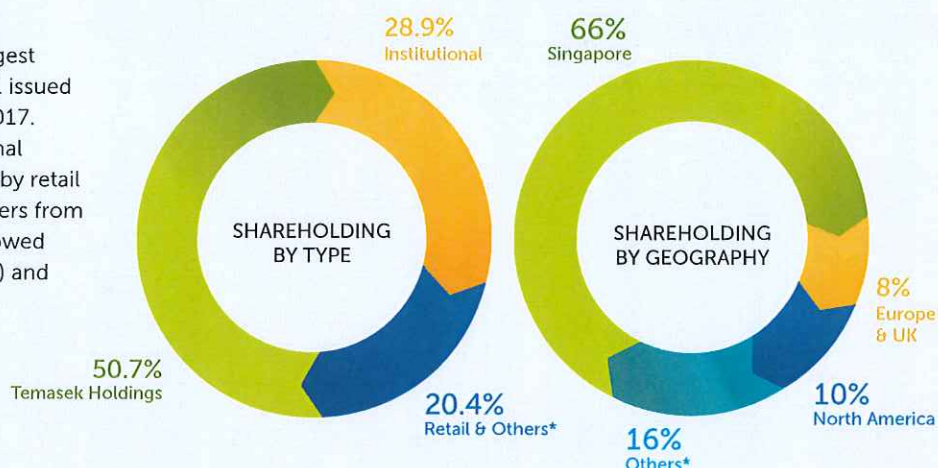
2017 INVESTOR RELATIONS CALENDAR

PERIOD	EVENT
1st Quarter	Visit to ST Engineering's 50 th Anniversary Innovation Showcase Annual management lunch with sell-side analysts FY2016 results briefing with live webcast Post-results investor lunch Maybank Kim Eng Invest ASEAN Conference
2nd Quarter	20 th Annual General Meeting 1Q2017 results briefing with live webcast DBAccess Asia Conference (Singapore) Visit to ST Electronics' booth at CommunicAsia 2017 Citi ASEAN Conference (Singapore) Non-deal roadshow to Europe
3rd Quarter	2Q2017 results briefing with live webcast Post-results investor lunch CLSA Investors' Forum (Hong Kong)
4th Quarter	3Q2017 results briefing with live webcast Post-results investor lunch Morgan Stanley Asia Pacific Summit (Singapore)

SHAREHOLDING

Temasek Holdings remains our largest shareholder, holding 50.7% of total issued share capital as at 31 December 2017. Another 28.9% is held by institutional investors, with the remainder held by retail and other shareholders. Shareholders from Singapore held a total of 66%, followed by those from North America (10%) and Europe and UK (8%).

* Others include unidentified holdings and holdings below analysis threshold



2017 SHARE PERFORMANCE

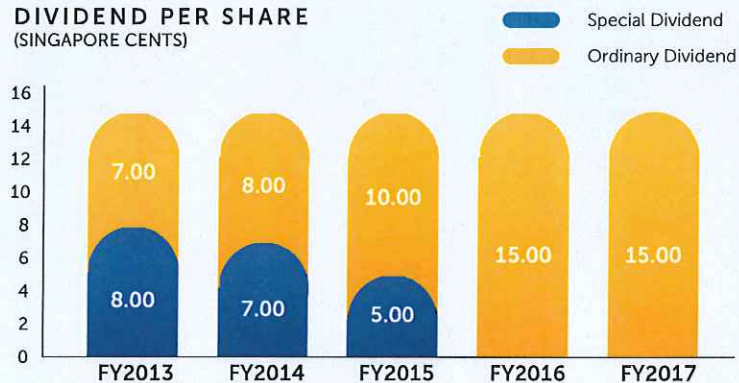
ST Engineering shares closed at \$3.26 as at 29 December 2017 (last trading day), representing a gain of 0.9% for the year, compared to the Straits Times Index of 18.1%. Market capitalisation was \$10.2

billion at year-end. The average share price over the course of the year was \$3.55, with a high of \$3.86 on 8 May, and a low of \$3.17 on 19 December. Average daily trading volume for the year was 3.7 million shares.

DIVIDENDS

The Board has proposed a final dividend of 10 cents per share for the financial year ending 31 December 2017. In addition to the interim dividend of 5 cents per share paid in August, ST Engineering declared dividends of a total of 15 cents per share, representing 91% of our net profit. Dividend yield for 2017 stands at 4.6% (computed using the average closing share price of the last trading day of 2017 and 2016).

DIVIDEND PER SHARE (SINGAPORE CENTS)



A W A R D S

BUSINESS EXCELLENCE

SINGAPORE CORPORATE GOVERNANCE AWARD (RUNNER-UP FOR INDUSTRIALS CATEGORY) AT THE 18TH INVESTORS CHOICE AWARDS
By Securities Investors Association (Singapore)
- ST Engineering

MOST PROFITABLE COMPANY (MULTI-INDUSTRY SECTOR) AT THE EDGE SINGAPORE BILLION DOLLAR CLUB CORPORATE AWARDS 2017
By The Edge Singapore
- ST Engineering

OVERALL MRO OF THE YEAR 2017 AT MRO GLOBAL DUBLIN AVIATION SUMMIT AWARDS
- ST Aerospace

TOP AIRFRAME MRO PROVIDER
By Aviation Week Network
- ST Aerospace

10 BEST TECH COMPANIES TO WORK FOR 2017 AWARD
By Singapore Computer Society
- ST Electronics
(Info-Comm Systems)

STAR OF ENTERPRISE IN CHINA OUTSOURCING SERVICE INDUSTRIES
By China Council for International Investment Promotion, Gartner & IDC
- ST Aerospace Technologies (Xiamen)

TOP 100 CHINA GROWING ENTERPRISE IN OUTSOURCING SERVICE INDUSTRIES
By China Council for International Investment Promotion, Gartner & IDC
- ST Aerospace Technologies (Xiamen)

PRODUCT QUALITY

BEST INNOVATIVE INFOCOMM PRODUCT (CYBER SECURITY)
By Singapore Infocomm Technology Federation
- ST Electronics for ST Electronics Data Diode

WINNER OF AVIATION CHALLENGE 1 AND 2
By Civil Aviation Authority of Singapore
- ST Dynamics for Automated Baggage Handling and Automated Cargo Handling

WINNER OF BEST SELLING N95 MASK BRAND AT HWB AWARDS 2017
By Watsons Singapore
- Innosparks for AIR+Smart Mask

WINNER OF RADIANCE AWARD, FIRST AID FACEMASK AT HEALTH & BEAUTY AWARDS 2017
By Guardian Singapore
- Innosparks for AIR+Smart Mask

DEFENCE

DEFENCE TECHNOLOGY PRIZE (ENGINEERING) AWARD
By MINDEF
- ST Engineering
- ST Electronics

TOTAL DEFENCE AWARD
By MINDEF
- ST Electronics

NS ADVOCATE AWARD FOR LARGE COMPANIES
By MINDEF
- ST Electronics
- ST Aerospace Supplies

NS ADVOCATE AWARD
By MINDEF
- ST Electronics
- ST Aerospace Services

NS MARK AWARD (GOLD)
By MINDEF
- ST Electronics
- ST Aerospace Supplies

WORKPLACE SAFETY & HEALTH

SAFETY & HEALTH AWARD 2017
By Ministry of Manpower and the Workplace Safety and Health Council (WSH Council)
- ST Electronics for eight rail electronics projects

SINGAPORE HEALTH AWARD
By Health Promotion Board
- Certificate of Recognition
- ST Aerospace Supplies
- Merit
- ST Electronics

WSH INNOVATION AWARD (MANUFACTURING)(GOLD)
By WSH Council
- ST Aerospace Engineering
- ST Aerospace Services Company

**WSH INNOVATION
AWARD (CERTIFICATE OF
COMMENDATION)**

By WSH Council

- ST Aerospace Services Company

**WSH AWARD (SUPERVISOR)
(SILVER)**

By WSH Council

- ST Aerospace Services Company

**WSH AWARD (SUPERVISOR)
(SILVER)**

By Singapore Manufacturers' Federation

- ST Aerospace Engines

**WSH INNOVATION AWARD
(BRONZE) By Singapore
Manufacturers' Federation**

- ST Aerospace Engineering

**WSH INNOVATION CONVENTION
(GOLD)**

By Association of Singapore Marine Industries

- ST Marine

**SAFETY & SECURITY WATCH
GROUP CLUSTER AWARD**

By Singapore Police Force

- ST Aerospace Systems

**NATIONAL STEPS CHALLENGE
(SEASON TWO)**

By Health Promotion Board

- ST Aerospace Engines

PEOPLE

HUMAN CAPITAL PARTNER

By Tripartite Alliance for Fair & Progressive Employment Practices

- ST Electronics (Info-Comm Systems)
- ST Electronics (Info-Security Systems)

CORPORATE CITIZENSHIP

COMMUNITY CHEST

SHARE AWARD 2017

By Community Chest

In 2017, 17 business entities received Community Chest Share Awards in the Platinum, Gold and Silver categories.

Of these, six entities were awarded:

**20-YEAR OUTSTANDING SHARE
(PLATINUM) AWARD**

- ST Aerospace Services
- ST Aerospace Systems

**15-YEAR OUTSTANDING SHARE
(PLATINUM) AWARD**

- ST Aerospace
- ST Aerospace Engines
- ST Aerospace Engineering

**15-YEAR OUTSTANDING SHARE
(GOLD) AWARD**

- ST Marine

**STAR OF COMMENDATION AWARD
(GOLD)**

By Singapore Industrial and Services Employees' Union

- ST Aerospace Engineering



**AVIATION
CHALLENGE**

In the past two years, ST Engineering focused on developing breakthrough robotics and autonomous solutions for airport logistics to reduce reliance on labour while enhancing performance, productivity and safety. One such initiative is our response to the challenge posed by the Civil Aviation Authority of Singapore in 2015 to solve the laborious airport cargo process (Aviation Challenge 2) and baggage handling process (Aviation Challenge 1). ST Engineering collaborated with Israel Aerospace Industries and won both Challenges with our autonomous solutions.

C O R P O R A T E I N F O R M A T I O N

BOARD OF DIRECTORS

Kwa Chong Seng
(Chairman)

Vincent Chong Sy Feng
(President & CEO)

Quek See Tiat

Lieutenant-General
Lim Cheng Yeow Perry

Neo Kian Hong

Quek Gim Pew

Dr Stanley Lai Tze Chang

Khoo Boon Hui

Olivia Lum Ooi Lin

Dr Beh Swan Gin

Lim Sim Seng

Lim Ah Doo

Rear Admiral Alan Goh Kim Hua
(Alternate Director to
Lieutenant-General
Lim Cheng Yeow Perry)

COMPANY SECRETARIES

Chua Su Li

Ng Kwee Lian (Karen)

REGISTERED OFFICE

ST Engineering Hub
1 Ang Mo Kio Electronics Park Road
#07-01

Singapore 567710
Tel: (65) 6722 1818
Fax: (65) 6720 2293
www.stengg.com

SHARE REGISTRAR

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

AUDITORS

KPMG LLP
16 Raffles Quay #22-00
Hong Leong Building
Singapore 048581
Quek Shu Ping (Partner-in-charge)
(Date of Appointment: 15 February
2017)

PRINCIPAL BANKERS

Bank of America, N.A.
50 Collyer Quay #14-01
OUE Bayfront
Singapore 049321

Citibank N.A.
8 Marina View #21-00
Asia Square Tower 1
Singapore 018960

DBS Bank Ltd
12 Marina Boulevard #45-01
DBS Asia Central @ MBFC Tower 3
Singapore 018982

Oversea-Chinese Banking
Corporation Limited
65 Chulia Street #10-00
OCBC Centre
Singapore 049513

United Overseas Bank Limited
1 Raffles Place #25-61
One Raffles Place Tower 2
Singapore 048616

RISK & SUSTAINABILITY HIGHLIGHTS

Our sustainability report is presented across the following platforms:

- A summary of our sustainability efforts for the year 2017, including an overview of the initiatives and our performance for the current year, is reported in this section. Unless otherwise stated, data and activities relate to our Singapore operations only. Information on sustainability efforts relating to our operations in the US is reported on pages 86 to 87;
- Our management approach, including our corporate governance, enterprise risk management system, and materiality, is captured in the document 'Our Management Approach to Sustainability', which is available on our website at www.stengg.com;
- The Global Reporting Initiative Content Index is also available on our website at www.stengg.com;
- We have a dedicated sustainability section on our website which provides an overview of our sustainability commitment in general.

This section should be read in conjunction with the information published in the 'Sustainability' section of our website at www.stengg.com.

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RISK & SUSTAINABILITY HIGHLIGHTS

THE STATEMENT FROM THE BOARD

The Board is pleased to present our Sustainability Report 2017, which sets out the Group's environmental, social and governance (ESG) performance for the year. This report is prepared in accordance with the SGX Sustainability Reporting Guide and the Global Reporting Initiative Standards: Core option.

The Group's sustainability strategy is underpinned by our core values: Integrity, Value Creation, Courage, Commitment and Compassion. For more than 50 years, ST Engineering has built a successful technology, defence and engineering business based on good business fundamentals, a commitment to performance with integrity,

and zero tolerance for fraud and dishonest conduct. We conduct our business in a responsible manner, by ensuring that our products not only meet technical specifications and prevailing industry standards, but are also reliable over their life cycles and are safe to produce, operate and maintain.

Our sustainability strategy involves multistakeholder considerations that balance today's needs with longer term developments. As a global technology, defence and engineering group in the aerospace, electronics, land systems and marine sectors, our employees bring technology and innovation together to create solutions that help to protect the communities and environment.

The Board has delegated to the Risk and Sustainability Committee (RSC) the responsibility to oversee and monitor the sustainability efforts. The responsibility for implementing the sustainability efforts rests with the President & CEO of ST Engineering and the Management Committee.

Through the Group's Enterprise Risk Management Framework, significant risks and material ESG factors identified are assessed against our business portfolios and the external environment, and reported to the RSC. The RSC meets quarterly with the management to review and discuss the Group's risk and sustainability performance. The RSC reviews and endorses the Sustainability Report.

**AS A RESPONSIBLE DEFENCE
TECHNOLOGY MANUFACTURER,
WE DO NOT DESIGN, PRODUCE
AND SELL ANTI-PERSONNEL MINES,
CLUSTER MUNITIONS, WHITE
PHOSPHOROUS MUNITIONS AND
THEIR RELATED KEY COMPONENTS.**

ENTERPRISE RISK MANAGEMENT FRAMEWORK

The Group deploys the Enterprise Risk Management Framework to identify the most important risks that will act as barriers to achieving its business goals in the short, medium and long term. Besides business risks, risks arising from changes in the environment, social issues as well as governance are also identified. The Framework provides discipline for the Group to identify, assess, control and monitor risks. It sets out a consistent definition of risks and risk tolerance limits to ensure that business units have a common understanding when identifying and assessing risks.

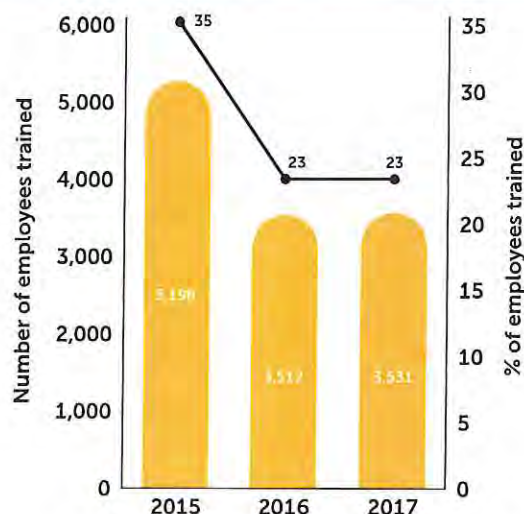
The RSC oversees management in the identification of risks as well as the implementation of risk

management policies and strategies. Further details on the Group's risk governance, including responsibilities of the Board, Audit Committee and RSC can be found in the Corporate Governance Report from page 88 to 116.

Important risks identified by the Group are set out below. A detailed description of the risks is set out in our website at www.stengg.com.

	OUR RISKS
Growth & Competition	Product and technology obsolescence Mergers and acquisitions
Ethics & Governance	Cyber risk Bribery and corruption Regulatory compliance
Operations	Contract compliance Business disruption Product liability and safety
Human Capital	Talent management and succession planning Occupational health and safety
Financial	Credit Foreign exchange

ANTI-BRIBERY AND CORRUPTION TRAINING IN SINGAPORE



ANTI-BRIBERY AND CORRUPTION

The Group has zero tolerance for corruption. We review and update our policies regularly to ensure their relevance. We also engaged a consultant to review our Anti-Corruption Framework to maintain its robustness.

Training on our Code of Business Conduct and Ethics is compulsory for all employees and is carried out annually. Additionally, all relevant employees are required to undergo Anti-Bribery and Corruption training once every two years.

RISK & SUSTAINABILITY HIGHLIGHTS

OUR SUSTAINABILITY PERFORMANCE

	2016 Performance	What we said we would do in 2017	What we did in 2017	What we will do in 2018
World-class Workforce	<p>Reviewed compensation and benefits structure against industry-best practice, and conducted performance management training in response to feedback from the Employee Opinion Survey 2015.</p> <p>Organised a successful Team Excellence Convention 2016 with 15 participating teams. Reviewed the talent management framework to build up bench strength for the Group.</p>	<p>Review and refresh the methodology and process for Employee Opinion Survey.</p> <p>Review leadership competency framework to develop leaders of the future, with focus on global mindset, collaboration and innovative thinking.</p>	<p>Refreshed and re-launched the Employee Opinion Survey as the Employee Engagement Survey.</p> <p>Reviewed our leadership competency framework and re-calibrated our leadership development programmes in tandem with the revised leadership competencies.</p>	<p>Review and enhance the Group performance appraisal system.</p> <p>Review Employee Engagement Survey 2017 results and identify Group-wide initiatives for improvement.</p>
Safe & Conductive Workplace	<p>Reviewed existing Safety Operating Procedures against the National Total Workplace Safety & Health (WSH) Guidelines.</p> <p>Gaps identified were corrected for implementation.</p> <p>Organised campaigns and activities to promote health and safety.</p> <p>Conducted cross audits to benchmark best practices.</p> <p>Mixed results for Accident Frequency Rate (AFR) and Accident Severity Rate (ASR), with room for improvement.</p>	<p>Work towards achieving a Vision Zero target of no fatalities and improve on both the AFR and ASR.</p> <p>Benchmark best practices through cross audits.</p> <p>Share WSH best practices and resources.</p> <p>Drive WSH excellence by monitoring the leading indicators and organising awareness initiatives and programmes.</p>	<p>Improved both the AFR and ASR, with no workplace fatalities in 2017.</p> <p>Conducted cross audits and shared best practices across the sectors.</p>	<p>Develop new procedures at the workplace to increase our state of preparedness in the event of a terrorist attack.</p> <p>Improve upon the cross audit programme to focus on specific critical workplace safety issues to ensure compliance with procedures and safety standards.</p>
Protecting Our Environ- ment	<p>Installed the solar PV System for Singapore operations. Achieved verification in ISO 14064-1.</p> <p>Singapore operations commenced implementation of ISO 14001:2015.</p> <p>Reviewed our pollution control and waste management practices.</p> <p>Achieved reduction in Greenhouse Gas (GHG) intensity by 23% (unaudited) with the base year as 2010.</p>	<p>Continue implementation and sharing of best practices for ISO 14001:2015.</p> <p>Conduct visits to learn about new initiatives in environmental sustainability, and study their feasibility for implementation.</p> <p>Explore new initiatives for improving water efficiency.</p>	<p>Conversion to the new ISO 14001:2015 progressed as planned, with all business units in Singapore expected to achieve the new accreditation by 2018.</p> <p>Implemented various water-efficient initiatives.</p>	<p>Review the intensity target for GHG emissions. (Original target: 16% reduction in intensity on a business as usual basis by 2025 with the base year as 2010.)</p> <p>Improve water intensity by 1.5% from 2017 level.</p>

OUR SUSTAINABILITY PERFORMANCE

	2016 Performance	What we said we would do in 2017	What we did in 2017	What we will do in 2018
Responsible Sourcing	Established a central procurement organisation led by a Chief Procurement Officer.	Strengthen central procurement organisation structure, resource and partnerships. Invest in technology solutions to drive efficiencies, streamline processes and enable visibility for better supply chain management.	Augmented our central procurement organisation with manpower and technological solutions. Implemented Spend Analytics Tool to enhance analytics capabilities.	Develop a strategic vendor management programme to strengthen vendor segmentation discipline aimed at improving responsible sourcing initiatives. Establish Vendor Code of Conduct.
Responsible Corporate Citizen	Embarked on developing a device to assist caregivers and wheelchair users to mount small flights of steps in and out of their homes. Successfully launched the ST Engineering Volunteer Week, with major activities across all business areas.	Review and develop a sustainable model for CSR investments, initiatives and activities. Achieve 50 Good Deeds.	Developed an ST Engineering community outreach framework, in line with the LBG Model. Achieved with a total of 8,842 man-hours in volunteer work.	Organise the ST Engineering Volunteers Week 2018. Increase the Group's participation rate in the Community Chest's SHARE programme.
Global Operations: United States	Improved disclosures from US operations relating to people, environment and the community. Established Group-wide goals for US business units in energy management, GHG emissions, waste management, and sustainable procurement.	Work towards a 15% reduction in GHG intensity by 2020 from the base year of 2015. Progressively report other targets and performance of the US sustainability efforts.	On track to achieving the target of 15% reduction in GHG intensity.	Progressively report other targets and performance of the US sustainability efforts.

RISK & SUSTAINABILITY HIGHLIGHTS



PRODUCTIVITY

Productivity is an enabler that underpins how we achieve our sustainability objectives, and improving it is a continuous process. Through various productivity programmes such as Economic Value-Added projects, Kaizen and Total Productive Maintenance, we encourage our employees to constantly explore new and better ways of working. We recognise high performing teams who demonstrate the use of technology, innovation, and continuous improvement tools to enhance their process, product, services and work environment through our annual Team Excellence Convention.

OUR PRODUCTIVITY EFFORTS

The Aerospace sector rolled out its latest Aerobook 3.0, an e-tool that seamlessly integrates the various aspects of the aircraft maintenance process. Aerobook 3.0 allows aircraft engineers and technicians to access pertinent maintenance information while on their job. Productivity is enhanced as aircraft engineers and technicians spend more time working on the aircraft, which leads to improved turnaround time.

The Electronics sector automated the hazardous work permit application and approval process. The e-Permit-To-Work system reduced the overall time taken to apply for and receive approval for hazardous work by more than 50%. The system also allows easy

document search and retrieval, enhancing overall work productivity.

The Land Systems sector continued to digitise its business processes. For its MRO operations, it launched several initiatives, including the introduction of a Wifi enabled workshop environment to allow technicians to quickly access and disseminate information, and the digitisation of the maintenance acceptance process that enhanced the productivity of Quality Assurance teams.

The Marine sector rolled out a hazard reporting smartphone application that allows staff to report hazards instantaneously. This application facilitated the prompt processing of hazard reporting, reducing processing time by up to two thirds compared to

the manual process. The smartphone application also encouraged reporting of hazards, which saw an increase by up to 30%.

During the year, ST Engineering also advanced its shared services project into implementation phase for its Singapore operations across seven functions comprising Finance, Human Resource, Information Technology, Procurement, Estate & Facilities Management, Corporate Communications and Legal.

WHAT WE WILL DO IN 2018

- Review the framework for productivity initiatives.

SAFE & RELIABLE PRODUCT

Product Quality encompasses all faculties of engineering including system safety and product reliability.

All major operations in Singapore have Quality Management Systems (QMS) that provide a set of policies and procedures to meet the stringent requirements of authorities and customers. The QMS are certified to international and relevant industry standards, including the latest ISO 9001:2015 QMS, AS9100D (for operations involved in aircraft maintenance and repair), AS9110D (for operations involved in aviation design and production), AS9120D (for operations involved in aviation

spares management) and National Aerospace and Defense Contractors Accreditation Programme (for special processes such as non-destructive testing).

System safety is a discipline of managing the safety implications of our products throughout the entire product life cycle, assessing and managing safety from the start at the design stage. We continued to enhance our product safety processes by adopting best practices and implementing new initiatives such as those listed below.

WE ACHIEVED FULL COMPLIANCE WITH PRODUCT SAFETY REQUIREMENTS IN 2017.

WHAT WE WILL DO IN 2018

- Complete the conversion of Quality Management System to ISO 9001:2015 standards.
- Review the framework for quality management.

AEROSPACE

Adopted the Unmanned Aerial Vehicle (UAV) Battery Safety Standard to ensure compliance with the criteria for selecting safe batteries in the operation of UAVs.

Initiated a Master Minimum Equipment List substantiation process to identify the critical safety items and differentiate them from the non-critical safety items. This list facilitates the prioritisation of efforts in the maintenance of aircraft and improves availability.

ELECTRONICS

Developed a Requirement Management Tool to identify and record hazards that may arise while developing and working on requirements of a project. The tool helps to ensure compliance with MIL-STD-882 on Standard Practice for System Safety.

LAND SYSTEMS

Implemented a checklist of standard safety requirements to improve overall safety assessment of our platform products.

MARINE

Developed an alternative method of identifying hazards by focusing on the Marine Class Rules and Reliability, Availability and Maintainability analysis. This alternative method provides a second perspective to hazards, and strengthens the overall rigour in analysing failure modes and their effects.

RISK & SUSTAINABILITY HIGHLIGHTS

WORLD-CLASS WORKFORCE

The Group recognises that people are a key contributor to our success and growth. In 2017, the Group reviewed and refreshed our Aspiration Statement. To support the new aspiration, three focal areas have been identified to further shape our workforce to support a world-class and high-performance organisation:

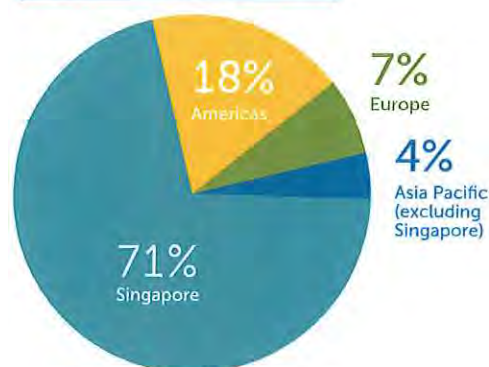
1. Enhancing capability and capacity for growth
2. Strengthening a passionate and engaged workforce
3. Being at the forefront of people practices

During the year:

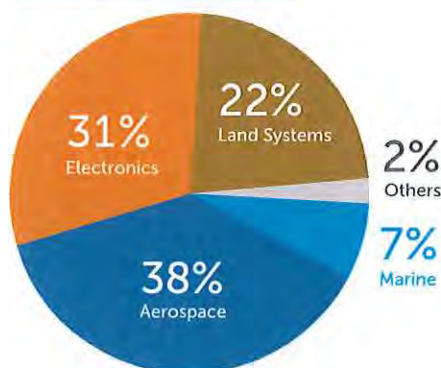
- We reviewed our leadership competency framework to sharpen our focus on developing leaders who are visionary, inspiring and transformational, and who will lead with a people-first mindset, based on principles. The ability to mobilise, engage and develop our people in the future workplace has been identified as a core competency. The leadership development programmes were recalibrated in tandem with the revised leadership competencies.
- The Employee Opinion Survey was refreshed and re-launched as the Employee Engagement Survey to all 15,000 employees in Singapore. The new survey measures existing levels of engagement and weighs our engagement score against external benchmarks. The results will form the basis for follow-up actions to identify areas of strengths and opportunities to further enhance engagement with our employees. The new survey will be extended to our employees globally in phases.

In the coming years, we will continue to develop other initiatives that deepen our skillsets and enhance core competencies, and promote leadership development and talent retention.

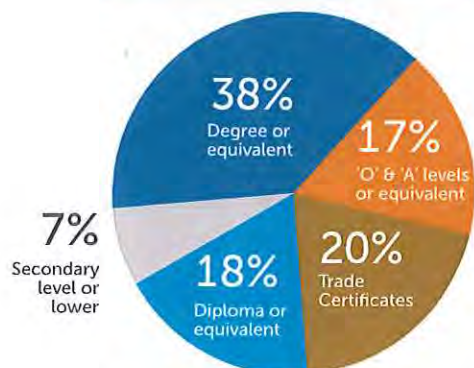
EMPLOYEES BY GEOGRAPHY



EMPLOYEES BY SECTORS



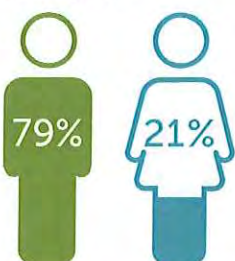
EMPLOYEES BY QUALIFICATIONS



Note: These statistics are calculated based on the Group's headcount of 21,541

WORKFORCE PROFILE FOR SINGAPORE OPERATIONS

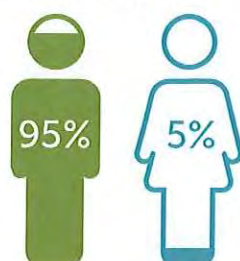
Employees



Male

Female

Supervised Workers*

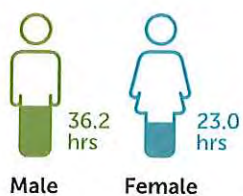


Male

Female

* Supervised workers refer to workers hired through local contractors. They are on short-term contracts, work in our facilities and are supervised by ST Engineering.

AVERAGE TRAINING HOURS PER EMPLOYEE

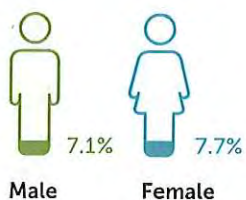


Male

Female

33.4hrs

TURNOVER RATE



Male

Female

7.3%



WHAT WE WILL DO IN 2018

- Review and enhance the Group performance appraisal system.
- Review Employee Engagement Survey 2017 results and identify Group-wide initiatives for improvement.

RISK & SUSTAINABILITY HIGHLIGHTS

SAFE & CONDUCTIVE WORKPLACE

It is our duty to ensure that our employees return home safely to their loved ones. In view of the mixed performances in our AFR and ASR in 2016, we stepped up efforts to improve our performances. For 2017, we managed to maintain our AFR at 2016's level, and greatly improved our ASR to below 2015's level. We also achieved our target for zero workplace fatality.

One area we focused on was to strengthen the safety culture of the organisation. We place high value on safety by encouraging shared responsibility among our employees, as well as reinforcing the concept that safety, health and work activities are inseparable.

(1) T.H.I.N.K (Tasks • Hazard • Information • No risk taking • Know your job) programme reminds our people to be more vigilant of their work surroundings and potential risks and make an informed decision before proceeding with their tasks.

(2) Automation helps to strengthen safety processes:

The Marine sector initiated the use of smartphones for reporting hazards. This not only improves the speed of reporting, but also encourages more people to do so.

The Electronics sector implemented the e-Permit-To-Work system which speeds up the processing time for hazardous work applications, and enhances overall compliance to procedures.

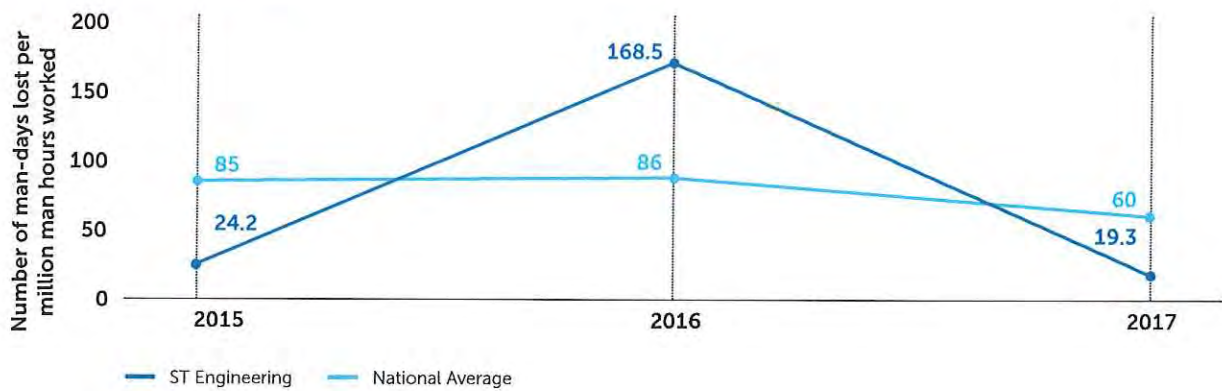
OUR MAJOR OPERATIONS IN SINGAPORE ACHIEVED OHSAS 18001 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATION.



ACCIDENT FREQUENCY RATE



ACCIDENT SEVERITY RATE



OCCUPATIONAL HEALTH PERFORMANCE INDICATORS	GROUP
No. of occupational health activities organised	89
Percentage of at-risk staff who attended the Audiometric Examination	100
Percentage of at-risk staff who attended the Respiratory Protection Training	100
Number of Occupational Disease cases (Excluding Noise Induced Deafness cases)	0
Number of Advanced Noise Induced Deafness cases	4

WHAT WE WILL DO IN 2018

- Develop new procedures at the workplace to increase our state of preparedness in the event of a terrorist attack.
- Improve the cross audit programme to focus on specific critical workplace safety issues to ensure compliance with procedures and safety standards.

RISK & SUSTAINABILITY HIGHLIGHTS

PROTECTING OUR ENVIRONMENT

We commenced our journey towards clean energy in 2014 when we test-piloted the use of a PV system at our Jalan Boon Lay facility. To date, clean energy output from this project amounted to 0.72 giga-watt hour (GWh). Although modest, we continue to invest in solar energy. During the year, an agreement was reached to develop two grid-connected rooftop solar projects at two other facilities in Changi and Seletar, Singapore. These new projects will further contribute a combined capacity of 4.1MWp of clean solar energy.

When fully operational, we estimate our investments in solar energy will replace 8.9% of our existing electricity source of energy, thereby reducing our overall GHG by 4,408 tonnes of Carbon Dioxide Equivalent (tCO₂e) annually.

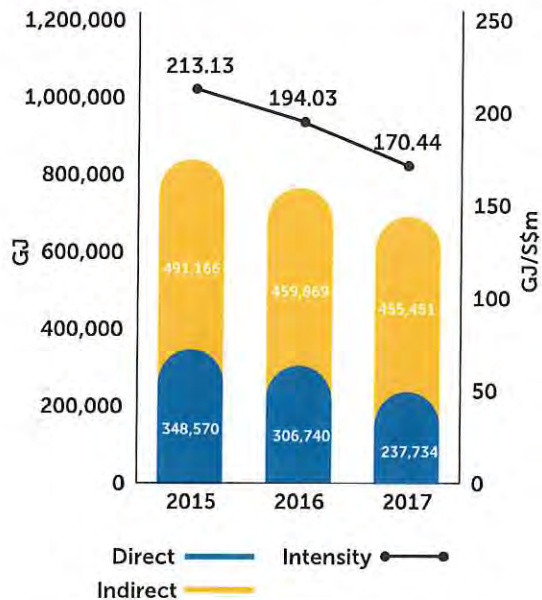
We continue to manage our water demand and consumption judiciously. We monitor our consumption regular to ensure that there is no abnormal spike and install water-efficient fittings in our facilities wherever feasible. To date, we have installed either auto-closing features or electronic sensors to about 58% of our taps. We also use NEWater wherever possible, with its usage accounting for about 21% of our total water consumption.

**OUR MAJOR OPERATIONS
IN SINGAPORE HAVE BEEN
CERTIFIED UNDER ISO 50001
SINCE 2015.**

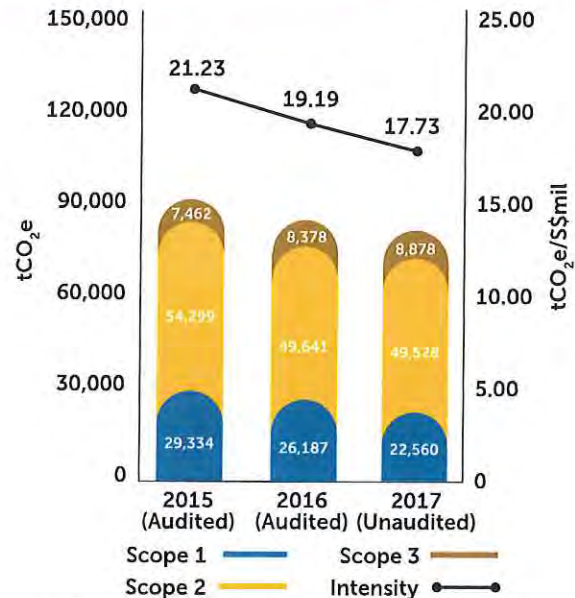
STAGE OF DEVELOPMENT	NUMBER OF PROJECTS TO REDUCE ENERGY CONSUMPTION	TOTAL ESTIMATED ANNUAL CO ₂ SAVINGS (tCO ₂ e)
TO BE IMPLEMENTED	5	392.7
IMPLEMENTATION COMMENCED	2	1,384.9
IMPLEMENTED	8	2,458.8



ENERGY CONSUMPTION AND INTENSITY



GHG EMISSION AND INTENSITY*



* GHG intensity figures are computed based on Scope 1 & 2 emissions normalised using revenue from Asia, where Singapore is a significant contributor.

In 2017, the Energy Market Authority (EMA) released revised Electricity Grid Emission Factors from 2012 onwards, as additional information on heat generation by co-generation plants are available. The differences in figures are less than 2%. We report our audited figures from 2013-2016, which are based on figures previously published by EMA.

Notes:

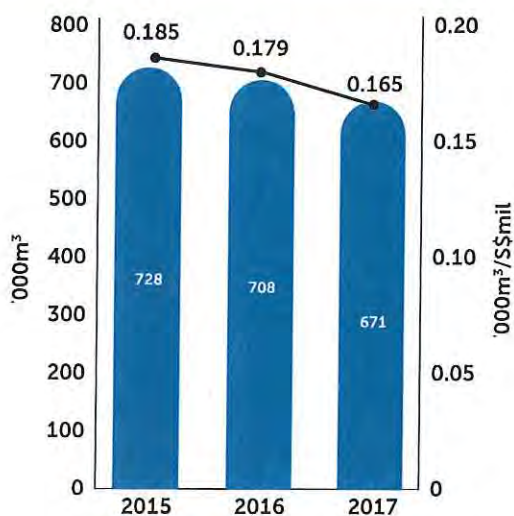
Energy consumption and GHG emissions figures for 2016 were adjusted as a result of audit, and restated accordingly.

Scope 1: Direct GHG emissions from sources owned or controlled by Singapore entities

Scope 2: Indirect GHG emissions from generation of purchased electricity consumed by Singapore entities

Scope 3: Indirect GHG emissions from business travels by air carried out by Singapore entities

WATER CONSUMPTION AND INTENSITY



WHAT WE WILL DO IN 2018

- Review the intensity target for GHG emissions. (Original target: 16% reduction in intensity on a business as usual basis by 2025, with the base year as 2010.)
- Improve water intensity by 1.5% from 2017 levels.

RISK & SUSTAINABILITY HIGHLIGHTS

RESPONSIBLE SOURCING

While timely sourcing of quality, safe and cost-effective goods and services for our products and solutions is critical, upholding responsible sourcing practices, within the Group and along our supply chain, is just as important.

In 2017, we augmented our central procurement organisation with manpower and technological solutions.

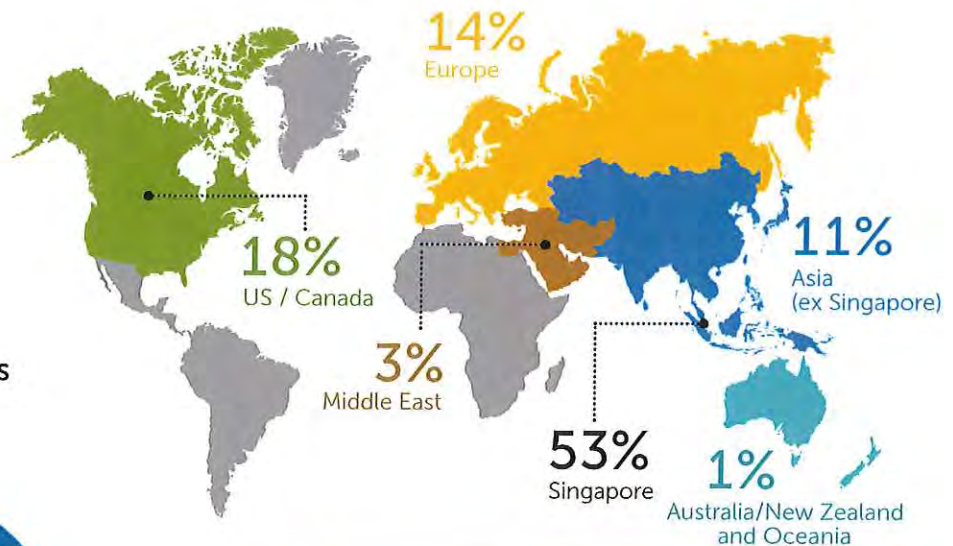
The Spend Analytics Tool was deployed to identify areas of significant spending, with the aim of rationalising the number of key suppliers, and driving greater economic value for the group. As we embark on the journey of responsible

sourcing, we are committed to engaging our suppliers on sustainability issues, and encouraging integration of sustainability considerations into our procurement decisions. Rationalising the number of suppliers and focusing on the ones with the greatest spend maximise the effectiveness of our programmes to manage sustainability impacts along the supply chain.

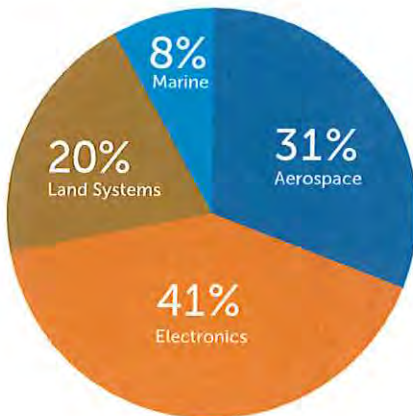
TOTAL PURCHASE VALUE

\$2.45b

DISTRIBUTION OF PURCHASES BY GEOGRAPHICAL LOCATION



DISTRIBUTION OF PURCHASES BY BUSINESS SECTORS



WHAT WE WILL DO IN 2018

- Develop a strategic vendor management programme to strengthen vendor segmentation discipline aimed at improving responsible sourcing initiatives.
- Establish a Vendor Code of Conduct.

RESPONSIBLE CORPORATE CITIZEN

The contributions of the Singapore's operations to our community totalled \$1.92m in 2017 and these went to address several key issues. On education, our contributions went to organisations such as the Assumption Pathway School and providing bond free tertiary scholarships to both local and overseas students. To raise awareness on the impact of climate change on our environment, the Group continued sponsorships for Cloud Forest Theatre and Cloud Forest Gallery (formerly known as +5 Degrees and Earth Check) at Gardens by the Bay. We continued our support to several social welfare homes through cash, in-kind contributions and staff volunteering.

Throughout the year, our employees volunteered for causes that they were passionate about, where every outreach was a charitable act involving at least 50 volunteer man hours. Our employees in Singapore engaged local communities and contributed a total of 8,842 volunteer man hours in 2017.

Over and above our total community contribution, the Group raised funds through our ST Engineering 50th Anniversary Charity Golf, ST Engineering Charity Draw and staff donation drive in support of 15 charities that support person with special needs, person with disabilities and youth at risk.

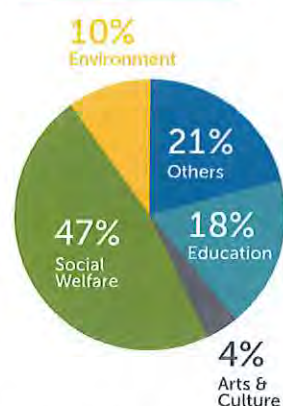
COMMUNITY CONTRIBUTIONS

\$1.92m

OUR CONTRIBUTION*



ISSUES ADDRESSED*



* LBG framework was applied to measuring community contributions and issues addressed.

WHERE OUR COMMUNITY EFFORTS WILL FOCUS ON:

- Enriching lives through education**
 We believe that education is a basic human right, and that it is the most compelling way to create positive and sustainable change for a better future. We work with partners and collaborators to provide opportunities and assistance to children and young adults so that their lives can be enriched and uplifted through education.
- Touching lives through engineering**
 As an engineering group, we have the innovative and creative expertise to bring about solutions to enhance living. Our focus in this aspect is the support of persons with disabilities or special needs. We work towards the development of assistive devices and special application engineering solutions to help persons with disabilities or special needs attain independent living and integrate into society.

WHAT WE WILL DO IN 2018

- Organise the ST Engineering Volunteers Week 2018.
- Increase the Group's participation rate in Community Chest's SHARE programme.

RISK & SUSTAINABILITY HIGHLIGHTS

GLOBAL OPERATIONS: UNITED STATES

In 2016, VT Systems set Group-wide environmental goals, including a 15% reduction in GHG emission intensity levels by 2020 from the base year of 2015. Since imposing these goals, our companies have been working hard to achieve them by implementing measures that would lead to more efficient use of resources as well as minimised impact on the environment.

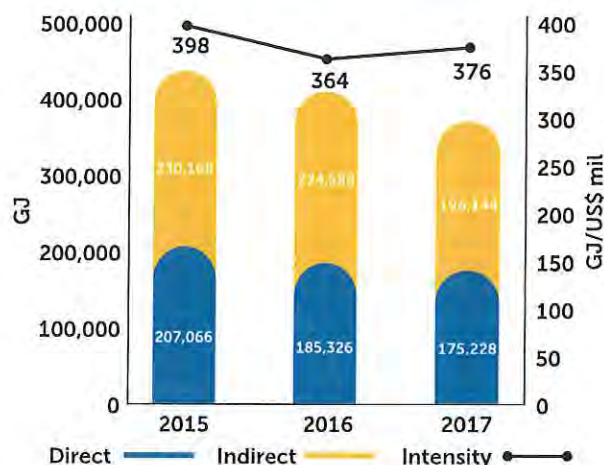
VT Mobile Aerospace Engineering, a company within the Aerospace sector, made significant reductions in energy consumption by changing the lightings in the hangar bays to LED. The LED replacement project was completed and is expected to reduce energy consumption by more than 15% going forward.

VT Hackney, a company in the Land Systems sector, also made efforts in reducing energy consumption and GHG emissions. In line with federal regulation, VT Hackney changed the foam-blowing agent that was used in their plants to a new type that does not contain Freon, hence emitting less GHG. With this change in the foam-blowing agent, GHG emissions were reduced by 41% in 2017. In addition to the reduction in GHG emissions, VT Hackney also made efforts to reduce energy consumption by replacing old lightbulbs with LED bulbs in their facilities. These efforts, amongst many others, will help us to achieve our goal of a 15% reduction in GHG Intensity by 2020.

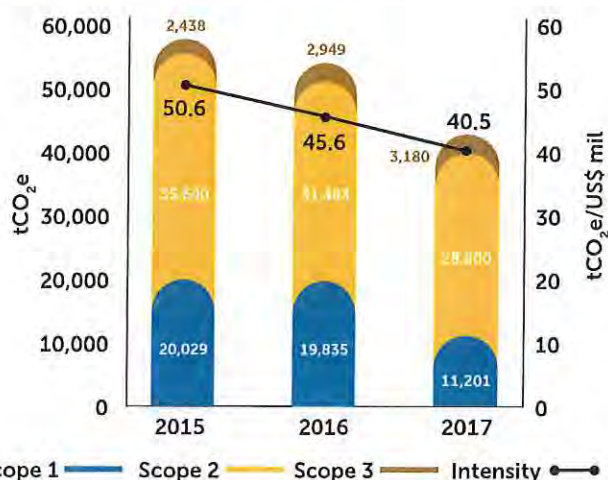
VT Systems continues to put time and effort into giving back to its surrounding community, supporting a variety of important causes and charitable organisations. Our goal over the past year was to increase the level of participation in events that impact the community, as well as implement programmes that seek to match financial contributions made by the company or by individuals to important causes.

In 2017, VT Systems contributed a total of US\$365,228 and 2,781 volunteering man hours to its community, in the form of cash donations, fundraisers, and volunteer hours. The organisations that the Group contributed to included St. Jude's Children's Hospital in Memphis, the San Antonio Food Bank, Episcopal Church of the Resurrection in Alexandria, Arlington Food Assistance Center, and the Texas Diaper Bank.

ENERGY CONSUMPTION AND INTENSITY



GHG EMISSION AND INTENSITY*



Scope 1 — Scope 2 — Scope 3 — Intensity —

* GHG intensity figures are computed based on Scope 1 & 2 emissions normalised using revenue from US operations.

Notes:

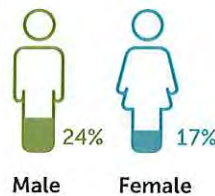
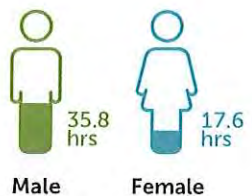
Scope 1: Direct GHG emissions from sources owned or controlled by US entities

Scope 2: Indirect GHG emissions from generation of purchased electricity consumed by US entities

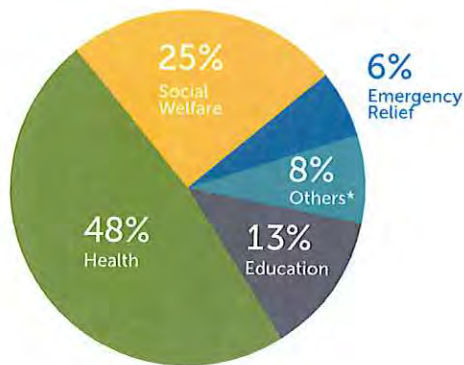
Scope 3: Indirect GHG emissions from business travels by air carried out by US entities

**WORKFORCE
PROFILE****Employees****Supervised
Workers**

* Supervised workers refer to workers hired through local contractors. They are on short-term contracts, work in our facilities and are supervised by VT Systems.

**TURNOVER RATE
FOR EMPLOYEES****Turnover
Rate****22.8%****AVERAGE TRAINING
HOURS PER EMPLOYEE****Training Hours
per Employee****32.9 hrs****COMMUNITY
CONTRIBUTIONS****US\$0.3m****WHAT WE WILL DO
IN 2018**

- Progressively report other targets and performance of the US sustainability efforts.

**OUR
CONTRIBUTION****ISSUES
ADDRESSED**

* Others include Economic Development, Arts & Culture and Environment issues.

C O R P O R A T E G O V E R N A N C E

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 2017 with specific reference to the guidelines of the Singapore Code of Corporate Governance 2012 (the Code).

The Board is pleased to report that the Company has complied in all material aspects with the principles, guidelines and recommendations set out in the Code. Our Summary of Disclosures is enclosed on pages 109 to 116 of this Annual Report.

BOARD MATTERS

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

- setting the Group's strategic objectives 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 President & Chief Executive Officer (CEO), Board succession and appointments on Board committees;
- appointment of key management personnel and succession planning as an ongoing process;
- review of the risk management framework through its Risk and Sustainability Committee (RSC) as set out in page 71; and
- approval of the unaudited quarterly, half yearly and full year audited results prior to their release.

Besides monitoring the performance of the Group, the Board also oversees and provides guidance on sustainability issues such as environmental and social factors, as part of the overall business strategy. Board meetings may include presentations by the Management to discuss business growth strategies.

In the discharge of its functions, the Board is supported by six Board committees (compared to eight in the previous year) to which it delegates specific areas of responsibilities for review and decision making. In May 2017, in a rationalisation exercise of the Board committees, the Business Investment and Divestment Committee (BIDC) and the Tenders Committee (TC) were dissolved. Henceforth, all investment and divestment decisions above the approval limits of Management and each Sector board are taken at the newly-formed Strategy & Finance Committee (SFC) and, beyond a certain threshold, at the Board level. As part of the streamlining, the Budget and Finance Committee was also dissolved in May 2017. Its functions have been transferred to the SFC.

The President & CEO, Mr Vincent Chong, is accountable to the Board. He is supported by the Management Committee which consists of the Chief Financial Officer (CFO), the Chief Corporate Officer (CCO) and the four sector Presidents.

On onboarding a Board member, a formal letter is sent to a director upon his appointment setting out his statutory obligations and duties and responsibilities as a director. He is also given the terms of reference for the respective Board committees. An induction programme is organised for a new director on the strategic direction and performance of the Group as well as his duties and obligations under the statutory compliance and corporate governance framework.

Visits to the Group's facilities are also arranged for new directors to enable them to develop a good understanding of the Group's business and operations and the respective key managements. The Board is routinely updated on the relevant laws, SGX continuing listing obligations and accounting standards requiring compliance, and their implications for the Group, so as to enable each Director to properly discharge his duties as a Board member and Board committee member.

Depending on their skillsets and background, directors are sponsored for relevant courses, conferences and seminars in order that they can be better equipped to fulfil their governance role and to comply with directors' obligations. Where there are statutory and regulatory changes that affect the obligations of directors, the Company will organise briefings by external legal counsel.

Board members receive monthly consolidated management reports on the financial performance of each business sector, capital commitments and significant operational highlights to keep the Board apprised of business investments and performance updates.

The Board convenes scheduled meetings on a quarterly basis to coincide with the announcement of the Group's quarterly results. Special Board meetings may be convened as and when necessary to consider corporate actions requiring the Board's guidance or approval.

To facilitate the Board's decision-making process, the Company's Constitution provides for Directors to participate in Board meetings by teleconference or video conference. Decisions of the Board and Board committees may also be obtained via circulation. At the end of every Board meeting, the Chairman allocates time for its non-executive Directors to meet without the presence of Management. Directors' attendance at Board and Board Committee meetings is tabulated on pages 89 and 90:

Name of Director	Board		Audit Committee		Executive Resource and Compensation Committee		Nominating Committee	
	Held	Attended	Held ⁷	Attended ⁷	Held	Attended	Held	Attended
Kwa Chong Seng	4	4			3	3	1	1
Vincent Chong Sy Feng	4	4						
Koh Beng Seng ¹	1	1	2	2				
Quek See Tiat ²	4	4	5	5				
LG Lim Cheng Yeow Perry	4	2						
Ng Chee Khern ³	2	2						
Neo Kian Hong ⁴	2	1						
Quek Gim Pew	4	3						
Davinder Singh ¹	1	1						
Dr Stanley Lai Tze Chang	4	4	5	5	3	2	1	1
Khoo Boon Hui	4	4	5	4				
Olivia Lum Ooi Lin	4	4						
Dr Beh Swan Gin	4	4						
Lim Sim Seng	4	4			3	3	1	1
Lim Ah Doo	4	4	5	5				
RADM Alan Goh Kim Hua	4	2						

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	Strategy & Finance Committee (revamped from Budget and Finance Committee on 11 May 2017)		Research, Development and Technology Committee		Risk and Sustainability Committee	
Name of Director	Held	Attended	Held	Attended	Held ⁷	Attended ⁷
Kwa Chong Seng	4	4				
Vincent Chong Sy Feng	4	4	2	2	5	5
Koh Beng Seng ¹						
Quek See Tiat ²						
LG Lim Cheng Yeow Perry					5	2
Ng Chee Khern ³						
Neo Kian Hong ⁴	2	1				
Quek Gim Pew			2	2		
Davinder Singh ¹					2	1
Dr Stanley Lai Tze Chang			2	2		
Khoo Boon Hui					5	5
Olivia Lum Ooi Lin					5	4
Dr Beh Swan Gin	2	2				
Lim Sim Seng	2	2				
Lim Ah Doo	2	2				
RADM Alan Goh Kim Hua						
Non Board Members						
Quek Poh Huat ⁵	4	4				
Bill Chua Teck Huat ⁶					2	1
Christopher Lau Loke Sam ⁶					2	2

No meetings were held for the Business Investment and Divestment Committee prior to the dissolution of the Committee in May 2017 as key matters were decided at the Board level. Matters of the Tenders Committee prior to the dissolution of the Committee were resolved via circular resolutions.

¹ Retired at AGM on 21 April 2017

² Appointed AC Chairman on 21 April 2017

³ Resigned on 19 June 2017

⁴ Appointed on 30 June 2017

⁵ Co-opted as SFC member on 11 May 2017

⁶ Co-opted as RSC member on 23 June 2017

⁷ Includes the joint AC and RSC meeting held on 14 February 2017

Board Composition and Guidance (Principle 2)

The Board comprises 12 directors and an alternate director. RADM Alan Goh is Alternate Director to LG Perry Lim. LG Lim, 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. RADM Goh is fully apprised of all Board matters, receives notices to attend Board meetings and Board papers as well as Board resolutions by circulation. As Alternate Director, he is in a position to act on behalf of LG Perry Lim in the latter's absence.

The Board, through the Nominating Committee (NC), reviews the size and composition of the Board taking into consideration the skillsets, backgrounds and independence of directors. The current board is sized to take into account the global scale of the Group's business and ST Engineering's key role in supporting Singapore's defence technology ecosystem. The Board will continue to review its composition and size to facilitate effective decision making.

During the year, the Board welcomed Mr Neo Kian Hong, Permanent Secretary (Defence Development), who was appointed as a non-independent non-executive Director and member of the SFC on 30 June 2017.

The Board consists of members with established track record in defence, business, finance, banking, technology, legal and management. Each non-executive director brings to the Board an independent perspective based on his training and expertise to enable the Board to make balanced and well considered decisions.

The Board has eight independent directors who represent more than 60% of the Board. The Code requires the independent directors to comprise at least half of the Board. The independence of each director is determined upon appointment and reviewed annually by the NC.

The NC has affirmed that the independent directors are Mr Kwa Chong Seng, Dr Stanley Lai, Mr Khoo Boon Hui, Mr Quek See Tiat, Ms Olivia Lum, Dr Beh Swan Gin, Mr Lim Sim Seng and Mr Lim Ah Doo. The Board agrees with the NC's assessment.

One of our independent directors, Ms Olivia Lum who will be retiring at the coming AGM of the Company in April 2018, has decided not to seek re-election due to personal business commitments.

The Board has, at all times, exercised independent judgment in decision making, using its collective wisdom and experience to act in the best interests of the Company. Any director who has an interest that may conflict with a subject under discussion by the Board, declares his or her interest and either recuses himself or herself from the information and discussion of the subject matter or abstains from decision-making.

The Board held a total of four meetings during the year to consider, among other things, the approval and release of the FY2016, 1Q2017, 2Q2017 and 3Q2017 results.

The Board and the SFC reviewed the Group's growth and strategy plans to ensure that the work of the Group is aligned with its charter and corporate objectives taking into account the opportunities and challenges in the environment in which we operate.

Chairman and Chief Executive Officer (Principle 3)

The Chairman and 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 President &

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CEO are separate individuals. No individual or small group of individuals dominates the Board's decision making process. The 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 electronic mail.

Mr Kwa Chong Seng joined the Board on 1 September 2012. He was appointed Chairman on 25 April 2013. Mr Kwa is the retired Chairman and Managing Director of ExxonMobil Asia Pacific Pte Ltd. Other than serving as a non-executive Director on the Board of SeaTown Holdings Pte Ltd, a wholly-owned subsidiary of Temasek Holdings (Private) Limited, Mr Kwa does not hold any other position in Temasek Holdings. The NC has determined that he is an independent director.

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, President & CEO and Management, engaging them in open dialogue over various matters, including strategic issues, sustainability, risks and business planning processes. 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.

Mr Vincent Chong who is an executive Director, and the President & CEO, is accountable to the Board for the conduct and performance of the Group. He sits on the boards of its key subsidiaries to ensure that decision-making processes and information flows are effectively channelled in a timely manner to ensure alignment with the ST Engineering Group's policies. He has been delegated authority to make decisions within certain financial limits authorised by the Board. He is supported in his work by the Management Committee.

Board Membership & Evaluation of Performance (Principles 4 and 5)

Supporting the Board are the following Board committees:

- Audit Committee
- Executive Resource and Compensation Committee
- Nominating Committee
- Strategy & Finance Committee (revamped from Budget and Finance Committee on 11 May 2017)
- Research, Development and Technology Committee
- Risk and Sustainability Committee

NOMINATING COMMITTEE

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, skillsets 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, succession planning for President & CEO and director training and development.

The NC comprises three non-executive independent directors. Mr Kwa Chong Seng is the Chairman of the NC. He abstains from voting when it comes to a determination of his independence. The other members are Dr Stanley Lai and Mr Lim Sim Seng.

The NC held one meeting in 2017 while other decisions were obtained by circulation. The NC is continually engaged in the board renewal process of ST Engineering and its key subsidiaries, having regard to the skills, experience and industry expertise needed for a balanced board composition to, among other things, oversee governance and risks within the Group's business. When the need for a new director is identified, potential candidates are identified from various sources. The NC will assess a shortlist 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.

During the year, the NC reviewed and affirmed the independence of the Company's independent directors.

The NC conducted a collective assessment of the Board to gauge the effectiveness of the Board's performance, the adequacy of the blend of skillsets and experience of the Board, and the quality and timeliness of board and committee meeting agendas and papers submitted by the Management. The review was internally undertaken with each Director being asked to complete a questionnaire. Their feedback was collated and shared with the Board. The review indicated that the Board continues to function effectively. The NC also took on board the feedback of the Board members on areas for improvement.

The NC also noted the list of other directorships held by our directors, taking into consideration their principal commitments. The NC is satisfied that each of the directors is able to devote time to carry out his/her duties as director in the Company.

The Board has considered and agreed not to set guidelines for maximum directorships in a listed company that a director can hold. Annually, an incumbent director is asked to affirm that he has adequate time to devote to his Board responsibilities. The ST Engineering Board members are selected on the basis of their ability to contribute to the Board through their relevant skillsets, experience, calibre and willingness to devote time. In addition, each Director is required to provide an annual affirmation of commitment to his Board responsibilities. With these considerations, the Board is of the view that setting a maximum number of board representations on listed companies for our Directors is not needed.

The NC is also responsible for renewal and succession plans to ensure Board continuity. At each Annual General Meeting (AGM), one third of the directors with the longest term in office since his last re-election is required to retire. A retiring director may submit himself for re-election. Under this provision, Mr Kwa Chong Seng, Dr Stanley Lai, Ms Olivia Lum and Dr Beh Swan Gin will retire. Mr Neo Kian Hong, who is newly appointed, will hold office until the forthcoming AGM of the Company. The retiring Directors, being eligible, have offered themselves for re-election, except for Ms Olivia Lum who has decided not to seek re-election due to personal business commitments.

Each of the retiring non-executive Directors has confirmed that he or she 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, proposes that each of the retiring Directors, save for Ms Olivia Lum, be re-elected at the Company's forthcoming AGM.

With the exception of Mr Vincent Chong, the remaining 11 directors are non-executive Directors.

C O R P O R A T E G O V E R N A N C E

The composition of the Board and Board committees as at 31 December 2017 is tabulated below:

	Audit Committee (established on 15/1/1998)	Strategy & Finance Committee (revamped from Budget and Finance Committee on 11/5/2017)	Executive Resource & Compensation Committee (established on 6/12/1997)	Nominating Committee (established on 4/12/2002)	Research, Development & Technology Committee (established on 1/8/2003)	Risk & Sustainability Committee (established on 7/12/1998)
BOARD MEMBERS						
Kwa Chong Seng		C	C	C		
Vincent Chong Sy Feng		M			M	M
Quek See Tiat ¹	C					
LG Lim Cheng Yeow Perry						M
Neo Kian Hong ²		M				
Quek Gim Pew					C	
Dr Stanley Lai Tze Chang	M		M	M	M	
Khoo Boon Hui	M					C
Olivia Lum Ooi Lin						M
Dr Beh Swan Gin		M				
Lim Sim Seng		M	M	M		
Lim Ah Doo	M	M				
RADM Alan Goh Kim Hua ³						
NON BOARD MEMBERS						
Quek Poh Huat ⁴		CM				
Bill Chua Teck Huat ⁵						CM
Christopher Lau Loke Sam ⁵						CM

Denotes:

C – Chairman

M – Member

CM – Co-opted Member

¹ Appointed AC Chairman on 21 April 2017 / ² Appointed on 30 June 2017

³ Alternate Director to LG Perry Lim / ⁴ Appointed on 11 May 2017 / ⁵ Appointed on 23 June 2017

Access to Information (Principle 6)

The Management furnishes Board members with monthly management reports, providing updates on key operational activities and financial analysis. The Board also has unrestricted access to the President & CEO, the CFO, the Chief Corporate Officer, management and the Company Secretary as well as the internal and external auditors and the risk management team. The Board may also seek independent professional advice, if necessary, at the Company's expense.

Board papers are sent to Directors at least three days prior to meetings in order for Directors to be adequately prepared for the meetings.

The Company Secretary attends all Board meetings and ensures that board procedures are followed. The Company Secretary advises the Board on governance matters including their timely disclosure obligations. She also assists with the co-ordination of continuing training for board members to keep the Board up-to-date on corporate governance matters. The appointment and removal of the Company Secretary is a matter for the Board as a whole to decide.

REMUNERATION MATTERS

Procedures for Developing Remuneration policies

(Principle 7)

Level and Mix of Remuneration

(Principle 8)

Disclosure on Remuneration

(Principle 9)

ROLE OF EXECUTIVE RESOURCE AND COMPENSATION COMMITTEE (ERCC)

The ERCC performs the role of the remuneration committee. The ERCC comprises Mr Kwa Chong Seng as Chairman, Dr Stanley Lai and Mr Lim Sim Seng. The members of the ERCC have held senior positions in large organisations and are experienced in the area of executive remuneration policies and trends. All the ERCC members are non-executive independent directors.

The ERCC met three times during the year. 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).

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 President & CEO, top five key management executives of the Group Companies 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 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's Companies. For FY2017, the Board reviewed and approved the specific remuneration packages and service contract terms for the key management executives.

Non-executive Director Remuneration

- Reviews and recommends to the Board the remuneration framework (including directors' fees) for non-executive Directors on the relevant Group boards.

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 in the Group's companies and reviews succession plans for key positions in the Group companies.

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For financial year 2017, Aon Hewitt Singapore Pte Ltd was engaged as remuneration consultant (Remuneration Consultant) to provide professional advice on board and executive remuneration matters. Aon Hewitt Singapore Pte Ltd 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 component, variable cash component, share-based component and benefits.

A. Fixed Compensation:

The fixed component comprises the base salary and compulsory employer contribution to an employee's Central Provident Fund (CPF).

B. Variable Cash Compensation:

The variable component includes the Performance Target Bonus and EVA-based Incentive Scheme.

Performance Target Bonus (PTB)

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 objectives are aligned to the overall strategic, financial and operational goals of the Group and Company, and are cascaded down to a select group of key executives using scorecards, creating alignment between the performance of the Group, Company and the individual.

The individual PTB payouts for the President & CEO and key management executives are determined by the ERCC based on the Group, Company and individual performance at the end of the financial year.

EVA-based Incentive Scheme (EBIS)

The EBIS was established with the objective of motivating and rewarding employees to create sustainable shareholder value achieved by growing profits, deploying capital efficiently and managing the risk profile and risk horizon of the business. A portion of the annual performance-related bonus of the Senior Management Executives is tied to the EVA achieved by the Group in the financial year.

Under the plan, one-third of the accumulated EVA-based bonus, comprising the EVA declared for the financial year and the balance of such bonus brought forward from preceding years (which comprises multiple years of incentive dollars retained in the EVA bank), is paid out in cash each year. The remaining two-thirds are carried forward in the individual executive's EVA bank. Amounts in the EVA bank are at risk because negative EVA will result in a clawback of EVA accumulated in previous years. This mechanism encourages the senior management 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 that the actual performance of the Group in financial year 2017 has partially met the predetermined targets, the resulting annual EVA declared under EBIS was adjusted accordingly.

C. Share-based Compensation:

Share awards which were granted in financial year 2017 were based on the Singapore Technologies Engineering Performance Share Plan 2010 (PSP2010) and the Singapore Technologies Engineering Restricted Share Plan 2010.

(RSP2010) approved and adopted by shareholders of the Company at the Extraordinary General Meeting held on 21 April 2010. Yearly awards under the PSP2010 and RSP2010 do not exceed the internal annual limit of 1% of the total number of issued shares of the Company, set by the ERCC.

Details of the share plans and awards granted are given in the Share Plans section of the Directors' Statement from pages 122 to 125.

PSP2010

The PSP2010 was established with the objective of motivating Senior Management Executives to strive for sustained growth and performance in the Group.

Pursuant to the PSP2010, the ERCC has decided to grant contingent awards on an annual basis, conditional on meeting targets set for a three-year performance period. With effect from financial year 2010, the performance measures used in PSP grants under PSP2010 are:

- Absolute Total Shareholder Return (TSR) against Cost of Equity hurdles (i.e. measure of absolute Wealth Added); and
- Relative TSR against Defensive Stock Index, the constituents of which are selected "defensive stock" companies that have similar market risk as the Group and are listed on the Singapore Exchange (SGX).

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

The final PSP award is conditional on the vesting of the shares under the RSP2010 which have the same performance end period.

The Group has clawback policies for the unvested shares under PSP2010 in the event of exceptional circumstances of restatement of the financial results of the Group subsequent to an earlier misstatement, or of misconduct or fraud resulting in any financial loss to the Group.

The Group partially met the predetermined target performance level for PSP awards granted based on the performance period from financial years 2015 to 2017.

RSP2010

The RSP2010 was established with the objective of motivating managers and above to strive for sustained long term growth and superior performance in the Group. It also aims to foster a share ownership culture among employees within the Group and to better align employees' incentives with shareholders' interests.

Pursuant to the RSP2010, the ERCC has decided to grant contingent awards on an annual basis, conditional on targets set for a one-year performance period. The performance measures set based on the Group corporate objectives, are:

- Group Net Profit; and
- Group EBITDA Margin.

A minimum threshold performance is required for any restricted shares to be released to the recipient at the end of the performance period. The actual number of shares released will depend on the achievement of set targets over the performance period, and will be determined by the ERCC at the end of the performance period, capped at 150% of the conditional award. The shares will be released equally over four consecutive years.

The Group has clawback policies for the unvested shares under RSP2010 in the event of exceptional circumstances of restatement of the financial results of the Group subsequent to an earlier misstatement, or of misconduct or fraud resulting in any financial loss to the Group.

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The Group has met the pre-determined target performance level for the RSP awards granted in FY2017. The achievement for FY2017 grant is computed based on the performance period for financial year 2017.

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 President & CEO are provided in the Summary Compensation Table for Directors on pages 100 to 101. Details of the remuneration packages for the key management executives are provided in the Summary Compensation Table for Key Management Executives on page 102.

In performing the duties as required under its Terms of Reference, the ERCC ensures that remuneration paid to the Senior Management Executives is strongly linked to the achievement of business and individual performance targets. The performance targets as determined by the ERCC are set at realistic yet stretched levels each year to motivate a high degree of business performance with emphasis on both short and long term quantifiable objectives. Pay-for-Performance Alignment study was conducted periodically by the Remuneration Consultant and reviewed by the ERCC for sufficient evidence indicating 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. The ERCC will undertake periodic reviews of the compensation-related risks.

During financial year 2017, there were no termination, retirement and post-employment benefits granted to Directors, 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 President & CEO and whose remuneration exceeded S\$50,000 during the financial year 2017, except for Mr Quek Gim Chuah (VP Quality, ST Aerospace), who is the brother of Mr Quek Gim Pew, Director of the Company.

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' Fee Policy comprises a basic retainer, attendance and additional fees for serving on Board committees. There has been no revision to this Policy.

For services rendered in financial year 2017, as per policy rate, 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 RSP2010, subject to shareholders' approval at its AGM in April 2018.

As the restricted shares are awarded in lieu of Directors' compensation in cash, the shares will be awarded 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 award 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 awarded to such NED as payment of the shares' component of the NEDs' fees for financial year 2011 and onwards; 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 shares in the Group a year after the end of his Board tenure.

The computation of NEDs' compensation is based on current fee policy rates.

	From Private Sector(\$) 2017
Chairman	600,000
Basic Retainer	
Director	72,000
Additional/Committee Fees	
Audit Committee:	
- Chairman	52,000
- Member	29,000
Executive Resource and Compensation Committee, Strategy & Finance Committee, Research, Development and Technology Committee and Risk and Sustainability Committee:	
- Chairman	35,000
- Member	18,000
Other Committee:	
- Chairman	29,000
- Member	14,000
Attendance Fees	
Per Board Meeting	2,000
Per Board Committee Meeting	1,000

The Chairman's fee is a fixed fee covering Board and Board Committee retainer and meeting attendance. The fee is paid in a combination of cash (70%) and shares (30%). The share award, as part of the fee, consists of fully-paid shares 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 award, and the two year moratorium will apply even in the event of retirement.

The NEDs' compensation payable in respect of financial year 2017 is proposed to be \$1,547,391 (FY2016: \$1,752,233). Details of the Directors' remuneration are provided in the Summary Compensation Table for Directors on pages 100 to 101.

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

	From Public Sector(\$) 2017
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 / Other Committee Member	11,250

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

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SUMMARY COMPENSATION TABLE FOR DIRECTORS FOR THE YEAR ENDED 31 DECEMBER 2017 (GROUP):

Payable by the Company

Executive Director	Salary ^{*1}	Variable ^{*2}	Benefits ^{*3}	Share-based Compensation ^{*4}	Directors' Total Fees ^{*5}		Total
	\$	\$	\$	\$	Cash-based \$	Share-based \$	\$
Vincent Chong Sy Feng	893,043	1,696,640	130,219	1,500,000	-	-	4,219,902

Non-Executive Directors	Salary ^{*1}	Variable ^{*2}	Benefits ^{*3}	Share-based Compensation ^{*4}	Directors' Total Fees ^{*5}		Total
	\$	\$	\$	\$	Cash-based \$	Share-based \$	\$
Kwa Chong Seng	-	-	-	-	420,000	180,000	600,000
Koh Beng Seng	-	-	-	-	41,370 ^(a)	-	41,370
Quek See Tiat	-	-	-	-	91,048 ^(b)	39,020	130,068
LG Lim Cheng Yeow Perry	-	-	-	-	11,250 ^(c)	-	11,250
Ng Chee Khern	-	-	-	-	5,209 ^{(c)(d)}	-	5,209
Neo Kian Hong	-	-	-	-	5,702 ^{(c)(e)}	-	5,702
Quek Gim Pew	-	-	-	-	22,500 ^(c)	-	22,500
Davinder Singh	-	-	-	-	38,864 ^(a)	-	38,864
Dr Stanley Lai Tze Chang	-	-	-	-	118,300	50,700	169,000
Khoo Boon Hui	-	-	-	-	107,100	45,900	153,000
Olivia Lum Ooi Lin	-	-	-	-	102,000	-	102,000
Dr Beh Swan Gin	-	-	-	-	11,250 ^(c)	-	11,250
Lim Sim Seng	-	-	-	-	90,712	38,877	129,589
Lim Ah Doo	-	-	-	-	89,312	38,277	127,589
RADM Alan Goh Kim Hua (Alternate to LG Lim Cheng Yeow Perry)	-	-	-	-	-	-	-
Total	-	-	-	-	1,154,617	392,774	1,547,391

Payable by Subsidiaries

Executive Director	Salary ^{*1}	Variable ^{*2}	Benefits ^{*3}	Share-based Compensation ^{*4}	Directors' Total Fees ^{*5}		Total
	\$	\$	\$	\$	Cash-based \$	Share-based \$	\$
Vincent Chong Sy Feng	-	-	-	-	210,379 ^(f)	-	210,379

Non-Executive Directors	Salary ^{*1}	Variable ^{*2}	Benefits ^{*3}	Share-based Compensation ^{*4}	Directors' Total Fees ^{*5}		Total
	\$	\$	\$	\$	Cash-based \$	Share-based \$	\$
Quek Gim Pew	-	-	-	-	13,125 ^(c)	-	13,125
Dr Stanley Lai Tze Chang	-	-	-	-	31,500	13,500	45,000
Dr Beh Swan Gin	-	-	-	-	45,000 ^(c)	-	45,000
Lim Sim Seng	-	-	-	-	52,500	22,500	75,000
Lim Ah Doo	-	-	-	-	52,500	22,500	75,000
RADM Alan Goh Kim Hua	-	-	-	-	1,173 ^(c)	-	1,173
Total	-	-	-	-	195,798	58,500	254,298

*1 Salary includes base salary and employer CPF for the financial year ended 31 December 2017.

*2 Variable includes Performance Target Bonus paid & EVA-based incentive declared for the financial year ended 31 December 2017. The EVA-based incentive declared for the year is added to the balance brought forward in each of the executive's individual EVA Bank. 1/3 of the total is paid out, with the balance 2/3 carried forward to the next year. A negative EVA-based incentive will result in a clawback of individual EVA Bank.

*3 Benefits provided for employees are comparable with local market practices. These include medical, dental, insurances, transport, etc.

*4 Shares delivered in the form of PSP and RSP Contingent Awards to be granted in 2018.

*5 The directors' cash fees and share awards will only be paid/granted upon approval by the shareholders at the forthcoming AGMs of the Group.

(a) Pro-rated. Retired at AGM on 21 April 2017

(b) Quek See Tiat was appointed AC Chairman on 21 April 2017

(c) Fees for public sector directors are payable to a government agency, the DCAC

(d) Pro-rated. Ng Chee Khern resigned as Director on 19 June 2017

(e) Pro-rated. Neo Kian Hong was appointed Director on 30 June 2017

(f) Fees are payable to Singapore Technologies Engineering Ltd

C O R P O R A T E G O V E R N A N C E

The following information relates to remuneration of directors of Singapore Technologies Engineering Ltd:

Number of Directors in Remuneration Bands	2017	2016
\$500,000 and above	2	3
\$250,000 to \$499,999	0	0
Below \$250,000	13	14
Total	15	17

SUMMARY COMPENSATION TABLE FOR KEY MANAGEMENT EXECUTIVES FOR THE YEAR ENDED 31 DECEMBER 2017 (GROUP):

Remuneration	Salary ^{*1}	Variable ^{*2}	Benefits ^{*3}	Share-based Compensation ^{*4}	Total
	%	%	%	%	%
Between \$2,000,000 and \$2,250,000					
Lim Serh Ghee	32	42	1	25	100
Between \$1,750,000 and \$2,000,000					
Ravinder Singh s/o Harchand Singh	33	39	1	27	100
Between \$1,500,000 and \$1,750,000					
Foo Chee Keng Cedric	40	34	1	25	100
Between \$1,000,000 and \$1,250,000					
Ng Sing Chan	65	14	1	20	100
Dr Lee Shiang Long	40	35	1	24	100
Total for Key Management Executives					\$8,117,236

^{*1} Salary includes base salary and employer CPF for the financial year ended 31 December 2017.

^{*2} Variable includes Performance Target Bonus paid & EVA-based incentive declared for the financial year ended 31 December 2017. The EVA-based incentive declared for the year is added to the balance brought forward in each of the executives' individual EVA Bank. 1/3 of the total is paid out, with the balance 2/3 carried forward to the next year. A negative EVA-based incentive will result in a clawback of individual EVA Bank.

^{*3} Benefits provided for employees are comparable with local market practices. These include medical, dental, insurances, transport, etc.

^{*4} Shares delivered in the form of PSP and RSP Contingent Awards to be granted in March 2018.

ACCOUNTABILITY AND AUDIT

Accountability (Principle 10)

The Board is responsible for providing a balanced assessment of the Company's performance, position and prospects. In presenting the annual financial statements and quarterly results announcements to shareholders promptly, it is the aim of the Board to provide the shareholders with a detailed analysis, explanation and assessment of the Group's performance, position, risk review and prospects. The Board also takes adequate steps to ensure compliance with legislative and regulatory requirements, including compliance with the continuing listing obligations under the SGX Listing Manual. As and when new rules and regulations or accounting standards are introduced, external professionals will be invited to brief our Directors.

The appointment of auditors is subject to approval at each AGM. In making its recommendations to shareholders on the appointment and re-appointment of auditors, the Board relies on the review and recommendations of the AC. The AC's assessment of the external auditor is based on factors such as the performance and independence of the auditor. KPMG LLP in Singapore audits Singapore incorporated subsidiaries that are not exempt from audit under the Singapore Companies Act. Subsidiaries incorporated in countries outside Singapore that require an audit in their local jurisdictions are largely audited by other independent member firms of the KPMG network affiliated with KPMG International Cooperative, a Swiss entity. Some of our overseas associates and joint ventures engage other auditing firms, but the number of such entities is not significant.

In compliance with SGX requirements, an audit engagement partner may only be in charge of an audit for up to five consecutive years. KPMG LLP, which was first appointed in 2010 has been meeting this requirement. The current audit engagement partner took over ST Engineering's audit in February 2017. The Company has complied with Rules 712 and 715 of the SGX Listing Manual in relation to the engagement of its auditors.

Directors and key senior executives of the Group are prohibited from dealing in ST Engineering shares two weeks before the announcement of ST Engineering's first quarter, second quarter, third quarter and full year results up to the date of the announcement of the results. Directors are discouraged from trading on short term considerations. Additionally, all directors of the Group and employees are reminded not to trade in situations where the insider trading laws and rules would prohibit trading.

The directors' interests in shares of ST Engineering and its related companies during the year are found on pages 119 to 121 of this Annual Report.

Audit Committee (Principle 12)

The AC is supported in its work by the Risk and Audit Committees (RACs) of the four business sectors. The respective chairmen of the RACs are invited to attend the AC meetings of ST Engineering so as to have a clear understanding of policies made at the holding company level and to share any feedback or raise any issue that the Sectors' RACs may have.

The AC has full authority to commission and review findings of internal investigations into matters where it is alerted of any suspected fraud or irregularity or failure of internal controls or infringement of any law likely to have a material impact on the Group's operating results. It can investigate any matter within its terms of reference and with the full cooperation of management.

The AC's key terms of reference include the following:

- undertaking the statutory and regulatory functions of an AC as are prescribed by law from time to time;
- reviewing the reports of the external and internal auditors to provide a further layer of assurance of the integrity, confidentiality and availability of critical information;
- reviewing interested person transactions;
- evaluating the work of the external auditors to determine their independence and recommending to the Board their reappointment and compensation on an annual basis; and
- reviewing the level of non-audit services.

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The Company has in place a Whistle-Blowing framework, where staff may, in confidence and without fear of retaliation, raise concerns of incidents of possible wrongdoing or breach of applicable laws, regulations or policies to the respective chairmen of the RACs, as well as the AC. In accordance with this framework, a Whistle-Blowing dashboard reporting is presented to the Sectors' RACs and the AC at its quarterly meetings. As ST Engineering has become a global company with a presence in many countries, it is aware of the need to apply international corporate governance standards wherever it operates. It takes a serious view of all reports of violations received and may commission investigations as appropriate.

Mr Quek See Tiat took over as Chairman of the AC following the retirement of Mr Koh Beng Seng at the last AGM in April 2017. The other members of the AC are Dr Stanley Lai, Mr Khoo Boon Hui, and Mr Lim Ah Doo. All the members of the AC are independent directors and majority, including the AC Chairman, have the relevant accounting or financial management expertise or experience. None of the AC members were previous partners or directors of the Company's existing external audit firm within the previous 12 months prior to their appointment to the AC, and none of the AC members have any financial interest in the Company's existing audit firm.

The AC held five meetings during the year including a joint meeting with the RSC to review the significant risks and related key controls. The AC met twice with the external and internal auditors, without management, at the beginning and middle of the year.

During the year, the AC reviewed the financial statements of the Group before the announcement of the Group's quarterly, half-yearly and full-year results. The following significant matters impact the financial statements, and were reviewed by the AC in relation to their materiality and appropriate methodology/assessment. These matters were also discussed with management and the external auditors:

Significant matters	How the AC reviewed these matters
Impairment of non-financial assets, including goodwill and other intangible assets	The AC considered the approach and methodology that were applied to the valuation model in goodwill impairment assessment. It reviewed the reasonableness of cash flow forecasts, the long-term growth rate and discount rate.
Revenue recognition	The AC considered the approach and methodology that were applied to the recognition of revenue and profit from long term contracts. It reviewed the various controls that were designed and applied by the Group to ensure that the estimates used in determining the amount of revenue and costs recognised are appropriate.
Net realisable value of inventories and work-in-progress	The AC considered the approach and methodology that were applied to the valuation of aircraft components and to the assessment of recoverability of work-in-progress. The AC reviewed the reasonableness of the obsolescence policy that was applied to the aircraft components and the assumptions and estimates that were used in determining the work-in-progress amounts.
Provision for warranties	The AC considered the approach and methodology that were applied to the determination of the Group's provision for warranties. It assessed the reasonableness of the key assumptions that were used by management to evaluate the likelihood of claims and risks arising from contracts that were covered by warranty.
Adequacy of project-related provisions	The AC considered the approach and methodology that were applied to the determination of the Group's project-related provisions for liquidated damages and foreseeable losses. It reviewed the key assumptions that were used by management to assess the potential claims and losses.
Impairment of property, plant and equipment – Roll-on/Roll-off Passenger ferry (ROPAX)	The AC considered the approach and methodology that were applied to the valuation of the property, plant and equipment relating to ROPAX. The AC assessed the sale and charter scenarios, cash flow forecasts, long-term growth rate and discount rate that were used in the valuation model that was used.
Acquisition of Aethon, Inc and SP Telecommunications Pte Ltd (SPTel)	The AC reviewed the assessment of Aethon (a subsidiary) and SPTel (a joint venture). It considered the approach and methodology that were applied to determine the allocation of the purchase price over the fair value of the acquired assets and liabilities.

The AC concluded that the management's accounting treatment and estimates 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 2017 have been addressed by the AC and traversed in the above commentary. The KAMs in the audit report for the financial year ended 31 December 2017 can be found on pages 128 – 131 of this Annual Report.

During the year, the AC considered and approved the 2017 Audit Plan and the 2017 Internal Audit (IA) Plan. In addition, the AC reviewed the adequacy of internal control procedures including IT security issues, Interested Person transactions and the issues raised in IA reports. It also considered the reappointment of the external auditors as well as their remuneration.

The AC also reviewed the level of non-audit services performed by its external auditors. For the full year 2017, \$7,954,000 was paid to the external auditors for audit and non-audit services of the Group, of which \$2,002,000 or 25% were for non-audit services. The AC was satisfied that the non-audit services performed by the auditors did not compromise their independence.

The AC is routinely updated on the proposed and impending changes in accounting standards and their implications for the Group.

Risk Management and Internal Control

(Principle 11)

Internal Audit

(Principle 13)

The AC, with the support of the respective Sectors' RACs oversees and appraises the quality of the IA function. The Board, through the AC, RSC and RACs, is responsible for oversight of the risk management responsibilities, sustainability, internal controls and governance processes delegated to Management.

IA supports the AC and RACs in reviewing the adequacy of the Group's internal control systems.

ST Engineering IA is staffed with individuals with the relevant qualifications and experience and comprises a team of 26 staff members, including the Head, Internal Auditor, who reports to the AC functionally and to the President & CEO administratively.

ST Engineering IA is a member of the Singapore Chapter of the Institute of Internal Auditors (IIA) and 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. ST Engineering IA continues to meet or exceed the IIA standards in all key aspects.

IA plans its internal audit schedules in consultation with, but independently of, Management. The IA Plan is submitted to the RACs and the AC for approval at the beginning of each year.

The RACs and the AC also meet with IA at least once a year. During the year, RAC/AC met with IA twice without the presence of Management to gather feedback on Management's level of cooperation and other matters that warrant the RACs' and the AC's attention. All IA reports are submitted to the RACs and the AC for deliberation with copies of these reports extended to the relevant senior management, for prompt corrective actions, as recommended. Furthermore, IA's summary of findings, recommendations and updates on management actions taken are discussed at the quarterly RAC and AC meetings.

During the year, a joint RSC and AC meeting was held in accordance with the respective terms of reference of the committees to facilitate constructive sharing of the common issues that may need to be addressed by both these committees. During the joint committee meeting, members were updated on the key risks and the risk management process.

IA continues to work with Management to align companies to the Group's internal control environment and compliance standards in order to strengthen the self-regulating checks and balances. Control issues, if any, are discussed at AC meetings. IA made periodic visits to overseas subsidiaries to review their operations to ensure compliance with the internal

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controls framework. IA is assisted in its work by an external accounting firm which is not the external auditors of the Company to ensure independence of the internal audit role. In accordance with its plan, surprise audits were conducted in the course of the year on selected areas including treasury activities.

IA continued with its system of rating a company at the end of an internal audit for the purpose of differentiating the high risk issues which require immediate attention.

Based on the internal controls 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, with the concurrence of the RACs and the AC, is satisfied that the Group's framework of internal controls and procedures as well as risk management systems are adequate as at 31 December 2017; to provide reasonable, but not absolute, assurance of achieving its internal control objectives and addressing financial, operational, compliance and information technology risks.

The Board is satisfied that problems are identified on a timely basis and follow up actions are taken promptly to minimise lapses. The Board, through the Board Committees, is supported in these areas by the Internal Audit and Risk Management teams of the Company. In this regard, the Board also notes that no system can provide absolute assurance against the occurrence of material errors, poor judgment in decision making, human error, fraud or other irregularities.

Risk and Sustainability Committee

The RSC, chaired by Mr Khoo Boon Hui, comprises LG Perry Lim, Ms Olivia Lum and Mr Vincent Chong. The RAC chairmen, Mr Christopher Lau and Mr Bill Chua are co-opted members of the RSC.

a) Risk Governance

The RSC assists the Board in its risk governance responsibility. RSC's role is one of oversight of the responsibilities delegated to Management to ensure that there is a system of controls in place for identifying and managing risks in order to safeguard stakeholders' interests and the Company's assets. The RSC also oversees the Group's sustainability issues and reporting.

The RSC is supported by the Risk and Sustainability Team (RST), headed by Head, Risk and Sustainability, working with the Sector Chief Risk Officers from each of the following Sectors:

- 1) Aerospace
- 2) Electronics
- 3) Land Systems
- 4) Marine

The Head of RST reports to the Chairman of the RSC and ST Engineering's President & CEO. The RST provides leadership in the implementation of a Group-wide Enterprise Risk Management (ERM) framework that allows risks to be identified, assessed, monitored and managed by the business managers.

The respective RACs additionally take on the review of risks and risk management systems and assist in the discharge of the risk oversight responsibilities at the Sector level.

Administratively, the RACs are supported by the RST and the Sector Chief Risk Officers. The RST ensures that there is general alignment in the quarterly risk agenda of the RAC meetings to that of the RSC. The annual risk work plan of each sector is also aligned to the Group risk work plan before it is approved by the respective RACs and further endorsed by the RSC.

The RSC reviews the minutes of the RAC meetings which are circulated to all members of the RSC. During the year, the RAC Chairmen of the respective RACs were co-opted as members of the RSC.

In the respective Terms of Reference of the RSC and AC, the members of the RSC and the AC will meet at least once a year to discuss significant risks and audit issues of the Group. The RSC held a total of five meetings during the year including a joint meeting with AC.

There is at least a member on the RSC who is also a member of the AC to facilitate communication and access of information between the two committees.

b) Risk Aware Culture and Training

Embedding the right culture throughout the organisation is important for effective risk management. The RSC recognises good culture fosters openness that will enable Management and staff to escalate concerns in a timely manner without fear, as well as promote better judgment, which provides greater comfort to the Board and Management.

As part of the risk awareness and communication programme, annual risk management training plans covering various risk topics are developed and implemented by the respective sectors, and the status of the training is updated to the RSC and RAC at periodic intervals.

c) Risk Review Process

Under the ERM framework, a risk dashboard of the top 15 business risks (comprising the key inherent risks that may impact the business objectives) is developed and maintained by each of the significant business units, rolling up into a summary dashboard for each of the four business sectors – Aerospace, Electronics, Land Systems and Marine. Once the top business risks are identified, measures will then be taken to develop and implement risk preventive and mitigation actions (collectively known as "controls") and risk monitoring processes. The business managers are required to periodically review the effectiveness of the controls implemented, and initiate necessary changes as the risk profile changes.

Quarterly, the Presidents and the Sector Chief Risk Officers review, with the RSC and RAC, their respective dashboard of material business risks. At the meetings, the Presidents and Sector Chief Risk Officers would discuss the risk management action plans and measures to address these risks. At the same time, the Presidents and Sector Chief Risk Officers would also highlight the following for discussion:

- 1) emerging trends and issues in each business sector
- 2) new risk or changes to existing risk profile
- 3) new risk incidents
- 4) major risk exposures
- 5) risk management actions taken on previously identified risks

The RSC continues to monitor the implementation of risk management policies and procedures and receives updates to the risk registers maintained by the respective sectors. Major reviews include compliance with major laws and regulations, as well as business disruption risks and their continuity plans.

In addition, during the year the RSC reviewed with Management the incident notification framework and cyber risk management framework.

d) Risk Management Self Assurance Process

The Risk Management Self Assurance is a process whereby the business risk owners, together with the respective control owners, evaluate and assess the operational effectiveness of the controls established to manage the key risks that are reported in the Sector Risk Dashboards.

On the basis of this self assessment, annually, the RACs and RSC will receive from the respective Sector Presidents and Sector Group Financial Controllers, written assurances on the adequacy and effectiveness of the system of risk management and controls to manage the significant risks.

For more information on the Company's risk management framework, please refer to the ST Engineering website www.stengg.com for details.

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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.

The Board has received assurance from the Group's President & CEO and CFO on the effectiveness of the Company's risk management and internal control systems, that the financial records have been properly maintained and that the financial statements give a true and fair view of the Company's operations and finances.

The Board is satisfied with the risk management process in place, and, in its opinion, that the effectiveness and adequacy of the material controls to manage the key risks have been appropriately reviewed through the management self assurance process, as well as reasonable independent assurance provided by the Company's IA Function.

Strategy & Finance Committee

The Strategy & Finance Committee (SFC) was created as a result of the board committee rationalisation exercise carried out in 2017 (see page 88). The SFC's role includes guiding Management in the development and execution of the Group's strategies as well as assuming the role currently performed by the Tenders Committee.

Chaired by Mr Kwa Chong Seng, the SFC members include Mr Neo Kian Hong, Dr Beh Swan Gin, Mr Lim Sim Seng, Mr Lim Ah Doo, Mr Vincent Chong and Mr Quek Poh Huat (co-opted member).

During the year, the SFC held four meetings of which one meeting was held offsite to discuss the Group's long term strategy and initiatives, as well as the drivers, constraints, opportunities and challenges for each of the business areas. The SFC also reviewed the 2018 Plan and five-year forecast prior to submission to the Board for approval. In accordance with its Terms of Reference, the SFC also met to consider and approve tender proposals.

Business Investment and Divestment Committee

During the year, the Business Investment and Divestment Committee which was set up by the Board to consider investments and divestments up to certain threshold values, was dissolved in the rationalisation exercise to streamline board committees. Investment and divestment decisions above Management and Sector board approval limits were taken up at the SFC and the ST Engineering Board level.

SHAREHOLDER RIGHTS AND RESPONSIBILITIES

Shareholder Rights

(Principle 14)

Communication with Shareholders

(Principle 15)

Conduct of Shareholder Meetings

(Principle 16)

At all times, ST Engineering is committed to disclosing material information in a timely, transparent and accurate manner in accordance with the Code.

All disclosures submitted to the Singapore Exchange Securities Trading Limited ("SGX-ST") through SGXNET are made available on the Group's corporate website at www.stengg.com.

The Investor Relations team and designated senior spokespersons establish and maintain regular dialogue with shareholders, media, analysts and the investment community through analyst and media briefings, facility visits, as well as investor roadshows and conferences. These platforms provide opportunities to present our business and investment case, as well as enable us to solicit and understand views of our stakeholders.

While we provide reasonable access to shareholders, media, analysts and the investment community to help them develop informed opinions of the Group, we do not respond or comment on rumours, market speculation, or forward projections of financial figures. In situations where the rumours or speculative news reports are materially incorrect or misleading, the Group may issue a clarification or confirmation statement through SGXNET.

The Group observes a "blackout period" of two weeks prior to the announcement of quarterly results. During this period, we do not comment on industry outlook, the Group's business performance and financial results. Neither do we participate in any investor meetings or conferences or proactively engage the financial media.

On dividend, the Company aims to provide shareholders with a sustainable dividend return and has, historically, been declaring interim and final dividends.

At general meetings of shareholders, we facilitate the opportunity for shareholders to participate effectively. Board members are present at these meetings where shareholders can seek clarification or question the Board on issues pertaining to the resolutions proposed before they are voted on. The external auditors are also present to assist the directors in answering questions on audit related matters. A copy of the AGM minutes is made available on the Group's corporate website at www.stengg.com.

At the AGM in April 2017, the President & CEO, delivered a presentation at the start of the Meeting, to update shareholders on the Group's recent developments and financial performance over the past year as well as focus areas for the Group.

To ensure authenticity of shareholder identity and due to other related security issues, the Company currently does not allow voting in absentia by mail, email or fax. For transparency in the voting process, ST Engineering has, since 2010, adopted the use of electronic poll voting for all the resolutions put to vote at its AGMs and Extraordinary General Meetings (EGMs). This is a fair and transparent way of voting based on the principle of one share one vote. The electronic process on how to vote is explained at the AGMs and EGMs. The Company also appoints an independent external party as scrutineer for the electronic poll voting. Prior to the AGMs and EGMs, the scrutineer will review the proxies and the electronic poll voting system, and be present at the proxy verification process, to ensure that the proxy and poll voting information is compiled correctly. The scrutineer attends the AGM to ensure that the polling process is properly carried out. Votes cast, for or against and the respective percentages, on each resolution are tallied and displayed 'live' on-screen to shareholders immediately after the voting. Each proposal is put to the vote as a separate resolution at general meetings. We do not "bundle" resolutions, unless the resolutions are interdependent and linked so as to form one significant proposal.

CODE OF CORPORATE GOVERNANCE 2012

SUMMARY OF DISCLOSURES

Principle and Guidelines	Description	Page Reference in ST Engineering Annual Report 2017
Guideline 1.1	Board's Role	Yes page 88
Guideline 1.2	All directors must objectively discharge their duties and responsibilities at all times as fiduciaries in the interests of the company	Yes page 88
Guideline 1.3	Delegation of authority, by the Board to any board committee, to make decisions on certain board matters	Yes page 88
Guideline 1.4	The number of meetings of the Board and board committees held in the year, as well as the attendance of every board member at these meetings	Yes pages 89-90
Guideline 1.5	The type of material transactions that require board approval under guidelines	Yes page 88
Guideline 1.6	The induction, orientation and training provided to new and existing directors	Yes pages 88-89

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SUMMARY OF DISCLOSURES (cont'd)

Principle and Guidelines	Description	Page Reference in ST Engineering Annual Report 2017
Guideline 2.1	There should be a strong and independent element on the Board, with independent directors making up at least one-third of the Board.	Yes page 91
Guideline 2.2	Independent directors should make up at least half of the Board where the Chairman of the Board and the CEO is the same person or are immediate family members, or the Chairman is part of the management team or the Chairman is not an independent director.	Yes page 91 – Chairman and CEO are separate individuals.
Guideline 2.3	The Board should identify in the company's Annual Report each director it considers to be independent. Where the Board considers a director to be independent in spite of the existence of a relationship as stated in the Code that would otherwise deem a director not to be independent, the nature of the director's relationship and the reasons for considering him as independent should be disclosed	Yes page 91
Guideline 2.4	Where the Board considers an independent director, who has served on the Board for more than nine years from the date of his first appointment, to be independent, the reasons for considering him as independent should be disclosed	NA – None of the directors have each served more than 9 years.
Guideline 2.5	The Board should examine its size and, with a view to determining the impact of the number upon effectiveness, decide on what it considers an appropriate size for the Board, which facilitates effective decision making.	Yes page 91
Guideline 2.6	The Board and its board committees should comprise directors who as a group provide an appropriate balance and diversity of skills, experience, gender and knowledge of the company.	Yes page 91
Guideline 2.7	Role of non-executive directors	Yes page 88
Guideline 2.8	To facilitate a more effective check on Management, non-executive directors are encouraged to meet regularly without the presence of Management.	Yes page 89
Guideline 3.1	Relationship between the Chairman and the CEO where they are immediate family members	NA page 91
Guideline 3.2	Role of Chairman of the Board	Yes page 92
Guideline 3.3	Appointment of a lead independent director	NA page 91 – Chairman and CEO are separate individuals.
Guideline 3.4	Periodic meeting of independent directors without the presence of other directors and lead independent director to provide feedback to the Chairman after such meetings.	Yes page 89

Principle and Guidelines	Description	Page Reference in ST Engineering Annual Report 2017
Guideline 4.1	Names of the members of the NC and the key terms of reference of the NC, explaining its role and the authority delegated to it by the Board	Yes page 92
Guideline 4.2	NC should make recommendations to the Board on relevant matters relating to the process for the selection, appointment and re-appointment of directors include composition and progressive renewal of the Board and each director's competencies, commitment, contribution and performance. All directors should be required to submit themselves for re-nomination and re-appointment at regular intervals and at least once every three years.	Yes pages 92-93
Guideline 4.3	The NC is charged with the responsibility of determining annually, and as and when circumstances require, if a director is independent, bearing in mind the circumstances set forth in Guidelines 2.3 and 2.4 and any other salient factors.	Yes pages 92-93
Guideline 4.4	The maximum number of listed company board representations which directors may hold should be disclosed	Yes Page 93
Guideline 4.5	Appointment of alternate directors.	Yes page 91
Guideline 4.6	Process for the selection, appointment and re-appointment of new directors to the Board, including the search and nomination process	Yes pages 92-93
Guideline 4.7	Key information regarding directors, including which directors are executive, non-executive or considered by the NC to be independent	Yes page 91. More information can be found on "Board of Directors" section of the AR.
Guideline 5.1	The Board should state in the company's Annual Report how assessment of the Board, its board committees and each director has been conducted. If an external facilitator has been used, the Board should disclose in the company's Annual Report whether the external facilitator has any other connection with the company or any of its directors. This assessment process should be disclosed in the company's Annual Report	Yes page 93
Guidelines 5.2 and 5.3	Evaluation of the Board and individual directors	Yes Page 93 – Only evaluation of Board. No evaluation of individual directors.
Guidelines 6.1 to 6.3	Board should have separate and independent access to Management and company secretary. Directors are entitled to request from Management and should be provided with such additional information as needed to make informed decisions.	Yes page 94

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SUMMARY OF DISCLOSURES (cont'd)

Principle and Guidelines	Description	Page Reference in ST Engineering Annual Report 2017
Guideline 6.4	The appointment and the removal of the company secretary should be a matter for the Board as a whole.	Yes page 95
Guideline 6.5	Procedure for directors, either individually or as a group, in the furtherance of their duties, to take independent professional advice, if necessary, and at the company's expense.	Yes page 94
Guideline 7.1	Names of the members of the RC and the key terms of reference of the RC, explaining its role and the authority delegated to it by the Board	Yes pages 95-96
Guideline 7.2	RC should review and recommend to the Board a general framework of remuneration for the Board and key management personnel.	Yes pages 96-99
Guideline 7.3	Names and firms of the remuneration consultants (if any) should be disclosed in the annual remuneration report, including a statement on whether the remuneration consultants have any relationships with the company	Yes page 96
Guideline 7.4	RC should review the company's obligations arising in the event of termination of the executive directors' and key management personnel's contracts of service, to ensure that such contracts of service contain fair and reasonable termination clauses which are not overly generous.	Yes page 98
Principle 8 Guidelines 8.1 to 8.4	The level and structure of remuneration should be aligned with the long-term interest and risk policies of the company, and should be appropriate to attract, retain and motivate the directors and key management personnel	Yes pages 96-99
Principle 9	Clear disclosure of remuneration policies, level and mix of remuneration, and procedure for setting remuneration	Yes pages 95-99
Guideline 9.1	Remuneration of directors, the CEO and at least the top five key management personnel (who are not also directors or the CEO) of the company. The annual remuneration report should include the aggregate amount of any termination, retirement and postemployment benefits that may be granted to directors, the CEO and the top five key management personnel (who are not directors or the CEO)	Yes pages 100-102
Guideline 9.2	Fully disclose the remuneration of each individual director and the CEO on a named basis. There will be a breakdown (in percentage or dollar terms) of each director's and the CEO's remuneration earned through base/fixed salary, variable or performance-related income/bonuses, benefits in kind, stock options granted, share-based incentives and awards, and their long-term incentives	Yes pages 100-101

Principle and Guidelines	Description	Page Reference in ST Engineering Annual Report 2017
Guideline 9.3	Name and disclose the remuneration of at least the top five key management personnel (who are not directors or the CEO) in bands of S\$250,000. There will be a breakdown (in percentage or dollar terms) of each key management personnel's remuneration earned through base/ fixed salary, variable or performance-related income/bonuses, benefits in kind, stock options granted, share-based incentives and awards, and other long-term incentives. In addition, the company should disclose in aggregate the total remuneration paid to the top five key management personnel (who are not directors or the CEO). As best practice, companies are also encouraged to fully disclose the remuneration of the said top five key management personnel	Yes page 102
Guideline 9.4	Details of the remuneration of employees who are immediate family members of a director or the CEO, and whose remuneration exceeds S\$50,000 during the year. This will be done on a named basis with clear indication of the employee's relationship with the relevant director or the CEO. Disclosure of remuneration should be in incremental bands of S\$50,000	Yes page 98
Guideline 9.5	Details and important terms of employee share schemes	Yes pages 96-98
Guideline 9.6	For greater transparency, companies should disclose more information on the link between remuneration paid to the executive directors and key management personnel, and performance. The annual remuneration report should set out a description of performance conditions to which entitlement to short-term and long-term incentive schemes are subject, an explanation on why such performance conditions were chosen, and a statement of whether such performance conditions are met.	Yes pages 96-98
Principle 10 Guidelines 10.1 to 10.3	The Board should present a balanced and understandable assessment of the company's performance, position and prospects	Yes page 103
Guideline 11.1	The Board should determine the company's levels of risk tolerance and risk policies, and oversee Management in the design, implementation and monitoring of the risk management and internal control systems.	Yes pages 105-108
Guideline 11.2	The Board should, at least annually, review the adequacy and effectiveness of the company's risk management and internal control systems, including financial, operational, compliance and information technology controls. Such review can be carried out internally or with the assistance of any competent third parties.	Yes page 108

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SUMMARY OF DISCLOSURES (cont'd)

Principle and Guidelines	Description	Page Reference in ST Engineering Annual Report 2017
Guideline 11.3	<p>The Board should comment on the adequacy and effectiveness of the internal controls, including financial, operational, compliance and information technology controls, and risk management systems.</p> <p>The commentary should include information needed by stakeholders to make an informed assessment of the company's internal control and risk management systems.</p> <p>The Board should also comment on whether it has received assurance from the CEO and the CFO: (a) that the financial records have been properly maintained and the financial statements give true and fair view of the company's operations and finances; and (b) regarding the effectiveness of the company's risk management and internal control systems.</p>	<p>Yes page 106</p> <p>Yes page 108</p>
Guideline 11.4	The Board may establish a separate board risk committee or otherwise assess appropriate means to assist it in carrying out its responsibility of overseeing the company's risk management framework and policies.	Yes pages 106-108
Guideline 12.1	Names of the members of the AC and the key terms of reference of the AC, explaining its role and the authority delegated to it by the Board	Yes pages 103-104
Guideline 12.2	Members of the AC should be appropriately qualified to discharge their responsibilities. At least two members, including the AC Chairman, should have recent and relevant accounting or related financial management expertise or experience, as the Board interprets such qualification in its business judgement.	Yes page 104
Guideline 12.3	The AC should have explicit authority to investigate any matter within its terms of reference, full access to and co-operation by Management and full discretion to invite any director or executive officer to attend its meetings, and reasonable resources to enable it to discharge its functions properly.	Yes page 103
Guideline 12.4	Duties of AC	Yes page 103
Guideline 12.5	The AC should meet (a) with the external auditors, and (b) with the internal auditors, in each case without the presence of Management, at least annually.	Yes page 104
Guideline 12.6	Aggregate amount of fees paid to the external auditors for that financial year, and breakdown of fees paid in total for audit and non-audit services respectively, or an appropriate negative statement	Yes page 105
Guideline 12.7	The existence of a whistle-blowing policy should be disclosed in the company's Annual Report	Yes page 104

Principle and Guidelines	Description	Page Reference in ST Engineering Annual Report 2017
Guideline 12.8	Summary of the AC's activities and measures taken to keep abreast of changes to accounting standards and issues which have a direct impact on financial statements	Yes pages 104-105
Guideline 12.9	A former partner or director of the company's existing auditing firm or auditing corporation should not act as a member of the company's AC: (a) within a period of 12 months commencing on the date of his ceasing to be a partner of the auditing firm or director of the auditing corporation; and in any case (b) for as long as he has any financial interest in the auditing firm or auditing corporation.	Yes page 104
Guideline 13.1	Internal Auditor's (IA) primary line of reporting should be to the AC Chairman although the IA would also report administratively to the CEO. The AC approves the hiring, removal, evaluation and compensation of the head of the IA function, or the accounting / auditing firm or corporation to which the IA function is outsourced. The IA should have unfettered access to all the company's documents, records, properties and personnel, including access to the AC.	Yes page 105
Guideline 13.2	The AC should ensure that the IA function is adequately resourced and has appropriate standing within the company	Yes page 105
Guideline 13.3	The IA function should be staffed with persons with the relevant qualifications and experience	Yes page 105
Guideline 13.4	The IA should carry out its function according to the standards set by nationally or internationally recognised professional bodies including the Standards for the Professional Practice of Internal Auditing set by The Institute of Internal Auditors	Yes page 105
Guideline 13.5	The AC should, at least annually, review the adequacy and effectiveness of the IA function	Yes page 106
Guideline 14.1	Companies should facilitate the exercise of ownership rights by all shareholders	Yes page 108
Guideline 14.2	Companies should ensure that shareholders have the opportunity to participate effectively in and vote at general meetings of shareholders. Shareholders should be informed of the rules, including voting procedures, that govern general meetings of shareholders	Yes page 109
Guideline 15.1	Companies should devise an effective investor relations policy to regularly convey pertinent information to shareholders	Yes page 108

C O R P O R A T E G O V E R N A N C E

SUMMARY OF DISCLOSURES (cont'd)

Principle and Guidelines	Description	Page Reference in ST Engineering Annual Report 2017
Guideline 15.2	Companies should disclose information on a timely basis through SGXNET and other information channels, including a well-maintained and updated corporate website. Where there is inadvertent disclosure made to a select group, companies should make the same disclosure publicly to all others as promptly as possible.	Yes page 108
Guideline 15.3	The Board should establish and maintain regular dialogue with shareholders, to gather views or inputs, and address shareholders' concern.	Yes page 108
Guideline 15.4	The steps the Board has taken to solicit and understand the views of the shareholders e.g. through analyst briefings, investor roadshows or Investors' Day briefings	Yes Page 108
Guideline 15.5	Where dividends are not paid, companies should disclose their reasons.	NA
Guideline 16.1	Shareholders should have the opportunity to participate effectively in and to vote at general meetings of shareholders. Companies should make the appropriate provisions in their Articles of Association (or other constitutive documents) to allow for absentia voting at general meetings of shareholders.	Yes page 109
Guideline 16.2	There should be separate resolutions at general meetings on each substantially separate issue.	Yes page 109
Guideline 16.3	All directors should attend general meetings of shareholders. In particular, the Chairman of the Board and the respective Chairman of the AC, NC and RC should be present and available to address shareholders' queries at these meetings. The external auditors should also be present to address shareholders' queries about the conduct of audit and the preparation and content of the auditors' report.	Yes page 109
Guideline 16.5	Companies should put all resolutions to vote by poll and make an announcement of the detailed results showing the number of votes cast for and against each resolution and the respective percentages. Companies are encouraged to employ electronic polling.	Yes page 109



FINANCIAL REPORT

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DIRECTORS' STATEMENT

31 DECEMBER 2017

(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 and of the Company for the financial year ended 31 December 2017.

In our opinion:

- (a) the financial statements set out on pages 135 to 270 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 2017, and changes in equity of the Group and of the Company, and the financial performance and cash flows of the Group for the year ended on that date in accordance with the provisions of the Singapore Companies Act, Chapter 50 and Singapore Financial Reporting Standards; 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)
Vincent Chong Sy Feng	
Quek See Tiat	
LG Lim Cheng Yeow Perry	
Neo Kian Hong	(Appointed on 30 June 2017)
Quek Gim Pew	
Dr Stanley Lai Tze Chang	
Khoo Boon Hui	
Olivia Lum Ooi Lin	
Dr Beh Swan Gin	
Lim Sim Seng	
Lim Ah Doo	
RADM Alan Goh Kim Hua	(Alternate Director to LG Lim Cheng Yeow Perry)

ARRANGEMENTS TO ENABLE DIRECTORS TO ACQUIRE SHARES OR DEBENTURES

Except for the Singapore Technologies Engineering Share Option Plan (ESOP), Singapore Technologies Engineering Performance Share Plan 2010 (PSP2010) and Singapore Technologies Engineering Restricted Share Plan 2010 (RSP2010) (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 objects 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

31 DECEMBER 2017

(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, Chapter 50, 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 2017 or date of appointment if later	31 December 2017
The Company		
Ordinary Shares		
Kwa Chong Seng	928,100 * ¹	975,600 * ¹
Vincent Chong Sy Feng	1,090,513	1,467,089
Quek See Tiat	25,200	34,200
Dr Stanley Lai Tze Chang	114,040	130,540
Khoo Boon Hui	10,700	21,700
Olivia Lum Ooi Lin	14,600	22,600
Lim Sim Seng	4,800 * ²	18,100 * ²
Lim Ah Doo	31,300	42,600
Conditional Award of Shares under PSP2010 for performance period 2015 to 2017		
Vincent Chong Sy Feng (126,000 shares)	0 to 214,200 * ¹	0 to 214,200 * ¹
Conditional Award of Shares under PSP2010 for performance period 2016 to 2018		
Vincent Chong Sy Feng (70,000 shares)	0 to 119,000 * ¹	0 to 119,000 * ¹
Conditional Award of Shares under PSP2010 for performance period 2017 to 2019		
Vincent Chong Sy Feng (258,800 shares)	—	0 to 439,960 * ¹
Time-based restricted shares under RSP2010 Vested in 2015 to 2017		
Vincent Chong Sy Feng (434,160 shares)	144,720 * ²	—

DIRECTORS' STATEMENT

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

DIRECTORS' INTERESTS (continued)

	Holdings in the name of the director, spouse or infant children	
	1 January 2017 or date of appointment if later	31 December 2017
The Company		
<i>Time-based restricted shares under RSP2010 Vested in 2015 to 2017</i>		
Vincent Chong Sy Feng (647,061 shares)	215,687 ^{#2}	—
<i>Unvested shares under RSP2010 arising from release of Conditional Award for performance period 1 January 2015 to 31 December 2015</i>		
Vincent Chong Sy Feng (64,676 shares)	48,507 ^{#2}	32,338 ^{#2}
<i>Conditional Award of Shares under RSP2010 for performance period 1 January 2017 to 31 December 2017</i>		
Vincent Chong Sy Feng (72,800 shares)	—	0 to 109,200 ^{#3}
Related Corporations		
Ascendas Funds Management (S) Limited		
<i>Unit holdings in Ascendas Real Estate Investment Trust</i>		
Quek See Tiat	34,000	34,000
Mapletree Greater China Commercial Trust Management Ltd.		
<i>Unit holdings in Mapletree Greater China Commercial Trust</i>		
Khoo Boon Hui	300,000	300,000
Mapletree Logistics Trust Management Ltd.		
<i>Unit holdings in Mapletree Logistics Trust</i>		
Lim Ah Doo	185,000	185,000

DIRECTORS' STATEMENT

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

DIRECTORS' INTERESTS (continued)

	Holdings in the name of the director, spouse or infant children	
	1 January 2017 or date of appointment if later	31 December 2017
Related Corporations		
Olam International Limited		
Ordinary Shares		
Kwa Chong Seng	420,000 * ²	609,279 * ³
Warrants		
Kwa Chong Seng	38,020 * ²	—
Singapore Airlines Limited		
Ordinary Shares		
Neo Kian Hong	9,000	9,000
Singapore Telecommunications Limited		
Ordinary Shares		
Kwa Chong Seng	26,466	26,466
Quek See Tiat	680	680
Neo Kian Hong	8,030	8,030
Quek Gim Pew	3,120	3,120
Khoo Boon Hui	3,087	3,087
Olivia Lum Ooi Lin	100,460	101,820
StarHub Ltd		
Ordinary Shares		
Quek See Tiat	5,000	5,000

*¹ Includes interest in 300,000 shares in Singapore Technologies Engineering Ltd, held in trust by a trustee company on behalf of the director.

*² Held in trust by a trustee company on behalf of the director.

*³ Includes interest in 189,279 shares in Olam International Limited, held in trust by a trustee company on behalf of the director.

*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 Balance of unvested restricted shares to be released according to the stipulated vesting periods.

*³ A minimum threshold performance over a 1-year period is required for any restricted shares to be released. The actual number of restricted shares to be released is capped at 150% of the conditional award and will be delivered in phases according to the stipulated vesting periods.

There was no change in any of above-mentioned directors' interest in the Company between the end of the financial year and 21 January 2018.

DIRECTORS' STATEMENT

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

SHARE PLANS

The Executive Resource and Compensation Committee (ERCC) is responsible for administering the ST Engineering Share Plans.

The ERCC members are Mr Kwa Chong Seng (Chairman), Mr Lim Sim Seng and Dr Stanley Lai Tze Chang.

As at 31 December 2017, no participants have been granted options and/or have received shares under the ST Engineering Share Plans which, in aggregate, represent 5% or more of the total number of new shares available under the ST Engineering Share Plans.

The aggregate number of new shares issued pursuant to the RSP2010 and PSP2010 did not exceed 8% of the issued share capital of the Company.

Except as disclosed below, there were no options granted and no shares awarded by the Company to any person to take up unissued shares of the Company.

(a) ESOP

- (i) The options granted under the ESOP are as follows:

Participant	Aggregate options granted and accepted since commencement to end of financial year under review	Aggregate options exercised/ lapsed since commencement to end of financial year under review	Aggregate options outstanding as at end of financial year under review
Non-Executive Directors of the Company and its subsidiaries (including current and former directors)	5,405,566	5,405,566	–
Group Executives	193,717,858	193,717,858	–
Parent Group Executives and others	187,320	187,320	–

DIRECTORS' STATEMENT

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

SHARE PLANS (continued)

(a) *ESOP* (continued)

- (ii) The options granted by the Company do not entitle the holders of the options, by virtue of such holdings, to any right to participate in any share issue of any other company.
- (iii) During the financial year, treasury shares in the Company were reissued pursuant to the exercise of options to take up unissued shares of the Company.

(b) *PSP2010 (PSP)*

The PSP is established with the objective of motivating senior management staff to strive for sustained long-term growth and performance in ST Engineering and its subsidiaries (ST Engineering Group). Awards of performance shares are granted conditional on performance targets set based on the ST Engineering Group corporate objectives.

Pursuant to the PSP, the ERCC has decided to grant awards on an annual basis, conditional on targets set for a performance period, currently prescribed to be a 3-year performance period. The performance shares will only be released to the recipient at the end of the performance qualifying period. A specified number of performance shares shall be released by the ERCC to the recipient and the actual number of performance shares will depend on the achievement of set targets over the respective performance period. A minimum threshold performance is required for any performance share 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 PSP grants are Absolute Total Shareholder Return (TSR) against Cost of Equity hurdles (i.e. measure of absolute Wealth Added); and Relative TSR against Defensive Stock Index, the constituents of which are selected "defensive stock" companies that have similar market risk as the Group and are listed on the Singapore Exchange Securities Trading Limited (SGX).

In addition to PSP performance targets being met, the ERCC decided that the final award for PSP is conditional upon the performance targets for RSP that has the same end of performance period being met. Known as the plan trigger condition, this is to create alignment between senior management and other employees. The final award for PSP 2015 is therefore conditional on the performance targets for RSP 2017, which has the same end of performance period in December 2017, being met.

DIRECTORS' STATEMENT

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

SHARE PLANS (continued)

(b) PSP2010 (PSP) (continued)

The awards granted under the PSP2010 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
Director of the Company					
Vincent Chong Sy Feng	0 to 439,960	–	0 to 773,160	–	0 to 773,160
Group Executives (including Vincent Chong Sy Feng)					
	0 to 2,914,905	– *	0 to 18,845,605	3,075,043	0 to 8,513,462

* During the year, the Group did not meet the pre-determined target performance level and that tranche of conditional award has thus lapsed.

(c) RSP2010 (RSP)

The RSP is established with the objective of motivating managers and above to strive for sustained long-term growth and superior performance in ST Engineering Group. It also aims to foster a share ownership culture among staff within the ST Engineering Group and to better align staff's incentive scheme with shareholders' interest.

Pursuant to the RSP, the ERCC has decided to grant awards on an annual basis, conditional on targets set for a performance period, currently prescribed to be a 1-year performance period. The actual number of restricted shares delivered will depend on the achievement of set targets over the respective performance period. This will be determined by the ERCC at the end of the qualifying performance period and released equally to the recipient over a 4-year vesting period.

A minimum threshold performance is required for any restricted share to be released while the maximum number of restricted shares to be delivered is capped at 150% of the conditional award.

The targets measured over a 1-year performance period are set based on ST Engineering Group corporate objectives. The performance measures used for the 1-year performance period are ST Engineering Group Net Profit After Tax and EBITDA Margin.

Since 2011, the awards granted under the ST Engineering RSP2010 to the Non-Executive Directors (other than those from the public sector) are outright shares with no performance and vesting conditions but with a Moratorium on selling. These shares will form up to 30% of their total compensation with the remaining 70% payable in cash.

DIRECTORS' STATEMENT

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

SHARE PLANS (continued)(c) **RSP2010 (RSP)** (continued)

The awards granted under the RSP2010 are as follows:

Participant	Conditional awards/awards granted during the financial year under review	Awards released during the financial year under review	Aggregate conditional awards/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	Aggregate conditional awards not released as at end of financial year under review
RSP2010						
Directors of the Company						
Kwa Chong Seng	47,500	47,500	175,600	175,600	–	–
Vincent Chong Sy Feng	0 to 109,200	376,576	0 to 1,624,951	1,437,089	32,338	0 to 109,200
Quek See Tiat	9,000	9,000	34,200	34,200	–	–
Dr Stanley Lai Tze Chang	16,500	16,500	105,000	105,000	–	–
Khoo Boon Hui	11,000	11,000	21,700	21,700	–	–
Olivia Lum Ooi Lin	8,000	8,000	22,600	22,600	–	–
Lim Sim Seng	13,300	13,300	18,100	18,100	–	–
Lim Ah Doo	11,300	11,300	12,600	12,600	–	–
Non-Executive Directors of the Company and its subsidiaries (including current and former directors)						
	145,100	145,100	1,042,400	1,042,400	–	–
Group Executives (including Vincent Chong Sy Feng)						
	0 to 7,627,183	4,147,360	0 to 58,135,156	20,687,852	5,647,978	0 to 7,107,340

DIRECTORS' STATEMENT

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

AUDIT COMMITTEE

The Audit Committee comprises four independent non-executive 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:

Quek See Tiat (Chairman)
Dr Stanley Lai Tze Chang
Khoo Boon Hui
Lim Ah Doo

The Audit Committee carried out its functions in accordance with Section 201B of the Singapore Companies Act, Chapter 50, the SGX Listing Manual and the Code of Corporate Governance.

The Audit Committee met during the year to review the scope of the internal audit functions and the scope of work of the statutory 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 and 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 the auditors, KPMG LLP, be nominated for re-appointment as auditors at the forthcoming Annual General Meeting of the Company.

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

AUDITORS

The Auditors, KPMG LLP, have indicated their willingness to accept re-appointment.

On behalf of the Board of Directors

Kwa Chong Seng
Director

Vincent Chong Sy Feng
Director

Singapore
22 February 2018

INDEPENDENT AUDITORS' REPORT

MEMBERS OF THE COMPANY
SINGAPORE TECHNOLOGIES ENGINEERING LTD

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Opinion

We have audited the accompanying financial statements of Singapore Technologies Engineering Ltd (the Company) and its subsidiaries (the Group), which comprise the balance sheets of the Group and the Company as at 31 December 2017, the statement of changes in equity of the Group and Company, the consolidated income statement, the consolidated statement of comprehensive income and the consolidated statement of cash flows of the Group for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, as set out on pages 135 to 270.

In our opinion, the accompanying consolidated financial statements of the Group and the balance sheet and statement of changes in equity of the Company are properly drawn up in accordance with the provisions of the Singapore Companies Act, Chapter 50 (the Act) and Financial Reporting Standards in Singapore (FRSs) so as to give a true and fair view of the financial position of the Group and Company as at 31 December 2017, and changes in equity of the Group and Company and the financial performance and cash flows of the Group for the year ended on that date.

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 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. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. 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.

INDEPENDENT AUDITORS' REPORT

MEMBERS OF THE COMPANY
SINGAPORE TECHNOLOGIES ENGINEERING LTD

THE KEY AUDIT MATTER	HOW WAS THE MATTER ADDRESSED IN OUR AUDIT
<p><i>Impairment of non-financial assets, including goodwill and other intangible assets</i></p> <p>Goodwill and intangible assets form 13% of the Group's total assets.</p> <p>The Group uses the discounted cash flow technique to determine the recoverable amounts of each cash-generating unit ("CGU").</p> <p>There is a risk of impairment of certain CGUs in United States which are operating in challenging business environment. This increases the level of judgement and estimation uncertainties within management's cash flow forecast.</p>	<p>Our procedures included, among others:</p> <ul style="list-style-type: none"> • We evaluated the identification of CGUs within the Group against the requirements of the accounting standards. • We reviewed the basis and methodology adopted to arrive at the recoverable amounts of the CGUs. • We assessed the key assumptions used in the cash flow projections, namely sales growth rates, earnings before interest, depreciation and amortisation ("EBIDA") growth rates, discount rates, terminal growth rates by comparing the Group's assumptions to externally derived data where available. • We reviewed the historical accuracy of the Group's estimates in the previous periods, identified and analysed changes in the assumptions from prior periods, focusing particularly on those CGUs operating in challenging business environment. • We have also assessed the adequacy of related disclosures in Note 15 to the financial statements. <p>Findings:</p> <p>We found that the assumptions and resulting estimates used in the discounted cash flow projections for all the CGUs were within acceptable range, except for two CGUs in the United States, which includes growth estimates that exceeded historical performance. In these instances, we have re-computed the recoverable amount using reduced growth estimates and we agree with management that no impairment charge is required for these CGUs.</p> <p>Overall, the results of our evaluation of the Group's impairment charge are consistent with management's assessment.</p> <p>We found the Group's disclosure provides sufficient details on the sensitivity of the impairment assessment to variations in key assumptions.</p>

INDEPENDENT AUDITORS' REPORT

MEMBERS OF THE COMPANY
SINGAPORE TECHNOLOGIES ENGINEERING LTD

THE KEY AUDIT MATTER	HOW WAS THE MATTER ADDRESSED IN OUR AUDIT
<p><i>Impairment of property, plant and equipment – Roll-on/Roll-off Passenger ferry ("ROPAX")</i></p> <p>The carrying amount of a ROPAX vessel, which is chartered out on a short term operating lease, representing a significant balance within the boats and barges class of property, plant and equipment may exceed its recoverable amount.</p> <p>ST Marine ("STM") was awarded a contract to design and build the ROPAX vessel in 2007. The contract was subsequently terminated in 2011, resulting in STM taking title of the vessel. Since the repossession of the vessel, management has tried to realise the value of the vessel through sale and charter. Limited market demand for such a vessel led to difficulties in selling or chartering the vessel out on a long term basis, resulting in write downs of the carrying value of the ROPAX between 2011 and 2013, to reflect its net realisable value. Since then, the ROPAX has been put to use through short term chartering arrangements. The vessel is currently under a charter to provide ferry services between Spain and Morocco for a two-year period beginning January 2016.</p> <p>The Group evaluated the recoverable amount of the ROPAX using the discounted cash flow ("DCF") technique across two scenarios where the ROPAX is chartered or disposed, weighted based on likelihood of outcomes to derive at a recoverable amount for the ROPAX.</p> <p>There are inherent uncertainties involved in estimating the recoverable amount of the ROPAX as it is dependent on the current economic conditions and whether the carrying amount can be realised through future sale or other chartering arrangements.</p>	<p>Our procedures included, amongst others:</p> <ul style="list-style-type: none"> • We assessed the factors relevant to the likelihood of the outcome of each scenario. • We considered two other possible leasing scenarios that could happen and computed the recoverable amount after incorporating the additional scenarios and compared to the carrying amount of the ROPAX. • We evaluated the key assumptions used in the review, particularly charter rates by comparing to the rates used in the existing lease arrangement and externally derived data where available. • We compared the discount rate used by management to our calculations based on market data. <p>Findings:</p> <p>The results of our evaluation of the valuation of the ROPAX are consistent with management's assessment that no further impairment charge is required. Nonetheless, uncertainties remain over the probability of securing longer term chartering arrangements or selling the vessel that may change the estimated recoverable amount.</p>

INDEPENDENT AUDITORS' REPORT

MEMBERS OF THE COMPANY
SINGAPORE TECHNOLOGIES ENGINEERING LTD

THE KEY AUDIT MATTER	HOW WAS THE MATTER ADDRESSED IN OUR AUDIT
<p>Revenue recognition</p> <p>The Group's three largest revenue streams are derived from the sale of goods, rendering of services and long term contract revenues.</p> <p>Some of these revenue streams have contracts that are accounted for based on the stage of completion of each individual contract. The amount of revenue and profit recognised is dependent on management's assessment on the stage of completion and the forecast cost profile of each long term contract. As long-term contracts can extend over multiple years, changes in conditions and circumstances over time can result in changes in the nature or extent of project cost incurred. In addition, variations to the original contract terms, including cost overruns may require further negotiations and settlements resulting in penalties and provisions for losses.</p> <p>Judgement is applied in forecasting the costs to be incurred, the overall margins of these contracts and assessment of the stage of completion. Such estimates are inherently judgemental.</p>	<p>Our procedures included, amongst others:</p> <ul style="list-style-type: none"> • We evaluated the revenue recognition policies of the Group for the different revenue streams to ensure revenue is recognised appropriately. • We tested the controls designed and applied by the Group to ensure that the estimates used in assessing revenue and costs are appropriate. The controls tested include, amongst others, controls over the preparation and authorisation of project evaluation, approval of revenue calculated and project budgets, and accuracy and completeness over manpower and labour rates computed. • We selected a sample of contracts for testing based on a number of qualitative and quantitative factors, such as contracts with significant deterioration in margin, those contracts with variations, claims and other factors which indicated that judgement is required in the estimates developed for current and forecast contract performance. • For each selected contract, we assessed the appropriateness of estimates used in the forecasts and whether the estimates showed any evidence of management bias. • We reviewed the contractual terms and work status of the customer contracts and verified that revenue is recognised according to the stage of completion of each project. <p>Findings:</p> <p>We found that the actual results at completion of certain ship building contracts in the US that adopted first of class designs tend to be lower than the initial margins estimated at the inception of the contracts. The changes in margins were due to revisions in the quantity of materials calculated and the corresponding labour hours required as the design and engineering matures. We found that the estimates used to derive the revised margins were fair.</p> <p>For the other long term contracts of the Group, we found that the estimates used to derive budgeted margins were fair except for some projects where the actual profit margins at completion of the contracts tend to be marginally higher compared to the estimated margins used for profit recognition at various stages of completion.</p>

INDEPENDENT AUDITORS' REPORT

MEMBERS OF THE COMPANY
SINGAPORE TECHNOLOGIES ENGINEERING LTD

THE KEY AUDIT MATTER	HOW WAS THE MATTER ADDRESSED IN OUR AUDIT
<p>Net realisable value of inventories</p> <p>There are judgement and estimates used in the valuation of the Group's inventories.</p> <p>In particular, the Group holds a significant amount of aircraft components for trading purposes which are slow moving. Due to the weak economic environment, resulting in a slower demand for aircraft components, there is a risk that the estimates of net realisable values exceed future selling prices, resulting in losses when the inventories are sold. Based on independent valuation reports, the Group recorded write downs of the carrying amount of the aircraft components in 2014 and 2015.</p> <p>In 2016, the Group revised its inventory obsolescence policy for components related to younger fleet to better reflect the obsolescence rate based on industry data and trends. The policy was assessed to remain appropriate in FY2017.</p>	<p>Our procedures included, amongst others:</p> <ul style="list-style-type: none"> • We evaluated management's basis of deriving the obsolescence policy by considering the current economic conditions and industry trends. • We analysed the historical sales transactions and orders for future sales, and compared them to inventory levels. • We compared the remaining useful lives of the aircraft components to the projected remaining economic life of the respective aircraft types relating to the component pool. <p>Findings:</p> <p>We found that management's assessment to evaluate inventories at the lower of cost or net realisable value as at 31 December 2017 and the assumptions made by management on the valuation of aircraft components to be fair. However, there remains volatility in the components trading market that may impact the realisation of the value of inventories in the future.</p>
<p>Provision for warranties</p> <p>Warranties are provided as stipulated under each sales contract. Such specific provisions are assessed and decided by project managers based on their experience of the likelihood of claims and risks arising from contracts covered by warranty.</p> <p>For contracts that do not specifically indicate any warranty provision, warranties are provided based on a percentage of sales.</p> <p>Determining the amount of both specific and general warranties involves judgement and estimates.</p>	<p>Our procedures included, amongst others:</p> <ul style="list-style-type: none"> • We assessed the key assumptions applied in determining the Group's provision amount for warranties. This included a comparison of the provision for warranties to the historical amounts being utilised, to determine whether the Group's estimation techniques were reasonable. <p>Findings:</p> <p>Based on our procedures, we found that the Group's provision falls within the upper range of the potential claims assessed by management.</p>

INDEPENDENT AUDITORS' REPORT

MEMBERS OF THE COMPANY
SINGAPORE TECHNOLOGIES ENGINEERING LTD

Other information

Management is responsible for the other information contained in the annual report. Other information is defined as all information in the annual report other than the financial statements and our auditors' report thereon.

We have obtained all other information prior to the date of this auditors' report except for the Shareholding Statistics which is 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 auditors' 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 Shareholding Statistics, 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.

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 FRSs, 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.

Auditors' 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 auditors' 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.

INDEPENDENT AUDITORS' REPORT

MEMBERS OF THE COMPANY
SINGAPORE TECHNOLOGIES ENGINEERING LTD

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 controls.
- Obtain an understanding of internal controls 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 controls.
- 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 auditors' 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 auditors' 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.

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 auditors' report unless the law or regulations preclude 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.

INDEPENDENT AUDITORS' REPORT

MEMBERS OF THE COMPANY
SINGAPORE TECHNOLOGIES ENGINEERING LTD

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 auditors' report is Quek Shu Ping.

KPMG LLP
*Public Accountants and
Chartered Accountants*

Singapore
22 February 2018

CONSOLIDATED INCOME STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

	Note	Group 2017 \$'000	2016 \$'000
Revenue	4	6,619,491	6,683,737
Cost of sales		(5,296,209)	(5,378,469)
Gross profit		1,323,282	1,305,268
Distribution and selling expenses		(169,488)	(182,322)
Administrative expenses		(474,045)	(476,252)
Other operating expenses		(126,404)	(175,611)
Profit from operations	5	553,345	471,083
Other income		39,944	67,815
Other expenses		(1,278)	(15)
Other income, net	7	38,666	67,800
Finance income		38,222	33,691
Finance costs		(56,271)	(45,707)
Finance costs, net	8	(18,049)	(12,016)
Share of results of associates and joint ventures, net of tax		49,332	63,766
Profit before taxation		623,294	590,633
Taxation	9	(87,867)	(97,770)
Profit for the year		535,427	492,863
Attributable to:			
Shareholders of the Company		511,882	484,514
Non-controlling interests	40	23,545	8,349
		535,427	492,863
Earnings per share (cents)	10		
Basic		16.43	15.60
Diluted		16.35	15.60

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

	Note	Group 2017 \$'000	2016 \$'000
Profit for the year		535,427	492,863
Other comprehensive income			
<i>Items that will not be reclassified subsequently to profit or loss:</i>			
Defined benefit plan remeasurements		(6,109)	(5,964)
<i>Items that are or may be reclassified subsequently to profit or loss:</i>			
Net fair value changes on available-for-sale financial assets	33	8,670	1,089
Net fair value changes on cash flow hedges		56,112	4,124
Share of net fair value changes on cash flow hedges of joint ventures	33	(127)	–
Realisation of cash flow hedge reserve arising from disposal of an associate	33	–	11,368
Foreign currency translation differences		(47,327)	(2,937)
Share of foreign currency translation differences of associates and joint ventures	33	(11,102)	(2,809)
Reclassification of foreign currency translation reserve to profit or loss arising from disposal of foreign entities		2,161	9,446
		8,387	20,281
Other comprehensive income for the year, net of tax		2,278	14,317
Total comprehensive income for the year, net of tax		537,705	507,180
Total comprehensive income attributable to:			
Shareholders of the Company		502,229	501,379
Non-controlling interests	40	35,476	5,801
		537,705	507,180

The accompanying notes are an integral part of the financial statements.

BALANCE SHEETS

AS AT 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

	Note	Group		Company	
		2017 \$'000	2016 \$'000	2017 \$'000	2016 \$'000
ASSETS					
Non-current assets					
Property, plant and equipment	11	1,719,396	1,670,132	9,661	3,251
Subsidiaries	12	–	–	1,277,232	1,277,609
Associates and joint ventures	13	448,387	405,530	17,657	17,657
Investments	14	360,346	322,051	–	–
Intangible assets	15	1,087,412	1,019,585	–	–
Long-term trade receivables		1,052	1,894	–	–
Deferred tax assets	17	74,047	92,528	2,200	4,813
Amounts due from related parties	20	4,806	4,806	344,514	507,257
Advances and other receivables	21	20,406	2,534	–	–
Derivative financial instruments	39	33,082	32,967	–	–
Employee benefits	28	243	151	–	–
		3,749,177	3,552,178	1,651,264	1,810,587
Current assets					
Inventories and work-in-progress	18	1,764,320	1,898,278	–	–
Trade receivables	19	1,645,824	1,457,982	–	–
Amounts due from related parties	20	28,271	24,618	388,894	199,634
Advances and other receivables	21	286,419	338,217	12,923	2,084
Short-term investments	14	357	188,890	–	–
Bank balances and other liquid funds	22	999,003	904,890	596,494	588,862
		4,724,194	4,812,875	998,311	790,580
Total assets		8,473,371	8,365,053	2,649,575	2,601,167
EQUITY AND LIABILITIES					
Current liabilities					
Advance payments from customers		822,958	932,515	–	–
Trade payables and accruals	23	1,612,509	1,722,488	21,019	24,148
Amounts due to related parties	24	104,042	28,449	545,066	504,827
Provisions	25	235,240	274,662	–	–
Progress billings in excess of work-in-progress	18	762,483	620,331	–	–
Provision for taxation		138,730	133,227	1,000	–
Borrowings	26	221,642	87,427	–	–
Deferred income	27	630	–	–	–
Employee benefits	28	2,491	1,916	–	–
		3,900,725	3,801,015	567,085	528,975
Net current assets		823,469	1,011,860	431,226	261,605

The accompanying notes are an integral part of the financial statements.

BALANCE SHEETS

AS AT 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

	Note	Group		Company	
		2017 \$'000	2016 \$'000	2017 \$'000	2016 \$'000
Non-current liabilities					
Advance payments from customers		641,262	590,828	–	–
Trade payables and accruals	23	122,978	137,763	7,608	8,997
Deferred tax liabilities	17	205,200	216,592	–	–
Borrowings	26	894,422	992,848	–	–
Deferred income	27	69,156	77,159	–	–
Employee benefits	28	102,669	85,200	–	–
Derivative financial instruments	39	15,553	19,435	–	–
Amounts due to related parties	24	17	17	667,594	676,417
		2,051,257	2,119,842	675,202	685,414
Total liabilities		5,951,982	5,920,857	1,242,287	1,214,389
Net assets		2,521,389	2,444,196	1,407,288	1,386,778
Share capital and reserves					
Share capital	29	895,926	895,926	895,926	895,926
Treasury shares	30	(22,870)	(44,081)	(22,870)	(44,081)
Capital reserves	32	119,782	113,184	3,807	(2,791)
Other reserves	33	(67,468)	(56,653)	61,151	65,231
Retained earnings		1,314,610	1,273,886	469,274	472,493
Equity attributable to owners of the Company		2,239,980	2,182,262	1,407,288	1,386,778
Non-controlling interests	40	281,409	261,934	–	–
		2,521,389	2,444,196	1,407,288	1,386,778
Total equity and liabilities		8,473,371	8,365,053	2,649,575	2,601,167

The accompanying notes are an integral part of the financial statements.

STATEMENTS OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

The Group	Note	Share capital \$'000	Treasury shares \$'000	Capital reserves \$'000	Other reserves \$'000	Retained earnings \$'000	Total \$'000	Non-controlling interests \$'000	Total equity \$'000
At 1.1.2016		895,926	(66,870)	113,277	(65,495)	1,255,214	2,132,052	128,875	2,260,927
Total comprehensive income for the year									
Profit for the year		–	–	–	–	484,514	484,514	8,349	492,863
Other comprehensive income									
Net fair value changes on available-for-sale financial assets	33	–	–	–	1,089	–	1,089	–	1,089
Net fair value changes on cash flow hedges		–	–	–	572	–	572	3,552	4,124
Realisation of cash flow hedge reserve arising from disposal of an associate	33	–	–	–	11,368	–	11,368	–	11,368
Foreign currency translation differences		–	–	–	467	–	467	(3,404)	(2,937)
Share of foreign currency translation differences of associates and joint ventures	33	–	–	–	(2,809)	–	(2,809)	–	(2,809)
Reclassification of foreign currency translation reserve to profit or loss arising from disposal of foreign entities		–	–	–	9,446	–	9,446	–	9,446
Defined benefit plan remeasurements		–	–	–	–	(3,268)	(3,268)	(2,696)	(5,964)
Other comprehensive income for the year, net of tax		–	–	–	20,133	(3,268)	16,865	(2,548)	14,317
Total comprehensive income for the year, net of tax		–	–	–	20,133	481,246	501,379	5,801	507,180
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		–	–	–	–	–	–	448	448
Return of capital to non-controlling interests		–	–	–	–	–	–	(1,178)	(1,178)
Cost of share-based payment		–	–	–	9,515	–	9,515	20	9,535
Purchase of treasury shares	30	–	(3,137)	–	–	–	(3,137)	–	(3,137)
Treasury shares reissued pursuant to share plans		–	25,926	282	(16,719)	–	9,489	(97)	9,392
Dividends paid	34	–	–	–	–	(465,930)	(465,930)	–	(465,930)
Dividends paid to non-controlling interests		–	–	–	–	–	–	(10,638)	(10,638)
Total contributions by and distributions to owners of the Company		–	22,789	282	(7,204)	(465,930)	(450,063)	(11,445)	(461,508)
Changes in ownership interests in subsidiaries									
Acquisition of non-controlling interests in a subsidiary without a change in control		–	–	–	(731)	–	(731)	564	(167)
Acquisition of subsidiaries with non-controlling interests		–	–	–	–	–	–	154,816	154,816
Disposal of a subsidiary		–	–	(375)	(3,474)	3,474	(375)	(16,677)	(17,052)
Total transactions with owners of the Company		–	22,789	(93)	(11,409)	(462,456)	(451,169)	127,258	(323,911)
Transfer from retained earnings to statutory reserve		–	–	–	118	(118)	–	–	–
At 31.12.2016		895,926	(44,081)	113,184	(56,653)	1,273,886	2,182,262	261,934	2,444,196

The accompanying notes are an integral part of the financial statements.

STATEMENTS OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

The Group	Note	Share capital \$'000	Treasury shares \$'000	Capital reserves \$'000	Other reserves \$'000	Retained earnings \$'000	Total \$'000	Non-controlling interests \$'000	Total equity \$'000
At 1.1.2017		895,926	(44,081)	113,184	(56,653)	1,273,886	2,182,262	261,934	2,444,196
Total comprehensive income for the year									
Profit for the year		–	–	–	–	511,882	511,882	23,545	535,427
Other comprehensive income									
Net fair value changes on available-for-sale financial assets	33	–	–	–	8,670	–	8,670	–	8,670
Net fair value changes on cash flow hedges		–	–	–	42,119	–	42,119	13,993	56,112
Share of net fair value changes on cash flow hedges of joint ventures	33	–	–	–	(127)	–	(127)	–	(127)
Foreign currency translation differences		–	–	–	(47,930)	–	(47,930)	603	(47,327)
Share of foreign currency translation differences of associates and joint ventures	33	–	–	–	(11,102)	–	(11,102)	–	(11,102)
Reclassification of foreign currency translation reserve to profit or loss arising from disposal of foreign entities		–	–	–	2,144	–	2,144	17	2,161
Defined benefit plan remeasurements		–	–	–	–	(3,427)	(3,427)	(2,682)	(6,109)
Other comprehensive income for the year, net of tax		–	–	–	(6,226)	(3,427)	(9,653)	11,931	2,278
Total comprehensive income for the year, net of tax		–	–	–	(6,226)	508,455	502,229	35,476	537,705
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		–	–	–	–	–	–	397	397
Return of capital to non-controlling interests		–	–	–	–	–	–	(43)	(43)
Cost of share-based payment		–	–	–	14,509	–	14,509	52	14,561
Purchase of treasury shares	30	–	(15,748)	–	–	–	(15,748)	–	(15,748)
Treasury shares reissued pursuant to share plans		–	36,959	6,598	(18,599)	–	24,958	(42)	24,916
Dividends paid	34	–	–	–	–	(467,641)	(467,641)	–	(467,641)
Dividends paid to non-controlling interests		–	–	–	–	–	–	(16,615)	(16,615)
Total contributions by and distributions to owners of the Company		–	21,211	6,598	(4,090)	(467,641)	(443,922)	(16,251)	(460,173)
Changes in ownership interests in subsidiaries									
Acquisition of non-controlling interests in a subsidiary without a change in control		–	–	–	(589)	–	(589)	250	(339)
Total transactions with owners of the Company		–	21,211	6,598	(4,679)	(467,641)	(444,511)	(16,001)	(460,512)
Transfer from retained earnings to statutory reserve		–	–	–	90	(90)	–	–	–
At 31.12.2017		895,926	(22,870)	119,782	(67,468)	1,314,610	2,239,980	281,409	2,521,389

The accompanying notes are an integral part of the financial statements.

STATEMENTS OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

	Note	Share capital \$'000	Treasury shares \$'000	Capital reserve \$'000	Share-based payment reserve \$'000	Retained earnings \$'000	Total \$'000
The Company							
At 1.1.2016		895,926	(66,870)	(3,073)	72,512	551,751	1,450,246
Total comprehensive income for the year							
Profit for the year		–	–	–	–	386,672	386,672
Total comprehensive income for the year		–	–	–	–	386,672	386,672
Transactions with owners of the Company, recognised directly in equity							
Contributions by and distributions to owners of the Company							
Cost of share-based payment		–	–	–	9,535	–	9,535
Purchase of treasury shares	30	–	(3,137)	–	–	–	(3,137)
Treasury shares reissued pursuant to share plans		–	25,926	282	(16,816)	–	9,392
Dividends paid	34	–	–	–	–	(465,930)	(465,930)
Total contributions by and distributions to owners of the Company		–	22,789	282	(7,281)	(465,930)	(450,140)
At 31.12.2016		895,926	(44,081)	(2,791)	65,231	472,493	1,386,778
At 1.1.2017		895,926	(44,081)	(2,791)	65,231	472,493	1,386,778
Total comprehensive income for the year							
Profit for the year		–	–	–	–	464,422	464,422
Total comprehensive income for the year		–	–	–	–	464,422	464,422
Transactions with owners of the Company, recognised directly in equity							
Contributions by and distributions to owners of the Company							
Cost of share-based payment		–	–	–	14,561	–	14,561
Purchase of treasury shares	30	–	(15,748)	–	–	–	(15,748)
Treasury shares reissued pursuant to share plans		–	36,959	6,598	(18,641)	–	24,916
Dividends paid	34	–	–	–	–	(467,641)	(467,641)
Total contributions by and distributions to owners of the Company		–	21,211	6,598	(4,080)	(467,641)	(443,912)
At 31.12.2017		895,926	(22,870)	3,807	61,151	469,274	1,407,288

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

	Note	2017 \$'000	Group 2016 \$'000
Cash flows from operating activities			
Profit before taxation		623,294	590,633
Adjustments:			
Share of results of associates and joint ventures, net of tax		(49,332)	(63,766)
Share-based payment expense		14,561	9,535
Depreciation charge		183,616	195,678
Property, plant and equipment written off		431	709
Amortisation of other intangible assets	15	33,343	51,643
Other intangible assets written off		–	54
Gain on disposal of property, plant and equipment	7	(241)	(903)
Gain on disposal of investments, net	8	(540)	(3,672)
Remeasurement gains on fair value of pre-existing interest in an acquiree		–	(1,364)
Loss/(gain) on disposal of an associate	7	1	(731)
Gain on disposal of subsidiaries		–	(11,796)
Loss on disposal of a subsidiary		1,277	15
Bargain purchase arising from business combination	7	–	(1,333)
Changes in fair value of financial instruments and hedged items		13,166	(2,500)
Changes in fair value of financial instruments held for trading	8	–	11
Interest expense		41,198	42,441
Interest income		(24,190)	(27,342)
Impairment of property, plant and equipment		63	30,837
Impairment of goodwill and other intangible assets	15	11	9,322
Impairment of investments	8	447	1,579
Dividends from investments	8	(7)	(4)
Amortisation of deferred income		(61)	–
Operating profit before working capital changes		837,037	819,046
Changes in:			
Inventories and work-in-progress		116,497	75,264
Progress billings in excess of work-in-progress		143,749	50,477
Trade receivables		(210,959)	(106,021)
Advance payments to suppliers		42,042	(15,694)
Other receivables, deposits and prepayments		1,733	(3,902)
Amount due from holding company and related corporations balances		(9,286)	15,502
Amount due to holding company and related corporations balances		230	(7,248)
Amount due from associates		9,077	22,005
Amount due from joint ventures		55,063	15,966
Trade payables		(84,678)	19,074
Advance payments from customers		(50,025)	(67,602)
Other payables, accruals and provisions		(15,329)	(3,943)
Deferred income		(7,942)	(6,378)
Foreign currency translation of foreign operations		1,171	(912)
Cash generated from operations		828,380	805,634
Interest received		26,948	29,886
Income tax paid		(91,666)	(76,715)
Net cash from operating activities		763,662	758,805

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

	Note	Group 2017 \$'000	2016 \$'000
Cash flows from investing activities			
Proceeds from sale of property, plant and equipment		1,994	3,760
Proceeds from disposal of an associate		–	731
Proceeds from sale and maturity of investments		315,838	224,093
Dividends from associates and joint ventures		81,029	44,736
Dividends from investments		7	4
Purchase of property, plant and equipment		(272,561)	(250,922)
Purchase of investments		(171,433)	(216,297)
Investments in associates and joint ventures		(85,784)	(35,162)
Additions to other intangible assets		(73,271)	(76,823)
Acquisition of controlling interests in subsidiaries, net of cash acquired		(50,005)	9,127
Disposal of subsidiaries, net of cash disposed		8,324	29,526
Net cash used in investing activities		(245,862)	(267,227)
Cash flows from financing activities			
Proceeds from bank loans		171,412	199,478
Proceeds from loan from non-controlling interests of a subsidiary		5,152	–
Proceeds of a loan from a joint venture		36,463	2,000
Repayment of bank loans		(65,702)	(222,611)
Repayment of other loans		(137)	(161)
Repayment of lease obligations		(784)	(972)
Repayment of loan to a joint venture		(19,607)	(7,000)
Proceeds from share options exercised with issuance of treasury shares		24,916	9,392
Purchase of treasury shares		(15,748)	(3,137)
Capital contribution from non-controlling interests of subsidiaries		397	448
Return of capital to non-controlling interests of a subsidiary		(43)	(1,178)
Acquisition of non-controlling interests in a subsidiary		(223)	(167)
Dividends paid to shareholders of the Company	34	(467,641)	(465,930)
Dividends paid to non-controlling interests		(16,010)	(10,638)
Interest paid		(41,824)	(40,885)
Deposits (pledged)/discharged		(131)	6,117
Net cash used in financing activities		(389,510)	(535,244)
Net increase/(decrease) in cash and cash equivalents		128,290	(43,666)
Cash and cash equivalents at beginning of the year		903,632	944,119
Exchange difference on cash and cash equivalents at beginning of the year		(34,308)	3,179
Cash and cash equivalents at end of the year	22	997,614	903,632

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

SUMMARY OF EFFECT ON ACQUISITION/DIVESTMENT OF EQUITY INTERESTS AND BUSINESS

(a) Acquisition of controlling interest in subsidiaries

(i) Acquisition of controlling interests in Aethon, Inc. (Aethon) in 2017

During the year, the Group acquired 100% of Aethon for a cash consideration of \$52.6 million. Aethon specialises in provision of autonomous mobile robots for material transportation and delivery.

Aethon contributed revenue of \$9,780,000 and net profit of \$1,245,000 to the Group for the period from 11 August 2017 to 31 December 2017.

Identifiable assets acquired and liabilities assumed

The acquisition had the following effect on the Group's assets and liabilities on acquisition date:

	Recognised on acquisition \$'000	Carrying amount before acquisition \$'000
Property, plant and equipment	993	993
Intangible assets	20,406	804
Inventories and work-in-progress	3,477	3,477
Trade receivables	2,455	2,454
Bank balances and other liquid funds	2,560	2,560
Trade payables and accruals	(9,504)	(9,457)
Deferred tax liabilities	(7,647)	–
Total identifiable net assets	12,740	831
Goodwill arising on consolidation	39,825	
Total purchase consideration	52,565	
Cash outflow on acquisition:		
Cash consideration paid	52,565	
Less: cash acquired	(2,560)	
Net cash outflow on acquisition	50,005	

The goodwill recognised on the acquisition of Aethon represents the synergies that the acquisition is expected to bring to the Group's businesses and products. Management assessed that the goodwill is allocated to two CGUs within the Group, namely Aethon and a Singapore business unit, amounting to \$23,895,000 and \$15,930,000, respectively, based on the expected future economic benefits to be realised by these entities through the combination of their businesses. None of the goodwill recognised is expected to be deductible for tax purposes.

The Group incurred acquisition-related cost of \$1,874,000 on legal fees and due diligence costs. These costs have been included in administrative expenses in the Group's income statement.

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

SUMMARY OF EFFECT ON ACQUISITION/DIVESTMENT OF EQUITY INTERESTS AND BUSINESS (continued)

(a) Acquisition of controlling interest in subsidiaries (continued)

(ii) Acquisition of Elbe Flugzeuwerke GmbH (EFW) in 2016

In the prior year, the Group acquired an additional 20% interests in EFW for a consideration of \$152,691,000 (Euro 98,700,000) comprising of \$4,943,000 (Euro 3,200,000) of cash and \$147,748,000 (Euro 95,500,000) in A320/A321 PTF engineering development work on 1 January 2016. As a result, the Group's equity interest in EFW increased from 35% to 55%, obtaining control of EFW. EFW contributed revenue of \$415,863,000 and net profit of \$8,158,000.

Consideration transferred

The following table summarised the acquisition-date fair value of each major class of consideration transferred:

	\$'000
Cash	4,943
To-be-developed intellectual property on A320/A321 passenger to freighter (PTF) conversion technology	136,922
Settlement of pre-existing relationship	(74,727)
Total consideration transferred	<u>67,138</u>

To-be-developed intellectual property on A320/A321 PTF conversion technology

The purchase consideration for the additional 20% acquisition in EFW includes a to-be-developed A320/A321 PTF conversion technology that is expected to cost the Group \$136,922,000.

Settlement of pre-existing relationship

In 2013, the Group invested in EFW by contributing a cash consideration of \$4,241,000 and a to-be-developed intellectual property on A330 PTF conversion technology valued at \$142,562,000 in return for a 35% equity ownership in EFW.

As at the date of the acquisition to obtain control in EFW, the Group had a remaining obligation to transfer intellectual property of \$74,727,000 to EFW. Management had estimated that this amount reflects the amount that the Group will need to incur, develop and deliver the intellectual property, with no favourable or unfavourable settlement impact. This pre-existing relationship was effectively settled when the Group acquired control of EFW.

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

SUMMARY OF EFFECT ON ACQUISITION/DIVESTMENT OF EQUITY INTERESTS AND BUSINESS (continued)

(a) Acquisition of controlling interest in subsidiaries (continued)

(ii) Acquisition of Elbe Flugzeugwerke GmbH (EFW) in 2016 (continued)

Identifiable assets acquired and liabilities assumed

The acquisitions had the following effect on the Group's assets and liabilities on acquisition date:

	Recognised on acquisition \$'000	Carrying amount before acquisition \$'000
Property, plant and equipment	77,233	77,233
Intangible assets	236,781	9,498
Derivative financial assets	3,533	3,533
Deferred tax assets	20,187	18,587
Inventories and work-in-progress	128,892	122,985
Trade receivables	68,957	68,957
Advances and other receivables	137,738	816
Bank balances and other liquid funds	14,070	14,070
Derivative financial liabilities	(36,494)	(36,494)
Provisions	(1,252)	(1,252)
Provision for taxation	(1,816)	(1,816)
Employee benefits	(70,366)	(70,366)
Trade payables and accruals	(114,389)	(109,393)
Deferred tax liabilities	(119,038)	(2,061)
Total identifiable net assets	344,036	94,297
Cash inflow on acquisition in 2016:		
Cash consideration paid	(4,943)	
Less: cash acquired	14,070	
Net cash inflow on acquisition	9,127	

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

SUMMARY OF EFFECT ON ACQUISITION/DIVESTMENT OF EQUITY INTERESTS AND BUSINESS (continued)

(a) Acquisition of controlling interest in subsidiaries (continued)

(ii) Acquisition of Elbe Flugzeuwerke GmbH (EFW) in 2016 (continued)

Goodwill

Goodwill arising from the acquisition had been recognised as follows:

	\$'000
Total consideration transferred	67,138
NCI, based on their proportionate interest in the recognised amounts of the assets and liabilities of the acquiree	154,816
Fair value of pre-existing interest in the acquiree	145,616
Fair value of identifiable net assets	(344,036)
Goodwill	<u>23,534</u>

The remeasurement to fair value of the Group's existing 35% interest in EFW resulted in a gain of \$1,364,000. This amount had been recognised in 'other income, net' in the income statement.

The goodwill was attributable mainly to the synergies expected to be achieved from integrating the acquiree into the Group's existing aircraft business. None of the goodwill recognised was expected to be deductible for tax purposes.

The Group incurred acquisition-related costs of \$333,000 on legal fees and due diligence costs. These costs have been included in administrative expenses.

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2017
(CURRENCY – SINGAPORE DOLLARS)

SUMMARY OF EFFECT ON ACQUISITION/DIVESTMENT OF EQUITY INTERESTS AND BUSINESS (continued)

(b) Disposal of controlling interests in subsidiaries

In 2016, the Group disposed the following companies:

(i) Disposal of Guizhou Jonyang Kinetics Co., Ltd. (GJK)

On 5 May 2016, the Group entered into an agreement with its non-controlling shareholder to dispose its 60% equity interest in GJK for a consideration of \$41.4 million. A gain on disposal of \$10.4 million was recognised in the prior year.

(ii) Disposal of Keystone Holdings (Global) Pte. Ltd. (Keystone)

On 5 July 2016, the Group had completed the disposal of its 50% equity interest in Keystone to SJ Aviation Capital Pte. Ltd for a sale consideration of \$13.9 million. As a result, the Group's equity interest in Keystone decreased from 100% to 50% and Keystone was reclassified from a subsidiary to a joint venture.

The financial effects arising from the disposal of GJK and Keystone are as follows:

	GJK \$'000	Keystone \$'000	Total \$'000
Property, plant and equipment	26,521	105,717	132,238
Deferred tax assets	5,997	–	5,997
Inventories and work-in-progress	98,507	–	98,507
Trade receivables	45,219	326	45,545
Advances and other receivables	22,593	1,292	23,885
Bank balances and other liquid funds	14,418	3,010	17,428
Advance payments from customers	–	(16,733)	(16,733)
Trade payables and accruals	(161,810)	(2,066)	(163,876)
Borrowings	–	(65,741)	(65,741)
Deferred tax liabilities	–	(280)	(280)
Non-controlling interests	(16,677)	–	(16,677)
Net assets disposed	34,768	25,525	60,293
Realisation of reserves	(3,815)	920	(2,895)
Gain on disposal	10,404	1,392	11,796
Fair value of pre-existing interest in the acquiree	–	(13,916)	(13,916)
Sale consideration	41,357	13,921	55,278
Less: bank balances and other liquid funds in subsidiaries disposed	(14,418)	(3,010)	(17,428)
Consideration receivable as at 31 December 2016	(8,324)	–	(8,324)
Net cash inflow on disposal	18,615	10,911	29,526

The accompanying notes are an integral part of the financial statements.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

These notes form an integral part of and should be read in conjunction with the accompanying financial statements.

1. 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 Company's immediate and ultimate holding company is Temasek Holdings (Private) Limited, a company incorporated in Singapore.

The principal activities of the Company are those of an investment holding company and the provision of engineering and related services. The principal activities of the Group are described in Note 37 to the financial statements.

The financial statements of Singapore Technologies Engineering Ltd and the consolidated financial statements of Singapore Technologies Engineering Ltd and its subsidiaries (collectively referred to as the Group) as at 31 December 2017 and for the year then ended were authorised and approved by the Board of Directors for issuance on 22 February 2018.

2. BASIS OF FINANCIAL STATEMENTS PREPARATION

The financial statements are prepared in accordance with Singapore Financial Reporting Standards (FRS).

The financial statements have been prepared on the historical cost convention, except for the revaluation of certain financial instruments.

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) except when otherwise indicated.

Revised standards

The Group has applied the following amendments for the first time for the annual period beginning on 1 January 2017:

- *Disclosure Initiative (Amendments to FRS 7);*
- *Recognition of Deferred Tax Assets for Unrealised Losses (Amendments to FRS 12);*
- *Clarification of the scope of FRS 112 (Improvements to FRSs 2016)*

Other than the amendments to FRS 7, the adoption of these amendments did not have any impact on the current or prior period and is not likely to affect future periods.

Disclosure Initiative (Amendment to FRS 7)

From 1 January 2017, as a result of the amendments to FRS 7, the Group has provided additional disclosure in relation to the changes in liabilities arising from financing activities for the year ended 31 December 2017. Comparative information has not been presented (see note 26).

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

3.1 Basis of consolidation

(i) *Business combinations*

Business combinations are accounted for using the acquisition method in accordance with FRS 103 *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 3.5(i).

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 re-measured 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 FRSS.

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 adjustments are 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 non-controlling interests to have a deficit balance.

In the Company's separate financial statements, investments in subsidiaries are accounted for at cost less accumulated impairment losses.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.1 Basis of consolidation (continued)

(iii) *Acquisitions of entities under amalgamation*

The Company's interests in Singapore Technologies Aerospace Ltd, Singapore Technologies Electronics Limited, Singapore Technologies Kinetics Ltd, and Singapore Technologies 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 Companies Act, Chapter 50 in 1997.

As the amalgamation of the Scheme Companies constitutes a uniting of interests, the pooling of interests method was 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 were 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 was 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 an available-for-sale financial asset, 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.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.1 Basis of consolidation (continued)

(v) *Investments in associates and joint ventures* (continued)

For investments in associates acquired by the Group's Corporate Venture Capital Unit, the Group has elected to measure its investment in associates at fair value through profit or loss in accordance with FRS 39 *Financial Instruments*.

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.

3.2 Foreign currency

The major functional currencies of the Group entities are Singapore dollar (SGD), United States dollar (USD) and Euro.

Transactions, assets and liabilities denominated in foreign currencies are translated into the respective functional currencies of the Group entities 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 are recognised in the statement of profit or loss, except for qualifying cash flow hedges which are deferred to equity.

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 are initially recognised in the foreign currency translation reserve and subsequently transferred to the profit or loss on disposal of the foreign operation.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.3 Financial Instruments

(i) *Non-derivative financial assets and liabilities*

Financial assets are recognised on the balance sheet when, and only when, the Group becomes a party to the contractual provisions of the financial instrument. All regular way purchases and sales of financial assets are recognised on the trade date, i.e. the date that the Group commits to purchase or sell the asset. The Group derecognises a financial asset when the contractual rights to the cash flows on the financial assets in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

Financial liabilities are recognised on the balance sheet when, and only when, the Group becomes a party to the contractual provisions of the financial instrument. The Group derecognises a financial liability when its contractual obligations are discharged, cancelled or expired.

A financial asset or financial liability is initially measured at fair value, plus, in the case of the financial asset or liability not carried at fair value through profit or loss, directly attributable transaction costs.

Financial assets and liabilities are offset and the net amount presented in the balance sheets when, and only when, the Group has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

Non-derivative financial assets and liabilities are categorised as follows:

Category	Subsequent measurement
(1) Loans and receivables	
– With fixed or determinable payments, that are not quoted in an active market	Amortised cost, computed using effective interest method, less impairment losses.
– Comprise bank balances and other liquid funds, and trade and other receivables (including finance lease receivables and amounts due from related parties)	

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.3 Financial Instruments (continued)

(i) *Non-derivative financial assets and liabilities* (continued)

Category	Subsequent measurement
(2) Fair value through profit or loss (FVTPL)	
– Acquired principally for the purposes of selling in the near term	Gains and losses arising from fair value changes are recognised in profit or loss.
– Includes separable embedded derivatives and other derivatives not designed in hedging relationship	Fair value gains/losses arising from embedded derivatives and forward currency contracts that provide an economic hedge to trading transactions, are considered to be part of the Group's operating activities and are classified as part of cost of sales to reflect the nature of the transactions.
– Investments in associates acquired by the Group's Corporate Venture Unit which are designated upon initial recognition to be measured at fair value through profit or loss	
(3) Available for sale (AFS)	
– Designated or are not classified in the other categories of financial assets	Gains and losses arising from changes in fair value are recognised in OCI and presented in fair value reserve in equity, until the investment is disposed of or is determined to be impaired, at which time, the cumulative gain or loss previously recognised in reserve is included in profit or loss for the year.
– Comprise equity securities and bonds	
	For those financial assets where there is no active market and where fair value cannot be reliably measured, they are measured at cost.
(4) Liabilities at amortised cost	
– Comprise bank overdrafts, trade and other payables (including lease obligations and amounts due to related parties) and borrowings	Amortised cost, computed using effective interest method.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.3 Financial Instruments (continued)

(ii) *Derivative financial instruments and hedge accounting*

Derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into. Attributable transaction costs are recognised in profit or loss as incurred.

Derivative financial assets and liabilities are categorised as follows:

Category	Subsequent measurement
(1) Fair value hedges	Gains and losses arising from fair value change of derivatives are recognised in profit or loss together with the fair value change of hedged items attributable to the hedged risks. When the hedge accounting is discontinued, adjustments to the carrying amount of the hedged item arising from the hedged risk is amortised to profit or loss from that date.
(2) Cash flow hedges	<p>Effective portion is recognised in OCI and presented in fair value reserve in equity, until the hedged transaction occurs or is no longer expected to occur, at which time, the cumulative gain or loss in equity is transferred to profit or loss.</p> <p>The ineffective portion is taken to profit or loss immediately.</p>
(3) Net investment hedges	<p>Gains and losses arising from translation of foreign currency financial liabilities designated as net investment hedges of foreign operations, if deemed effective, are recognised in OCI and presented in foreign currency translation reserve in equity. On disposal of the foreign operation, the cumulative gain or loss are released to profit or loss.</p> <p>The ineffective portion is taken to profit or loss immediately.</p>

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.3 Financial Instruments (continued)

(ii) *Derivative financial instruments and hedge accounting* (continued)

Category	Subsequent measurement
(4) Embedded derivatives	Any gains or losses arising from fair value changes of derivatives that are not designated in a hedging relationship are recognised immediately in profit or loss. Gains and losses that provide an economic hedge to trading transactions are classified as cost of sales to better reflect the nature of the transactions.

(iii) *Share capital*

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of ordinary shares are recognised as a deduction from equity, net of any tax effects.

(iv) *Treasury shares*

When ordinary shares are reacquired by the Company, the consideration paid is recognised as 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 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.

(v) *Intra-group financial guarantees in the separate financial statements*

Financial guarantees are financial instruments issued by the Company 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. Subsequent to initial measurement, the financial guarantees are stated at the higher of the initial fair value less cumulative amortisation and the amount that would be recognised if they were accounted for as contingent liabilities.

When financial guarantees are terminated before their original expiry date, the carrying amount of the financial guarantee is transferred to profit or loss.

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.4 Property, plant and equipment and depreciation

(i) Recognition and measurement

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses. Cost comprises expenditure that is directly attributable to the acquisition of the asset and subsequent costs incurred to replace parts that are eligible for capitalisation. Cost may also include transfers from equity on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment.

Certain items of property, plant and equipment which were subject to a one-time revaluation in 1972 (the 1972 assets) are stated at valuation, net of depreciation and any impairment losses.

(ii) Depreciation

Depreciation of plant, property and equipment is recognised in profit and loss on a straight line basis, except for freehold land which are not depreciated, and leasehold land which are depreciated over the remaining lease term.

The estimated useful lives are as follows:

Item #	Useful life
Buildings	– 2 to 60 years *
Leasehold land	– Over the period of the lease of between 2 and 50 years *
Improvements to premises	– 3 to 30 years *
Wharves and slipways	– 20 years
Syncrolift and floating docks	– 15 years
Boats and barges	– 10 to 23 years
Plant and machinery	
– Aerospace	– 8 to 25 years
– Electronics	– 10 years
– Land Systems	– 5 to 15 years
– Marine	– 5 to 10 years
– Others	– 5 years
Production tools and equipment	
– Aerospace	– 5 to 15 years
– Electronics	– 10 years
– Others	– 3 to 5 years
Furniture, fittings, office equipment and computers	– 2 to 10 years
Transportation equipment and vehicles	– 4 to 5 years
Aircraft and aircraft engines	– 15 to 30 years
Satellite	– 5 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 11(c)(ii) for details of the lease tenure used to approximate the useful lives of the leasehold land, buildings and improvements.

(iii) Disposals

Profits or losses on disposal of property, plant and equipment are included in the profit and loss account.

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.5 Intangible assets

(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. In respect of equity-accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment, and an impairment loss on such an investment is not allocated to any asset, including goodwill, that forms part of the carrying amount of the equity-accounted investee.

(ii) Other intangible assets

Class of intangible assets	Background	Measurement method	Amortisation method	Useful lives
Acquired as part of business combination/separately acquired				
Dealer network	Includes customer relationships and networks acquired	(i) Separately acquired intangible assets are initially recognised at cost (ii) Intangible assets that are acquired as part of business combination are initially recognised at its fair value as at the date of acquisition (iii) Carried at cost less any accumulated amortisation and impairment losses following initial recognition	Straight-line	5 to 25 years
Commercial and property rights	Relates to intellectual property			2 to 16 years
Brands	Includes corporate brands such as the LeeBoy™ and Rosco brand of road construction equipment.			Aerospace: 5 years Electronics: 20 years Land: 70 years
Licenses	Relates to licenses to <ul style="list-style-type: none">– conduct commercial aviation activities– conduct pilot training in U.S.– purchase and lease Boeing parts– develop MRO capabilities for specific aircraft types			7 to 30 years
Technology agreements	Relates to the intellectual property assets required to operate the EcoPower Engine Wash business			13 years
Authorised repair centre agreements	Relates to the sole appointed authorised service centre for repair and overhaul of landing gear			5 years

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.5 Intangible assets (continued)

(ii) Other intangible assets (continued)

Class of intangible assets	Background	Measurement method	Amortisation method	Useful lives
Development expenditure				
Development expenditure	<p>Relates to costs incurred for</p> <ul style="list-style-type: none"> the prototyping and development of Boeing 757 15-Pallet Supplemental Type Certificate (B757 15-PTF) the design, development and assembly of aircraft seats the development of A330 passenger-to-freighter conversion Supplemental Type Certificate (A330-200 PTF and A330-300 PTF) the development of A320/A321 passenger-to-freighter conversion Supplemental Type Certificate (A320/A321 PTF) <p>The amortisation of the development and assembly of aircraft seats, development of A330-200 PTF as well as the development of A320/A321 PTF have been deferred for the year ended 31 December 2017 as the assets are not yet ready for management's intended use. Development expenditure on an individual project is recognised as an intangible asset when the Group can demonstrate the technical feasibility of completing the development. The expenditure capitalised includes costs that are directly attributable to 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.</p>	<p>(i) Initially recognised at cost</p> <p>(ii) Carried at cost less any accumulated amortisation and impairment losses following initial recognition</p>	<p>A320/A321 PTF: Units of production method</p> <p>Others: Straight-line</p>	<p>B757 15-PTF: 10 years</p> <p>A330-A300 PTF: 41 years</p> <p>Others: 2 to 5 years</p>

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.5 Intangible assets (continued)

(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.

3.6 Inventories and work-in-progress

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 by weighted average cost depending on the nature and 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.

Work-in-progress is measured at cost plus profits recognised to date less progress billings and recognised losses, if any, when the possibility of loss is ascertained.

Work-in-progress is included in current assets in the balance sheet for all contracts in which costs incurred plus recognised profits exceed progress billings. If progress billings exceed costs incurred plus recognised profits, then the difference is presented as "progress billings in excess of work-in-progress" and is included in current liabilities.

3.7 Impairment

(i) Non-derivative financial assets

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset not carried at FVTPL is impaired.

To determine whether there is objective evidence that financial assets (including equity securities) are impaired, the Group considers factors such as the probability of insolvency or significant financial difficulties of the debtor/issuer, default or significant delay in payments, significant adverse changes in the business environment where the debtor/issuer operates and disappearance of an active market for a security. In addition, for an investment in an equity security, a significant or prolonged decline in its fair value below its cost is objective evidence of impairment.

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.7 Impairment (continued)

(i) *Non-derivative financial assets* (continued)

Financial assets carried at amortised cost

Individually significant financial assets are first tested for impairment on an individual basis. The Group considers if there are objective evidence of impairment, such as probability of insolvency or significant financial difficulties of the debt and default or significant delay in payments.

If it is determined that no objective evidence of impairment exists, the individually significant financial assets are included in the collective assessment for financial assets that are not individually significant. The financial assets are categorised based on credit risks characteristics for a collective assessment of impairment, based on past default experience.

The amount of loss is computed as the difference between the asset's carrying amount and the expected recoverable amount, discounted to its present value and recognised as an expense in profit or loss. The carrying amount of the asset shall be reduced through use of an allowance account. If there are changes in events subsequent to the recognition of the impairment loss, the changes in impairment loss is accounted for or reversed through profit or loss.

Financial assets carried at cost

Unquoted equity investments where the fair value cannot be reliably estimated are classified as available-for-sale investments.

If there is objective evidence that an impairment loss on an unquoted equity instrument that is not carried at fair value because its fair value cannot be reliably measured, or on a derivative asset that is linked to and must be settled by delivery of such an unquoted equity instrument has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset. The loss recognised is not reversed in future periods.

Available-for-sale financial assets

Significant or prolonged decline in the fair value of the investment below its cost is considered in determining whether the investment is impaired. If any such evidence exists for available-for-sale financial assets, the cumulative loss is transferred from equity and recognised in the profit and loss. For available-for-sale equity instruments, impairment losses previously recognised are reversed through OCI and available-for-sale debt instruments are reversed through the profit and loss, if the increase in fair value is related objectively to a subsequent event.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.7 Impairment (continued)

(iii) *Non-financial assets*

The Group assess at each reporting date whether there is an indication that its non-financial assets, other than goodwill, inventories, work-in-progress and deferred tax assets, may be impaired. Goodwill is reviewed for impairment, annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. If any such indication exists, the Group makes an estimate of the asset's recoverable amount. An impairment loss is recognised if the carrying amount of an asset or its related cash-generating unit (CGU) exceeds its estimated recoverable amount.

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 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's 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.

Intangible assets other than goodwill that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

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.

3.8 Provisions

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 balance sheet 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 six months to ten 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 2017 is expected to be incurred over the applicable warranty periods.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.8 Provisions (continued)

(ii) *Liquidated damages*

Provision for liquidated damages is made in respect of anticipated claims from customers due to a breach in contractual terms (e.g. late performance). The utilisation of provisions is dependent on the timing of claims.

(iii) *Foreseeable losses*

Provision for foreseeable losses on uncompleted contracts are recognised immediately in profit or loss when it is determinable.

(iv) *Closure costs*

Provision for closure costs is made in respect of the expected costs that the Group will undertake between the cessation of its China Specialty Vehicle business subsidiaries' operations to the completion of its liquidation.

3.9 Employee benefits

(i) *Employee equity compensation benefits*

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 Note 31.

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.

(ii) *Short-term employee benefits*

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

(iii) *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.

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.9 Employee benefits (continued)

(iv) *Defined benefit plans*

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).

(v) *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 one-third of the accumulated EVA-based bonus, comprising the EVA declared in the financial year and the balance of such bonus brought forward from preceding years is paid out in cash each year, with the balance being carried forward to the following year. The balances of the EVA bank in future will be adjusted by the yearly EVA performance of the Group and the payouts made from the EVA bank.

3.10 Revenue

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and revenue can be reliably measured. Revenue is measured at the fair value of consideration received or receivable, net of any returns, trade discounts and volume rebates.

Revenue is recognised using the following methods:

- (i) Revenue from sale of goods is recognised when risks and rewards of ownership have transferred to the customer.
- (ii) Revenue from rendering of services is recognised in proportion to the stage of completion of these services.
- (iii) Revenue from long-term contracts is recognised by reference to stage of completion, which is measured by either:
 - (a) a combination of different cost components or a single cost component that would provide the most reliable indication of the stage of completion of a contract; or
 - (b) when goods and services, representing part of a contract, are delivered; or
 - (c) upon completion of designated phases of a contract.
- (iv) Management fee income is recognised when management services are rendered.

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.11 Other income

- (i) Government grants are recognised when the Group complies with the conditions associated with the grants. Grants that compensate the Group for expenses incurred are recognised in profit or loss as other income in the same periods in which the expenses are recognised. Grants relating to depreciable assets are recognised in profit or loss as other income over the estimated useful lives of the relevant assets.
- (ii) Commission income in excess of the certain percentage of the total amount received is taken up in the income statement only upon the discharge of specified contractual obligations.
- (iii) Rental income from leasing of facilities is accounted for on a straight-line basis over the lease terms.
- (iv) The gain or loss on disposal of an item of property, plant and equipment, subsidiary, associate or joint venture is determined by comparing the proceeds from disposal with the carrying amount of the disposed item, and is recognised net within other income.
- (v) The gain from bargain purchase is recognised in other income from business combinations where the fair value of the identifiable nets assets or pre-existing equity interest in the acquiree exceeds the consideration transferred.

3.12 Finance income and finance costs

Finance income comprises interest income, dividend income, gains on disposal on investments 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 or impairment losses recognised on investments, 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.

3.13 Finance leases

- (i) As lessee

Finance lease are those leasing agreements, which transfer substantially all the risks and benefits incidental to ownership.

Assets financed under such leases are capitalised at the lower of its fair value and the present value of the minimum lease payments at the inception of the lease. Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged to profit or loss.

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.13 Finance leases (continued)

(ii) As lessor

Leases where the Group transferred substantially all the risks and rewards incidental to legal ownership of the leased assets, are classified as finance leases.

The leased asset is derecognised and the present value of the lease receivables (net of initial direct costs for negotiating and arranging the lease) is recognised on the balance sheet. The difference between the gross receivables and the present value of the lease receivables is recognised as unearned finance income.

Each lease payment received is applied against the gross investment in the finance lease receivables 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 receivables.

Initial direct costs incurred by the Group in negotiating and arranging finance leases are added to finance lease receivables and recognised as an expense in profit or loss over the lease term on the same basis as the leased income.

3.14 Operating leases

Leases where the lessor effectively retains substantially all the risks and benefits of ownership of the leased asset, are classified as operating leases. Operating lease payments are recognised as an expense in profit or loss on a straight-line basis over the lease term.

The aggregate benefit of incentives provided by the lessor is recognised as a reduction of rental expense over the lease term on a straight-line basis.

3.15 Income taxes

(i) Current tax

Current tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the tax authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the balance sheet date.

(ii) 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.

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.15 Income taxes (continued)

(ii) *Deferred tax* (continued)

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 is recognised in profit or loss except to the extent that it relates to a business combination, or items recognised directly in equity or in OCI.

3.16 Operating segments

For management purposes, the Group is organised on a worldwide basis into four major operating segments. The management of the Company reviews the segments' operating results regularly in order to allocate resources to the segments and to assess the segments' performance.

3.17 Significant accounting estimates and judgements

(i) *Key sources of estimation uncertainty*

The key assumptions concerning the future and other key sources of estimation uncertainty at the balance sheet date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

(a) Impairment of non-financial assets

When value-in-use calculations are undertaken, management must estimate the expected future cash flows from the asset or CGU and choose a suitable discount rate and growth rates in order to calculate the present value of those cash flows.

(b) Impairment of loans and receivables

Where there is objective evidence of impairment, the amount and timing of future cash flows are estimated based on historical loss experience for assets with similar credit risk characteristics. The carrying amount of the Group's loans and receivables at the balance sheet date is disclosed in Note 39 to the financial statements.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.17 Significant accounting estimates and judgements (continued)

(i) *Key sources of estimation uncertainty* (continued)

(c) Depreciation charge

Management estimates the useful lives, residual values to be within 2 to 60 years 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, if appropriate.

(d) Revenue recognition and provision for foreseeable losses

The Group has recognised revenue from long-term contracts by reference to the stage of completion. The bases for measuring the stage of completion are described in 3.10(iii).

Significant judgement based on management's knowledge and experience is required in determining the appropriate stage of completion and estimating a reasonable contribution margin or expected losses for revenue and costs recognition.

(e) Allowance for inventory obsolescence and write down of finished goods to net realisable value

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.

(f) 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.

(g) Provision for closure costs

The provision for closure costs is based on estimates of the expected costs that the Group will incur for the period between the cessation of its subsidiaries' operations to the completion of the subsidiary's liquidation. As the liquidation process is subjected to regulatory approval and subsequent negotiations with various stakeholders, the actual costs incurred may be higher or lower than the provision made.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.17 Significant accounting estimates and judgements (continued)

(i) *Key sources of estimation uncertainty* (continued)

(h) Income taxes

There are certain transactions and computations for which the ultimate tax determination is uncertain during the ordinary course of business. The Group recognises liabilities for expected tax issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recognised, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

Certain subsidiaries of the Group have potential tax benefits arising from unutilised tax losses, unabsorbed wear and tear allowances and other temporary differences, which are available for set-off against future taxable profits. Significant judgement is involved in determining the availability of future taxable profits against which the Group can utilise the tax benefits therefrom. The use of the potential tax benefits is also subject to the agreement of the tax authorities and compliance with certain provisions of the tax legislation of the respective countries in which the subsidiaries operate. Where the final outcome of these matters is different from the amounts that were initially recognised, such differences will impact the income tax provision and recognised deferred tax assets relating to the potential tax benefits in the period in which such determination is made.

(i) Measurement of fair values

A number of the Group's accounting policies require the measurement of fair values for both financial and non-financial assets and liabilities. 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. Further information about the assumptions made in measuring fair values is included in Note 39 to the financial statements.

(j) EVA-based Incentive Scheme (EBIS)

Estimates of the Group's obligations arising from the EBIS at the balance sheet date may be affected by future events, which cannot be predicated 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 may result in a clawback of EVA bonus accumulated in previous years.

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.17 Significant accounting estimates and judgements (continued)

(ii) *Critical 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) their ability to exercise power over its investees;
- (b) their exposure or rights to variable returns for its investments with those investees; and
- (c) their ability to use its power to affect those returns.

The Group's judgement included considerations of their power exercised at the board of the respective investees and rights and obligations arising from board reserve of matters as agreed with the other shareholders.

3.18 Full convergence with International Financial Reporting Standards (IFRS) and adoption of new standards

Applicable to 2018 financial statements

In December 2017, the Accounting Standards Council (ASC) issued the Singapore Financial Reporting Standards (International) (SFRS(I)). Singapore-incorporated companies that have issued, or are in the process of issuing, equity or debt instruments for trading in a public market in Singapore, will apply SFRS(I) with effect from annual periods beginning on or after 1 January 2018.

The Group's financial statements for the financial year ending 31 December 2018 will be prepared in accordance with the SFRS(I) issued by the ASC. As a result, this will be the last set of financial statements prepared under the current FRS.

In adopting the new framework, the Group will be required to apply the specific transition requirements in SFRS(I) 1 *First-time Adoption of International Financial Reporting Standards*.

In addition to the adoption of the new framework, the following new SFRS(I)s, amendments to and interpretations of SFRS(I) are effective from the same date.

- SFRS(I)15 *Revenue from Contracts with Customers* (Amendments to SFRS(I) 15 and Clarifications to SFRS(I) 15);
- SFRS(I) 9 *Financial Instruments*;
- *Classification and Measurement of Share-based Payment Transactions* (Amendments to SFRS(I) 2);
- *Transfers of Investment Property* (Amendments to SFRS(I) 1-40);

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.18 Full convergence with International Financial Reporting Standards (IFRS) and adoption of new standards (continued)

Applicable to 2018 financial statements (continued)

- *Deletion of short-term exemptions for first-time adopters* (Amendments to SFRS(I) 1);
- *Measuring an Associate or Joint Venture at Fair Value* (Amendments to SFRS(I) 1-28);
- *Applying SFRS(I) 9 Financial Instruments with SFRS(I) 4 Insurance Contracts* (Amendments to SFRS(I) 4); and
- *SFRS(I) INT 22 Foreign Currency Transactions and Advance Consideration.*

The Group does not expect a material impact on the financial statements from the application of the amendments to and interpretations of SFRS(I).

The Group's impact assessment of SFRS(I) 1, SFRS(I) 15 and SFRS(I) 9 is set out below in pages 171 to 178.

(i) SFRS(I) 1

When the Group adopts SFRS(I) in 2018, the Group will apply SFRS(I) 1 with 1 January 2017 as the date of transition for the Group and the Company. SFRS(I) 1 generally requires that the Group applies SFRS(I) on a retrospective basis, as if such accounting policy had always been applied. If there are changes to accounting policies arising from new or amended standards effective in 2018, restatement of comparatives may be required because SFRS(I) 1 requires both the opening balance sheet, and comparative information to be prepared using the most current accounting policies. SFRS(I) 1 provides mandatory exceptions and optional exemptions from retrospective application, but these are often different from those specific transition provisions in individual FRSs applied to the FRS financial statements. The Group does not expect the application of mandatory exceptions and the election of optional exemptions in SFRS(I) 1 to have any significant impact on the financial statements.

(ii) SFRS(I) 15

SFRS(I) 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It also introduces new cost guidance which requires certain costs of obtaining and fulfilling contracts to be recognised as separate assets when specific criteria are met.

The Group plans to adopt SFRS(I) 15 in its financial statements for the year ending 31 December 2018, using the retrospective approach. As a result, the Group will apply all of the requirements of SFRS(I) 15 retrospectively, except as described below, and the comparative period presented in the 2018 financial statements will be restated.

The Group plans to elect the practical expedients for completed contracts. This means that completed contracts that began and ended in the same comparative reporting period, as well as completed contracts at the beginning of the earliest period presented, are not restated.

The expected impact upon the adoption of SFRS(I) 15 are described below. The information below reflects the Group's expectations of the tax implications arising from the changes in accounting treatment. Tax effects may change when the transition adjustments are finalised.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.18 Full convergence with International Financial Reporting Standards (IFRS) and adoption of new standards (continued)

Applicable to 2018 financial statements (continued)

(ii) SFRS(I) 15 (continued)

(a) Identification of performance obligations

The Group currently recognises revenue for each long-term contract based on the different types of goods and services stipulated in its contracts. Under SFRS(I) 15, the Group is required to identify distinct performance obligations (PO) in bundled arrangements and account for each PO separately, unless it can be demonstrated that the Group provides a significant integrated service; and the goods or services within the contract are highly dependent on or highly integrated with other goods or services.

The Group has evaluated the criteria required for contracts with multiple performance obligations and has put in place process to assess, track and monitor the recognition of revenue for each performance obligation. For the long term contracts that are highly customised to the requirements of the customers and where the Group's right to payment for good and services rendered to date if the contract is terminated for reasons other than the Group's failure to performed as promised is established, the Group does not expect a significant impact on the timing and amount of revenue recognition. For certain contracts where the right to payment is not established, the Group will defer revenue recognition until completion of work. The potential impact is quantified in 'Summary of quantitative impact' below.

(b) Variable consideration

The Group's contracts may include variable considerations such as discounts, incentives, performance bonuses, penalties, including liquidated damages for delays, or other similar terms. Under SFRS(I) 15, the Group is required to estimate the amount of consideration to which it expects to be entitled and variable amounts are included in contract revenue to the extent that it is highly probable that there will be no significant reversal when the uncertainty is resolved.

For contracts that contain a significant financing components, the Group adjusts the transaction price for the effects of the time value of money. For this purpose, the Group will elect the practical expedient of not adjusting the transaction price if the period between payment and transfer of goods and/or services is less than one year.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.18 Full convergence with International Financial Reporting Standards (IFRS) and adoption of new standards (continued)

Applicable to 2018 financial statements (continued)

(iii) SFRS(I) 9

SFRS(I) 9 contains new requirements for classification and measurement of financial instruments, a new expected credit loss model for calculating impairment of financial assets, and new general hedge accounting requirements.

Changes in accounting policies resulting from the adoption of SFRS(I) 9 will generally be applied by the Group retrospectively, except as described below.

- The Group plans to elect the SFRS(I) exemption in SFRS(I) 1 allowing it not to restate comparative information in the 2018 SFRS(I) financial statements. Differences in the carrying amounts of financial assets and financial liabilities resulting from the adoption of SFRS(I) 9 are recognised in retained earnings as at 1 January 2018.
- The following assessments have to be made on the basis of facts and circumstances that existed at 1 January 2018.
 - The determination of the business model within which a financial asset is held.
 - The determination of whether contractual terms of a financial asset give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding.
 - The designation of an investment in equity instruments that is not held for trading as at fair value through other comprehensive income (FVOCI).
 - The designation and revocation of previous designations of certain financial assets and financial liabilities measured at FVTPL.
- If an investment in a debt security has low credit risk at 1 January 2018, the Group plans to assume that the credit risk on the asset has not increased significantly since its initial recognition.
- New hedge accounting requirements are applied prospectively. All hedging relationships designated under FRS 39 *Financial Instruments: Recognition and Measurement* at 31 December 2017 that meet the criteria for hedge accounting under SFRS(I) 9 at 1 January 2018 will be regarded as continuing hedging relationships.

The expected impact on adoption of SFRS(I) 9 are described below. The information below reflects the Group's expectation of the implications arising from the changes in the accounting treatment, however, the actual tax effect may change when the transition adjustments are finalised.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.18 Full convergence with International Financial Reporting Standards (IFRS) and adoption of new standards (continued)

Applicable to 2018 financial statements (continued)

(iii) SFRS(I) 9 (continued)

(a) Classification of financial assets and liabilities

SFRS(I) 9 contains three principal classification categories for financial assets: measured at amortised cost, FVOCI and FVTPL and replaces the existing FRS 39 categories of held-to-maturity, loans and receivables and available-for-sale. Classification under SFRS(I) 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. SFRS(I) 9 largely retains the existing requirements in FRS 39 for the classification of financial liabilities.

The Group does not expect a significant change to the measurement basis arising from adopting the new classification and measurement model.

(b) Expected credit losses on financial assets

SFRS(I) 9 replaces the 'incurred loss model' in FRS 39 with an 'expected credit loss' (ECL) model. The new impairment model also applies to certain loan commitments and financial guarantee contracts, but not to equity investments.

The Group plans to apply the simplified approach and record lifetime ECL on all trade receivables and any contract assets arising from the application of SFRS(I) 15. The Group expects an increase in impairment for trade receivables of \$627,000.

The Group does not expect any material tax impact on the increase in impairment arising from SFRS(I) 9 adoption.

The Group is currently finalising the testing of its expected credit loss model and the quantum of the final transition adjustments may be different upon finalisation.

(c) Measurement of unquoted equity securities

SFRS(I) 9 is more restrictive in the use of cost when measuring unquoted equity securities. Consequently, the Group reviewed all such investments and recognised that the maximum impact would be a \$10,875,000 increase in long-term investments to be recorded in the fair value reserve.

Summary of quantitative impact

The Group is currently finalising the transition adjustments. The following reconciliations provide an estimate of the expected impacts on initial adoption of SFRS(I) 1, SFRS(I) 15 and SFRS(I) 9 on the Group's and the Company's financial position as at 31 December 2017 and 1 January 2018 and the Group's profit or loss and other comprehensive income for the year ended 31 December 2017.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.18 Full convergence with International Financial Reporting Standards (IFRS) and adoption of new standards (continued)

Summary of quantitative impact (continued)

Consolidated balance sheet

	31 December 2017			1 January 2018	
	Current framework \$'000	SFRS(I) 15 \$'000	SFRS(I) framework \$'000	SFRS(I) 9 \$'000	SFRS(I) framework \$'000
ASSETS					
Non-current assets					
Property, plant and equipment	1,719,396	–	1,719,396	–	1,719,396
Associates and joint ventures	448,387	–	448,387	–	448,387
Investments	360,346	–	360,346	10,875	371,221
Intangible assets	1,087,412	–	1,087,412	–	1,087,412
Long-term trade receivables	1,052	(1,052)	–	–	–
Deferred tax assets	74,047	(19)	74,028	–	74,028
Amounts due from related parties	4,806	–	4,806	–	4,806
Advances and other receivables	20,406	–	20,406	–	20,406
Derivative financial instruments	33,082	–	33,082	–	33,082
Employee benefits	243	–	243	–	243
	<u>3,749,177</u>	<u>(1,071)</u>	<u>3,748,106</u>	<u>10,875</u>	<u>3,758,981</u>
Current assets					
Contract assets	–	939,073	939,073	–	939,073
Inventories and work-in-progress	1,764,320	(681,964)	1,082,356	–	1,082,356
Trade receivables	1,645,824	(705,099)	940,725	(627)	940,098
Amounts due from related parties	28,271	–	28,271	–	28,271
Advances and other receivables	286,419	105	286,524	–	286,524
Short-term investments	357	–	357	–	357
Bank balances and other liquid funds	999,003	–	999,003	–	999,003
	<u>4,724,194</u>	<u>(447,885)</u>	<u>4,276,309</u>	<u>(627)</u>	<u>4,275,682</u>
Total assets	<u>8,473,371</u>	<u>(448,956)</u>	<u>8,024,415</u>	<u>10,248</u>	<u>8,034,663</u>
EQUITY AND LIABILITIES					
Current liabilities					
Contract liabilities	–	1,246,021	1,246,021	–	1,246,021
Advance payments from customers	822,958	(804,923)	18,035	–	18,035
Trade payables and accruals	1,612,509	(12,770)	1,599,739	–	1,599,739
Amounts due to related parties	104,042	–	104,042	–	104,042
Provisions	235,240	24,906	260,146	–	260,146
Progress billings in excess of work-in-progress	762,483	(762,483)	–	–	–
Provision for taxation	138,730	(4,044)	134,686	–	134,686
Borrowings	221,642	–	221,642	–	221,642
Deferred income	630	–	630	–	630
Employee benefits	2,491	–	2,491	–	2,491
	<u>3,900,725</u>	<u>(313,293)</u>	<u>3,587,432</u>	<u>–</u>	<u>3,587,432</u>
Net current assets	<u>823,469</u>	<u>(134,592)</u>	<u>688,877</u>	<u>(627)</u>	<u>688,250</u>

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.18 Full convergence with International Financial Reporting Standards (IFRS) and adoption of new standards (continued)

Summary of quantitative impact (continued)

Consolidated balance sheet (continued)

	31 December 2017			1 January 2018	
	Current framework \$'000	SFRS(I) 15 \$'000	SFRS(I) framework \$'000	SFRS(I) 9 \$'000	SFRS(I) framework \$'000
Non-current liabilities					
Contract liabilities	–	521,787	521,787	–	521,787
Advance payments from customers	641,262	(641,262)	–	–	–
Trade payables and accruals	122,978	8,865	131,843	–	131,843
Deferred tax liabilities	205,200	–	205,200	–	205,200
Borrowings	894,422	–	894,422	–	894,422
Deferred income	69,156	–	69,156	–	69,156
Employee benefits	102,669	–	102,669	–	102,669
Derivative financial instruments	15,553	–	15,553	–	15,553
Amounts due to related parties	17	–	17	–	17
	<u>2,051,257</u>	<u>(110,610)</u>	<u>1,940,647</u>	<u>–</u>	<u>1,940,647</u>
Total liabilities	<u>5,951,982</u>	<u>(423,903)</u>	<u>5,528,079</u>	<u>–</u>	<u>5,528,079</u>
Net assets	<u>2,521,389</u>	<u>(25,053)</u>	<u>2,496,336</u>	<u>10,248</u>	<u>2,506,584</u>
Share capital and reserves					
Share capital	895,926	–	895,926	–	895,926
Treasury shares	(22,870)	–	(22,870)	–	(22,870)
Capital reserves	119,782	–	119,782	–	119,782
Other reserves	(67,468)	(12)	(67,480)	10,875	(56,605)
Retained earnings	1,314,610	(24,957)	1,289,653	(615)	1,289,038
Equity attributable to owners of the Company	<u>2,239,980</u>	<u>(24,969)</u>	<u>2,215,011</u>	<u>10,260</u>	<u>2,225,271</u>
Non-controlling interests	281,409	(84)	281,325	(12)	281,313
	<u>2,521,389</u>	<u>(25,053)</u>	<u>2,496,336</u>	<u>10,248</u>	<u>2,506,584</u>
Total equity and liabilities	<u>8,473,371</u>	<u>(448,956)</u>	<u>8,024,415</u>	<u>10,248</u>	<u>8,034,663</u>

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.18 Full convergence with International Financial Reporting Standards (IFRS) and adoption of new standards (continued)

Summary of quantitative impact (continued)

Consolidated income statement

	31 December 2017		
	Current framework \$'000	SFRS(I) 15 \$'000	SFRS(I) framework \$'000
Revenue	6,619,491	(98,428)	6,521,063
Cost of sales	(5,296,209)	87,931	(5,208,278)
Gross profit	1,323,282	(10,497)	1,312,785
Distribution and selling expenses	(169,488)	–	(169,488)
Administrative expenses	(474,045)	–	(474,045)
Other operating expenses	(126,404)	–	(126,404)
Profit from operations	553,345	(10,497)	542,848
Other income	39,944	–	39,944
Other expenses	(1,278)	–	(1,278)
Other income, net	38,666	–	38,666
Finance income	38,222	428	38,650
Finance costs	(56,271)	(1,411)	(57,682)
Finance costs, net	(18,049)	(983)	(19,032)
Share of results of associates and joint ventures, net of tax	49,332	–	49,332
Profit before taxation	623,294	(11,480)	611,814
Taxation	(87,867)	2,146	(85,721)
Profit for the year	535,427	(9,334)	526,093
Attributable to:			
Shareholders of the Company	511,882	(9,250)	502,632
Non-controlling interests	23,545	(84)	23,461
	535,427	(9,334)	526,093

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.18 Full convergence with International Financial Reporting Standards (IFRS) and adoption of new standards (continued)

Summary of quantitative impact (continued)

Consolidated statement of comprehensive income

	31 December 2017		
	Current framework \$'000	SFRS(I) 15 \$'000	SFRS(I) framework \$'000
Profit for the year	535,427	(9,334)	526,093
Other comprehensive income			
<i>Items that will not be reclassified subsequently to profit or loss:</i>			
Defined benefit plan remeasurements	(6,109)	–	(6,109)
<i>Items that are or may be reclassified subsequently to profit or loss:</i>			
Net fair value changes on available-for-sale financial assets	8,670	–	8,670
Net fair value changes on cash flow hedges	56,112	–	56,112
Share of net fair value changes on cash flow hedges of joint ventures	(127)	–	(127)
Foreign currency translation differences	(47,327)	1	(47,326)
Share of foreign currency translation differences of associates and joint ventures	(11,102)	–	(11,102)
Reclassification of foreign currency translation reserve to profit or loss arising from disposal of foreign entities	2,161	–	2,161
	8,387	1	8,388
Other comprehensive income for the year, net of tax	2,278	1	2,279
Total comprehensive income for the year, net of tax	537,705	(9,333)	528,372
Total comprehensive income attributable to:			
Shareholders of the Company	502,229	(9,249)	492,980
Non-controlling interests	35,476	(84)	35,392
	537,705	(9,333)	528,372

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.18 Full convergence with International Financial Reporting Standards (IFRS) and adoption of new standards (continued)

Applicable to financial statements for the year 2019 and thereafter

The following new SFRS(I), amendments to and interpretations of SFRS(I) are effective for annual periods beginning after 1 January 2018:

Applicable to 2019 financial statements

- SFRS(I) 16 *Leases*
- IFRIC 23 *Uncertainty over Income Tax Treatments*

Applicable to 2021 financial statements

- SFRS(I) 17 *Insurance Contracts*

Mandatory effective date deferred

- *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture* (Amendments to SFRS(I) 10 and IAS 28).

The Group is still in the process of assessing the impact of the new SFRS(I)s, amendments to and interpretations of SFRS(I)s on the financial statements. The Group's preliminary assessment of SFRS(I) 16, which is expected to have a more significant impact on the Group, is as described below. The Group also preliminarily assessed that SFRS(I) 17 is not relevant to the Group as the Group does not issue insurance contracts nor account for financial guarantee contracts as insurance contracts.

(i) SFRS(I) 16

SFRS(I) 16 replaces existing lease accounting guidance. SFRS(I) 16 is effective for annual periods beginning on or after 1 January 2019, with early adoption permitted if SFRS(I) 15 is also applied. SFRS(I) 16 eliminates the lessee's classification of leases as either operating leases or finance leases and introduces a single lessee accounting model. Applying the new model, a lessee is required to recognise right-of-use (ROU) assets and lease liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value.

The Group plans to adopt the standard when it becomes effective in 2019 and expects to apply the standard using the modified retrospective approach. The Group also expects the ROU assets recognised at date of initial application to be equal to their lease liabilities.

The Group is likely to elect the practical expedient not to reassess whether a contract contains a lease at the date of initial application, 1 January 2019. Accordingly, existing lease contracts that are still effective on 1 January 2019 continue to be accounted for as lease contracts under SFRS(I) 16. The Group has performed a preliminary assessment of the impact on its financial statements based on its existing operating lease arrangements (refer to note 36).

Until 2018, the approximate financial impact of the standard is unknown due to factors that impact calculation of lease liabilities such as discount rate, expected term of leases including renewal options and exemptions for short-term leases. The Group will continue to assess its portfolio of leases to calculate the impending impact of transition to the new standard.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3.18 Full convergence with International Financial Reporting Standards (IFRS) and adoption of new standards (continued)

Applicable to financial statements for the year 2019 and thereafter (continued)

(i) SFRS(I) 16 (continued)

(a) The Group as lessee

The Group expects its existing operating lease arrangements to be recognised as ROU assets with corresponding lease liabilities under SFRS(I) 16. The operating lease commitments on an undiscounted basis amount to approximately 4.8% of the consolidated total assets and 6.8% of consolidated total liabilities. Under the new standard, remaining lease payments of the operating leases will be recognised at their present value discounted using appropriate discount rate. In addition, the nature of expenses related to those leases will now change as SFRS(I) 16 replaces the straight-line operating lease expense with depreciation charge of ROU assets and interest expense on lease liabilities.

(b) The Group as lessor

SFRS(I) 16 substantially carries forward the current existing lessor accounting requirements. Accordingly, the Group continues to classify its leases as operating leases or finance leases, and to account for these two types of leases using the existing lease and finance lease accounting models respectively. However, SFRS(I) 16 requires more extensive disclosures to be provided by a lessor.

4. REVENUE

	Group	
	2017	2016
	\$'000	\$'000
Sale of goods	1,985,183	2,187,741
Service income	4,271,981	3,969,886
Contract revenue	362,327	526,110
	<u>6,619,491</u>	<u>6,683,737</u>

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

5. PROFIT FROM OPERATIONS

Profit from operations is arrived after charging/(crediting) the following items (except where otherwise disclosed in the other notes to financial statements):

	Group	
	2017	2016
	\$'000	\$'000
After charging/(crediting)		
Auditors' remuneration		
– auditors of the Company	2,913	2,928
– other auditors [#]	3,039	3,664
Non-audit fees		
– auditors of the Company	990	1,234
– other auditors [#]	1,012	1,485
Fees paid to Auditors of the Company under business relationship arrangement	626	436
Fees and remuneration of directors [*]	6,022	8,308
Fees paid to a firm of which a director is a member	606	519
Allowance/(write-back of allowance) for		
– inventory obsolescence	35,012	54,864
– doubtful debts (trade)	5,590	10,559
– unbilled receivables (trade)	(4)	–
– doubtful lease receivables	–	697
Bad debts written off	11,040	1,616
Provision for foreseeable losses	25,333	8,037
Property, plant and equipment written off	431	709
Research, design and development expenses	117,470	109,108
Operating lease expenses	47,041	47,914
Fair value changes in embedded derivatives not designated as hedging instruments (included in cost of sales)		
– Gains	(22)	(293)
– Losses	1,177	287
Fair value changes of forward currency contracts not designated as hedging instruments (included in cost of sales)		
– Gains	–	(2,521)
– Losses	231	2,593
Ineffective portion of changes in fair value of cash flow hedges (included in cost of sales)	4,324	–

^{*} Includes share-based payment expense of \$1,951,274 (2016: \$2,518,525).

[#] Refers to other member firms of KPMG International

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

6. PERSONNEL EXPENSES

	Group	
	2017	2016
	\$'000	\$'000
Wages and salaries *	1,582,092	1,580,071
Contributions to defined contribution plans	172,640	170,707
Defined benefit plan expenses	6,109	5,225
Share-based payments	14,160	8,946
Other personnel expenses	186,244	195,162
	<u>1,961,245</u>	<u>1,960,111</u>

* Includes directors' remuneration of \$2,589,683 (2016: \$3,869,794).

7. OTHER INCOME, NET

	Group	
	2017	2016
	\$'000	\$'000
Other income		
Government grants	14,089	16,761
Commission income	1	4
Rental income	6,525	6,333
Gain on disposal of property, plant and equipment	241	903
Gain on disposal of subsidiaries	–	11,796
Gain on disposal of an associate	–	731
Bargain purchase arising from business combination	–	1,333
Grant income from Wage Credit Scheme	6,955	19,835
Remeasurement gain on fair value of pre-existing interest in acquiree	–	1,364
Others	12,133	8,755
	<u>39,944</u>	<u>67,815</u>
Other expenses		
Loss on disposal of a subsidiary	(1,277)	(15)
Loss on disposal of a joint venture	(1)	–
	<u>(1,278)</u>	<u>(15)</u>
Other income, net, recognised in profit or loss	<u>38,666</u>	<u>67,800</u>

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

8. FINANCE COSTS, NET

	Group	
	2017 \$'000	2016 \$'000
Finance income		
Dividend income from quoted equity investments	7	4
Interest income		
– bank deposits	8,570	9,148
– staff loans	9	12
– finance lease	118	149
– bonds	13,846	15,295
– others	1,647	2,738
Exchange gain, net	12,025	–
Gain on disposal of investments	540	3,672
Net change in fair value of cash flow hedges reclassified from equity on occurrence of forecast transactions	–	314
Fair value changes of financial instruments		
– gain on forward currency contract designated as hedging instrument	213	–
– gain on forward currency contract, cross currency interest rate swaps and cross currency swap not designated as hedging instrument	–	2,280
– gain on ineffective portion of forward currency contract designated as hedging instrument	–	42
Fair value changes of hedged items	1,247	37
	38,222	33,691
Finance costs		
Interest expense		
– bank loans and overdrafts	(7,397)	(8,122)
– bonds	(31,595)	(32,060)
– finance lease	(760)	(747)
– others	(1,446)	(1,512)
Exchange loss, net	–	(1,503)
Loss on fair value changes of investments held for trading	–	(11)
Net change in fair value of cash flow hedges reclassified from equity on occurrence of forecast transactions	(1,598)	–
Fair value changes of financial instruments		
– loss on fair value changes of forward currency contract and forward currency denominated cash balance designated as hedging instrument	–	(173)
– loss on forward currency contract and cross currency interest rate swaps not designated as hedging instrument	(13,023)	–
– loss on ineffective portion of forward currency contract designated as hedging instrument	(5)	–
Impairment losses on investments	(447)	(1,579)
	(56,271)	(45,707)
Finance costs, net, recognised in profit or loss	(18,049)	(12,016)

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

9. TAXATION

	Group	
	2017	2016
	\$'000	\$'000
Current income tax		
Current year	122,789	143,979
Overprovision in respect of prior years	(8,882)	(18,431)
	<u>113,907</u>	<u>125,548</u>
Deferred income tax		
Current year	5,077	(13,523)
Overprovision in respect of prior years	(10,804)	(14,542)
Effect of change in tax rate	(20,313)	287
	<u>(26,040)</u>	<u>(27,778)</u>
	<u>87,867</u>	<u>97,770</u>

Reconciliation of tax expense

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	
	2017	2016
	\$'000	\$'000
Profit before taxation	623,294	590,633
Taxation at statutory tax rate of 17% (2016: 17%)	105,960	100,408
Adjustments:		
Income not subject to tax	(3,540)	(4,249)
Expenses not deductible for tax purposes	24,231	34,158
Different tax rates of other countries	3,380	(2,312)
Overprovision in prior years, net	(19,686)	(32,973)
Effect of change in tax rates	(20,313)	287
Effect of results of associates and joint ventures presented net of tax	(8,386)	(10,840)
Tax incentives	(2,778)	(4,916)
Deferred tax assets not recognised	15,624	27,619
Deferred tax assets previously not recognised now utilised	(6,580)	(11,246)
Others	(45)	1,834
	<u>87,867</u>	<u>97,770</u>

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

10. EARNINGS PER SHARE

Basic earnings per share

The calculation for basic earnings per share is based on:

	Group	
	2017	2016
	\$'000	\$'000
Profit attributable to shareholders	511,882	484,514

The weighted average number of ordinary shares is arrived at as follows:

	Group	
	2017	2016
	'000	'000
Number of shares		
Issued ordinary shares at beginning of the year	3,108,606	3,101,528
Effect of share options exercised, performance shares and restricted shares released	7,976	5,140
Effect of treasury shares held	(1,303)	(1,021)
Weighted average number of ordinary shares during the year	3,115,279	3,105,647

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 average fair value of one ordinary share during the financial year ended 31 December 2017 was \$3.55 (2016: \$3.18) per share. As at 31 December 2017, the Company has two categories of dilutive potential ordinary shares from performance share plan and restricted share plan. The weighted average number of ordinary shares adjusted for the unissued shares under option is as follows:

	Group	
	2017	2016
	'000	'000
Number of shares		
Weighted average number of ordinary shares * (used in the calculation of basic earnings per share)	3,115,279	3,105,647
Number of unissued shares under share options, performance shares and restricted shares	16,928	–
Number of shares that would have been issued at fair value	(1,371)	–
Weighted average number of ordinary shares (diluted) during the year	3,130,836	3,105,647

* The weighted average number of ordinary shares takes into account the weighted average effect of changes in treasury shares transactions during the year.

As at 31 December 2017, there was no outstanding balance of unexercised share options. As at 31 December 2016, 10,051,479 share options were excluded from the diluted weighted average number of ordinary shares calculation as their effect would have been anti-dilutive.

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

11. PROPERTY, PLANT AND EQUIPMENT

	Valuation/Cost							As at 31.12.2016 \$'000
	As at 1.1.2016 \$'000	Additions \$'000	Disposals/ write-off \$'000	Arising from acquisition of interest in a subsidiary \$'000	Due to disposal of subsidiaries \$'000	Reclassi- fications \$'000	Translation difference \$'000	
The Group	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
At Valuation								
Leasehold land and buildings	1,919	–	–	–	–	–	–	1,919
Wharves and slipways	1,317	–	–	–	–	–	–	1,317
Syncrolift and floating docks	4,613	–	–	–	–	–	–	4,613
Plant and machinery	1,683	–	–	–	–	–	–	1,683
Furniture, fittings, office equipment and computers	285	–	–	–	–	–	–	285
At Cost								
Freehold land and buildings	73,457	–	–	–	–	612	1,391	75,460
Leasehold land and buildings	1,104,440	15,752	(629)	27,374	(27,033)	7,544	(5,446)	1,122,002
Improvements to premises	128,239	7,400	(1,175)	–	(30)	956	1,445	136,835
Wharves and slipways	46,949	–	–	–	–	–	412	47,361
Syncrolift and floating docks	90,349	–	(263)	–	–	509	428	91,023
Boats and barges	181,182	–	(76)	–	–	(3,773)	28	177,361
Plant and machinery	820,467	59,780	(27,060)	25,557	(14,630)	11,019	667	875,800
Production tools and equipment	323,141	28,482	(7,927)	13,033	(504)	1,701	1,890	359,816
Furniture, fittings, office equipment and computers	281,237	25,728	(17,017)	2,245	(3,746)	1,411	783	290,641
Transportation equipment and vehicles	17,503	1,708	(1,152)	–	(1,619)	(59)	(63)	16,318
Aircraft and aircraft engines	346,299	25,564	–	–	(108,871)	(7,578)	(1,857)	253,557
Satellite	–	–	–	–	–	13,698	–	13,698
Construction-in-progress	32,453	87,941	(421)	11,005	(25)	(34,344)	(137)	96,472
	3,455,533	252,355	(55,720)	79,214	(156,458)	(8,304)	(459)	3,566,161

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

11. PROPERTY, PLANT AND EQUIPMENT (continued)

The Group	Valuation/Cost						As at 31.12.2017 \$'000
	As at 1.1.2017 \$'000	Additions* ¹ \$'000	Disposals/ write-off \$'000	Arising from acquisition of interest in a subsidiary \$'000	Reclassi- fications \$'000	Translation difference \$'000	
At Valuation							
Leasehold land and buildings	1,919	—	—	—	—	—	1,919
Wharves and slipways	1,317	—	—	—	—	—	1,317
Syncrolift and floating docks	4,613	—	—	—	—	—	4,613
Plant and machinery	1,683	—	—	—	—	—	1,683
Furniture, fittings, office equipment and computers	285	—	—	—	—	—	285
At Cost							
Freehold land and buildings	75,460	12,255	—	—	2,902	(5,517)	85,100
Leasehold land and buildings	1,122,002	29,431	(670)	—	49,039	(13,289)	1,186,513
Improvements to premises	136,835	11,760	(1,590)	4	12,667	(5,695)	153,981
Wharves and slipways	47,361	9	—	—	1,152	(1,472)	47,050
Syncrolift and floating docks	91,023	249	—	—	(14)	(1,509)	89,749
Boats and barges	177,361	120	—	—	—	(101)	177,380
Plant and machinery	875,800	79,951	(16,542)	—	32,097	(13,170)	958,136
Production tools and equipment	359,816	31,119	(2,227)	307	545	(8,451)	381,109
Furniture, fittings, office equipment and computers	290,641	35,617	(11,916)	682	3,044	(5,977)	312,091
Transportation equipment and vehicles	16,318	2,104	(1,197)	—	5	(284)	16,946
Aircraft and aircraft engines	253,557	1,370	—	—	8,339	(7,659)	255,607
Satellite	13,698	—	—	—	—	—	13,698
Construction-in-progress	96,472	68,689	(193)	—	(119,781)	(10)	45,177
	3,566,161	272,674	(34,335)	993	(10,005)	(63,134)	3,732,354

*¹ During the year, the Group's wholly-owned subsidiary, Vision Technologies Marine, Inc. acquired selected marine repair assets in Pascagoula, Mississippi in the US. This transaction has been accounted for as an asset acquisition. Total consideration transferred at acquisition date comprises of cash consideration of \$34 million (US\$25 million).

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

11. PROPERTY, PLANT AND EQUIPMENT (continued)

The Group	Accumulated depreciation						As at 31.12.2016 \$'000
	As at 1.1.2016 \$'000	Depreciation charge/ impairment losses*2 for the year \$'000	Disposals/ write-off \$'000	Due to disposal of subsidiaries \$'000	Reclassi- fications \$'000	Translation difference \$'000	
At Valuation							
Leasehold land and buildings	1,919	–	–	–	–	–	1,919
Wharves and slipways	1,317	–	–	–	–	–	1,317
Syncrolift and floating docks	4,613	–	–	–	–	–	4,613
Plant and machinery	1,683	–	–	–	–	–	1,683
Furniture, fittings, office equipment and computers	285	–	–	–	–	–	285
At Cost							
Freehold land and buildings	24,717	1,468	–	–	–	479	26,664
Leasehold land and buildings	483,036	64,306	(496)	(6,610)	46	1,234	541,516
Improvements to premises	52,154	10,916	(1,163)	(30)	(2)	395	62,270
Wharves and slipways	28,609	1,317	–	–	–	145	30,071
Syncrolift and floating docks	72,248	1,498	(263)	–	–	128	73,611
Boats and barges	55,574	6,372	(76)	–	(1,792)	28	60,106
Plant and machinery	469,719	63,061	(24,679)	(9,085)	13	1,377	500,406
Production tools and equipment	226,040	22,070	(7,569)	(476)	37	3,065	243,167
Furniture, fittings, office equipment and computers	233,978	35,613	(16,832)	(3,386)	(47)	990	250,316
Transportation equipment and vehicles	14,359	1,407	(1,076)	(1,479)	(48)	(44)	13,119
Aircraft and aircraft engines	76,503	17,117	–	(3,154)	(7,578)	708	83,596
Satellite	–	1,370	–	–	–	–	1,370
	1,746,754	226,515	(52,154)	(24,220)	(9,371)	8,505	1,896,029

^{*2} In the prior year, the Group recognised impairment losses of \$30,837,000, which mainly relate to:

- impairment of rotatable assets deployed to customers. Following the liquidation of one of its customers, the Group performed an impairment assessment and recognised an impairment loss of \$1,132,000 as part of cost of sales in the income statement. The recoverable amount was estimated based on its market value less cost to sell.
- impairment on certain property, plant and equipment. The Group performed an impairment assessment and recognised an impairment loss of \$28,170,000. The recoverable amounts of these property, plant and equipment were determined based on the fair value less costs of disposal of the property, plant and equipment. Management estimated the fair value less costs of disposal of these property, plant and equipment based on independent valuation, with reference to replacement costs (level 3 of fair value hierarchy), and market resale values of similar assets (level 2 of fair value hierarchy).

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

11. PROPERTY, PLANT AND EQUIPMENT (continued)

The Group	Accumulated depreciation					As at 31.12.2017 \$'000
	As at 1.1.2017 \$'000	Depreciation charge/ impairment losses for the year \$'000	Disposals/ write-off \$'000	Reclassifications \$'000	Translation difference \$'000	
At Valuation						
Leasehold land and buildings	1,919	–	–	–	–	1,919
Wharves and slipways	1,317	–	–	–	–	1,317
Syncrolift and floating docks	4,613	–	–	–	–	4,613
Plant and machinery	1,683	–	–	–	–	1,683
Furniture, fittings, office equipment and computers	285	–	–	–	–	285
At Cost						
Freehold land and buildings	26,664	1,504	–	–	(2,006)	26,162
Leasehold land and buildings	541,516	40,822	(568)	204	(7,378)	574,596
Improvements to premises	62,270	9,030	(1,589)	(29)	(1,779)	67,903
Wharves and slipways	30,071	1,363	–	–	(471)	30,963
Syncrolift and floating docks	73,611	1,502	–	–	(365)	74,748
Boats and barges	60,106	5,994	–	–	(103)	65,997
Plant and machinery	500,406	60,214	(14,808)	(233)	(10,682)	534,897
Production tools and equipment	243,167	20,935	(2,155)	(3,583)	(4,689)	253,675
Furniture, fittings, office equipment and computers	250,316	24,050	(11,841)	3,618	(5,193)	260,950
Transportation equipment and vehicles	13,119	1,547	(1,190)	23	(244)	13,255
Aircraft and aircraft engines	83,596	13,978	–	–	(1,689)	95,885
Satellite	1,370	2,740	–	–	–	4,110
	<u>1,896,029</u>	<u>183,679</u>	<u>(32,151)</u>	<u>–</u>	<u>(34,599)</u>	<u>2,012,958</u>

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

11. PROPERTY, PLANT AND EQUIPMENT (continued)

The Group	31.12.2017 \$'000	Net book value	
		31.12.2016 \$'000	1.1.2016 \$'000
At Valuation			
Leasehold land and buildings	–	–	–
Wharves and slipways	–	–	–
Syncrolift and floating docks	–	–	–
Plant and machinery	–	–	–
Furniture, fittings, office equipment and computers	–	–	–
At Cost			
Freehold land and buildings	58,938	48,796	48,740
Leasehold land and buildings	611,917	580,486	621,404
Improvements to premises	86,078	74,565	76,085
Wharves and slipways	16,087	17,290	18,340
Syncrolift and floating docks	15,001	17,412	18,101
Boats and barges	111,383	117,255	125,608
Plant and machinery	423,239	375,394	350,748
Production tools and equipment	127,434	116,649	97,101
Furniture, fittings, office equipment and computers	51,141	40,325	47,259
Transportation equipment and vehicles	3,691	3,199	3,144
Aircraft and aircraft engines	159,722	169,961	269,796
Satellite	9,588	12,328	–
Construction-in-progress	45,177	96,472	32,453
	1,719,396	1,670,132	1,708,779

Due to changes in the use of assets,

- (a) Plant and machinery with net book value amounting to \$320,000 (2016: \$1,982,000) were reclassified to inventories;
- (b) Plant and machinery with net book value amounting to \$9,685,000 (2016: nil) were reclassified as prepayment for land use right; and
- (c) In 2016, inventories amounting to \$3,049,000 were reclassified to property, plant and equipment.

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

11. PROPERTY, PLANT AND EQUIPMENT (continued)

The Company	Leasehold land and buildings \$'000	Furniture, fittings, office equipment and computers \$'000	Transportation equipment and vehicles \$'000	Total \$'000
Cost				
As 1.1.2016	2,841	5,378	525	8,744
Additions	–	374	–	374
Disposals/write-off	–	(1,279)	(57)	(1,336)
As at 31.12.2016	2,841	4,473	468	7,782
Additions	–	7,577	–	7,577
As at 31.12.2017	2,841	12,050	468	15,359
Accumulated depreciation				
As 1.1.2016	447	3,994	306	4,747
Depreciation charge for the year	282	609	94	985
Disposals/write-off	–	(1,144)	(57)	(1,201)
As at 31.12.2016	729	3,459	343	4,531
Depreciation charge for the year	282	791	94	1,167
As at 31.12.2017	1,011	4,250	437	5,698
Net book value				
As at 31.12.2017	1,830	7,800	31	9,661
As at 31.12.2016	2,112	1,014	125	3,251
As at 1.1.2016	2,394	1,384	219	3,997

(a) Property, plant and equipment pledged as security

Property, plant and equipment of certain overseas subsidiaries of the Group with a carrying value of \$107,201,000 (2016: \$62,252,000) are pledged as security for bank loans and other loans.

(b) Property, plant and equipment under lease obligations

Included in the above are property, plant and equipment acquired under finance lease obligations with a net book value of:

	Group	
	2017 \$'000	2016 \$'000
Leasehold land and buildings	15,064	16,953
Furniture, fittings, office equipment and computers	549	755
	15,613	17,708

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

11. PROPERTY, PLANT AND EQUIPMENT (continued)**(c) Major properties****(i) Freehold land and buildings**

Location	Description	Land area (sq. m.)	Net book value	
			2017 \$'000	2016 \$'000
USA				
13442 Emerson Road, Kidron, Ohio	Industrial buildings	68,351	888	1,006
300 Hackney Ave, Independence, Kansas	Industrial buildings	117,358	4,330	4,891
400 Hackney Ave, Washington, North Carolina	Industrial buildings	39,942	1,464	1,676
914 Saegers Station Drive, Montgomery, Pennsylvania	Industrial buildings	122,659	4,491	4,574
7801 Trinity Drive, Escatawpa, Mississippi	Shipyard and buildings	839,564	3,880	4,201
5801 Elder Ferry Road, Moss Point, Mississippi	Shipyard and buildings	227,151	4,182	4,525
900 Bayou Casotte Parkway, Pascagoula, Mississippi	Shipyard and buildings	331,803	19,242	21,196
2810 Lousie Street, Pascagoula, Mississippi	Buildings	25,252	2,757	3,078
3800 Richardson Road South, Hope Hull, Alabama	Production facility	8,361	1,989	2,351
Australia				
2 Bowral Place, Ballarat, Victoria	Office building and training classrooms	7,714	1,163	1,217
Germany				
Am Sandberg 3, Kodersdorf	Factory and office building	29,562	14,485	—

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

11. PROPERTY, PLANT AND EQUIPMENT (continued)**(c) Major properties (continued)****(ii) Leasehold land, buildings and improvements**

Location	Description	Tenure	Land area (sq. m.)	Net book value	
				2017 \$'000	2016 \$'000
Singapore					
501 Airport Road	Factory and office building	10.6 years from 1.6.2013	23,899	4,050	5,078
503 Airport Road	Factory and office building	10.6 years from 1.6.2013	7,175	622	735
505 Airport Road	Jet engine test cell	3 years from 1.7.2016	5,317	13,610	15,840
8 Changi North Way	Hangar and office building	30 years from 1.1.1992	75,713	20,279	22,672
	Hangar and office building	22.5 years from 16.6.1999	14,860	1,655	1,796
	Hangar and office building	16.3 years from 20.8.2005	9,764	8,008	8,449
102 Gul Circle	Factory and office building	30 years from 17.7.2012	6,857	7,055	7,338
51 Loyang Drive	Leasehold land for factory building	30 years from 1.1.1992	6,045	408	511
540 Airport Road	Hangars and office building	3 years lease from 1.7.2016	52,212	13,078	14,984
Seletar West Camp	Hangars and office building	31.7 years lease from 5.1.2009	25,200	26,977	28,314
Seletar West Camp	Factory and office building	25.7 years from 1.2.2015	4,516	5,596	5,795
Seletar West Camp	New Aero Centre	28.4 years from 1.4.2012	23,094	9,363	9,725

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

11. PROPERTY, PLANT AND EQUIPMENT (continued)**(c) Major properties (continued)****(ii) Leasehold land, buildings and improvements (continued)**

Location	Description	Tenure	Land area (sq. m.)	Net book value	
				2017 \$'000	2016 \$'000
Singapore					
24 Ang Mo Kio Street 65	Industrial and commercial buildings	30 years from 1.12.2012	23,970	4,361	3,995
100 Jurong East Street 21	Industrial and commercial buildings	30 years from 1.11.1988, renewable to 2048	11,232	5,181	5,550
1 Ang Mo Kio Electronics Park Road	Industrial and commercial buildings	30 years from 1.11.2011	20,000	55,473	59,892
6 Ang Mo Kio Electronics Park Road	Industrial and commercial buildings	30 years from 1.12.2011	5,000	16,070	17,018
3 Ang Mo Kio Electronics Park Road	Industrial and commercial buildings	30 years from 1.12.2015	30,000	46,271	—
33 Tuas Avenue 2	Factory and office building	30 years from 1.4.1996 to 31.3.2026	6,669	1,327	1,480
16 Benoi Crescent	Industrial and commercial buildings	30 years from 16.7.1989 to 15.7.2019	6,981	1,440	1,459
249 Jalan Boon Lay	Industrial and commercial buildings	27 years from 1.10.2001 to 31.12.2028, renewable to 10.10.2065	206,031	103,096	109,876
16 Tuas Avenue 7	Industrial buildings	30 years from 16.8.2013 to 15.8.2043	12,029	133	149
601 Rifle Range Road	Industrial buildings	Renewable every year *	556,074	6,025	5,701

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

11. PROPERTY, PLANT AND EQUIPMENT (continued)**(c) Major properties** (continued)**(iii) Leasehold land, buildings and improvements** (continued)

Location	Description	Tenure	Land area (sq. m.)	Net book value	
				2017 \$'000	2016 \$'000
Singapore (continued)					
15 Chin Bee Drive	Industrial buildings	60 years from 1.8.1973 to 31.7.2033	39,137	15,185	16,406
16 Benoi Road	Administrative offices and workshop	56 years from 1.6.1969	20,224	4,512	5,148
7 Benoi Road	Buildings, foreshore and workshops	56 years from 1.6.1969	103,975	11,625	13,504
60 Tuas Road	Buildings, foreshore and workshops	30 years from 1.12.1992	125,262	2,207	2,716
30/36 Kian Teck Avenue	Workers' dormitory	30 years from 1.9.1995	3,908	2,241	2,533
USA					
2100 Aerospace Drive Brookley Complex, Mobile, Alabama	Hangar and office building	29 years from 1.11.2012	103,825	28,386	28,603
9800 John Saunders Road, San Antonio, Texas	Hangar and office building	16.6 years from 1.6.2002	255,121	24,461	27,085
601 Bayou Casotte Parkway, Pascagoula, MS 39581	Shipyard and buildings	10 years from 30.6.2017	343,861	10,760	—

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

11. PROPERTY, PLANT AND EQUIPMENT (continued)**(c) Major properties** (continued)**(ii) Leasehold land, buildings and improvements** (continued)

Location	Description	Tenure	Land area (sq. m.)	Net book value	
				2017 \$'000	2016 \$'000
People's Republic of China					
No 2, Huayu Road, Huli District, Xiamen 361006, Fujian	Leasehold land for factory building	50 years from 20.11.2008	38,618	45,218	46,957
66 Xin Cheng Rui Shandong Road, Dantu, Zhenjiang, Jiangsu	Leasehold land, industrial and commercial buildings	50 years from 30.11.2012 to 30.11.2062	51,576	9,282	9,467
68 Xin Cheng Rui Shandong Road, Dantu, Zhenjiang, Jiangsu	Leasehold land, industrial and commercial buildings	50 years from 31.05.2013 to 31.05.2063	200,120	49,306	50,205
Germany					
Grenzstr. 1, Dresden	Hangar and office building	31 years from 1.1.1994	110,145	43,818	24,479
Zum Windkanal 32, Dresden	Hangar	18 years from 1.8.2007	5,415	6,638	6,747
Lindenstr. 1, Kodersdorf	Production hall with offices	5 years from 1.3.2013	5,688	21	20

* This relates to buildings constructed by subsidiaries on properties rented from the Ministry of Defence Singapore on leases which are renewable from one to three years. In view of the relationship between the landlord and the subsidiaries, the cost of the buildings is depreciated over the period of intended use, i.e. 30 years.

NOTES TO THE FINANCIAL STATEMENTS

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

12. SUBSIDIARIES

	Company	
	2017	2016
	\$'000	\$'000
Unquoted shares, at cost	1,176,486	1,177,733
Impairment in subsidiaries	(7,000)	(7,000)
Carrying amount after impairment in subsidiaries	1,169,486	1,170,733
Capital contribution * ¹	107,746	106,876
	<u>1,277,232</u>	<u>1,277,609</u>

*¹ The amount relates to capital contribution in the form of share options, performance shares and restricted shares issued to employees of subsidiaries.

Details of the subsidiaries are as follows:

	Effective equity interest held by the Group	
	2017	2016
	%	%
(a) Singapore Technologies Aerospace Ltd and its subsidiaries	100	100
Elbe Flugzeugwerke GmbH * ² and its subsidiaries	55	55
Aircraft Composites Sachsen GmbH * ²	55	55
CCI-Assembly GmbH * ²	55	55
Precision Products Singapore Pte Ltd	100	100
Singapore Aerospace K.K. * ¹ #	100	100
Singapore Technologies Engineering (Europe) Ltd *	100	100
ST Aerospace Aircraft Seats Pte. Ltd.	90	90
ST Aerospace Engineering Pte Ltd and its subsidiaries:	100	100
Pacific Flight Services Pte Ltd	100	100
Pacific Flight Services Pty Ltd #	100	100
ST Aerospace Academy Pte. Ltd. and its subsidiary:	100	100
Aviation Training Academy Australia Pty Ltd # and its subsidiary:	100	100
ST Aerospace Academy (Australia) Pty Ltd #	100	100
ST PAE Holdings Pty Ltd # and its subsidiaries:	100	100
Aerospace Engineering Services Pty Ltd * ² #	100	100
Aerospace Engineering Services Pty Ltd Unit Trust * ² #	100	100
ST Aerospace Engines Pte Ltd and its subsidiary:	100	100
ST Aerospace Technologies (Xiamen) Company Limited *	80	80
ST Aerospace International Structures Pte Ltd	100	100
ST Aerospace Resources Pte. Ltd.	100	100
ST Aerospace Rotables Pte. Ltd. * ³	–	100
ST Aerospace Services Co Pte. Ltd.	80	80
ST Aerospace Solutions (Europe) A/S * and its subsidiary:	100	100
Airline Rotables (UK Holdings) Limited * and its subsidiary:	100	100
Airline Rotables Limited *	100	100

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12. SUBSIDIARIES (continued)

Details of the subsidiaries are as follows: (continued)

	Effective equity interest held by the Group	
	2017 %	2016 %
(a) Singapore Technologies Aerospace Ltd and its subsidiaries (continued)	100	100
ST Aerospace Supplies Pte Ltd and its subsidiaries:	100	100
iShopAero Pte Ltd	100	100
ST Aerospace Guangzhou Aero-Technologies & Engineering Co Ltd.*	100	100
ST Aerospace Systems Pte Ltd and its subsidiary:	100	100
Singapore Precision Repair and Overhaul Pte Ltd	100	100
ST Aviation Resources Pte Ltd * ⁴	–	100
Visiontech Engineering Pte Ltd	51	51
(b) Singapore Technologies Electronics Limited and its subsidiaries	100	100
GFM Electronics S.A. de C.V. #	51	51
SEEL Electronic & Engineering Sdn Bhd	100	100
ST Electronics (Enterprise 1) Pte. Ltd.	100	100
ST Electronics (Info-Comm Systems) Pte. Ltd. and its subsidiaries:	100	100
ST Electronics (Info-Security) Pte. Ltd.	100	100
STELCOMMS Pte. Ltd.	100	100
Telematics Wireless Ltd. and its subsidiary:	100	100
Telematics Wireless USA Corp #	100	100
ST Electronics (Info-Software Systems) Pte. Ltd. and its subsidiaries:	100	100
INFA Systems Limited	100	100
ST Electronics (e-Services) Pte. Ltd. and its subsidiary:	100	100
Knowledge Alive Pte. Ltd. * ⁵ and its subsidiary:	–	100
COMAT Training Services Pte Ltd * ⁵	–	100
ST Electronics (Data Centre Solutions) Pte. Ltd.	100	100
ST Electronics (Wuxi) Co., Ltd.	100	100
ST Electronics (Satcom & Sensor Systems) Pte. Ltd. and its subsidiaries:	100	100
iDirect Asia Pte. Ltd.	100	100
OrisTel Systems Pte. Ltd.	100	100
ST Electronics (Shanghai) Co., Ltd and its subsidiary:	100	100
ST Electronics (Tianjin) Co., Ltd	100	100
ST Electronics (Taiwan) Limited	100	100
ST Electronics (Thailand) Limited	100	100
ST Electronics (Training & Simulation Systems) Pte. Ltd. and its subsidiaries:	100	100
Antycip Simulation Limited and its subsidiary:	93	93
Antycip Simulation SAS	93	93
ST Education & Training Private Limited * ⁶ and its subsidiary:	–	100
STET Maritime Pte. Ltd. * ⁶	–	100
STET Homeland Security Services Pte. Ltd.	100	100

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12. SUBSIDIARIES (continued)

Details of the subsidiaries are as follows: (continued)

		Effective equity interest held by the Group	
		2017	2016
		%	%
(b) Singapore Technologies Electronics Limited and its subsidiaries (continued)		100	100
ST Electronics do Brasil Serviços e Soluções em Sistemas Eletrônicos Ltda #		100	100
ST Electronics Saudi Arabia Limited *7		100	—
STELOP Pte. Ltd.		50.05	50.05
(c) Singapore Technologies Kinetics Ltd and its subsidiaries		100	100
Advanced Material Engineering Pte. Ltd. and its subsidiaries:		100	100
Advanced Pyrotechnic Materials Private Limited		51	51
SMART Systems Pte Ltd		51	51
Autonomous Technology Pte Ltd and its subsidiary:		100	100
Kinetics Automotive & Specialty Equipment Co., Ltd ^		100	100
Kinetics Systems (Shanghai) Co., Ltd.		100	100
Mobility Systems Pte Ltd and its subsidiaries:		100	100
Kinetics Drive Solutions Inc. #		100	100
Silvatech Global Systems Limited #		100	100
Silvatech Systems Corporation Pte Ltd *4		—	100
Technicae Projetos e Serviços Automotivos Ltda. #		100	94.36
Ordnance Development and Engineering Company of Singapore (1996) Private Limited		100	100
SDDA Pte. Ltd. and its subsidiary:		100	100
Kinetics Link Services Sdn. Bhd. *1		60	60
SDG Kinetics Pte. Ltd. and its subsidiaries:		100	100
LeeBoy Brazil Equipamentos De Construção Ltda. #		100	100
LeeBoy India Construction Equipment Private Limited		100	100
Securedge Pte. Ltd. *4		—	100
Singapore Commuter Private Limited and its subsidiaries:		100	100
Jiangsu Huaran Kinetics Co., Ltd. *1		75.3	75.3
Jiangsu Huatong Kinetics Co., Ltd. *1		75.3	75.3
Singapore Test Services Private Limited		100	100
ST Kinetics Integrated Engineering Pte. Ltd.		100	100
ST Kinetics International Pte. Ltd. and its subsidiary:		100	100
VT Hackney, S.A. de C.V. #		100	100
ST Synthesis Pte Ltd *8		100	100
STA Inspection Pte Ltd		100	100
Unicorn International Pte Limited		100	100

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12. SUBSIDIARIES (continued)

Details of the subsidiaries are as follows: (continued)

		Effective equity interest held by the Group	
		2017	2016
		%	%
(d)	Singapore Technologies Marine Ltd and its subsidiaries	100	100
	Hovertrans Solutions Pte. Ltd. * ¹	51	51
	ST Marine (Wuhan) Engineering Design Consultancy Co. Ltd. * ⁴	–	100
	STSE Engineering Services Pte Ltd and its subsidiaries:	100	100
	STSE (Shanghai) Co. Ltd.	100	100
	STSE Engineering Services (B) Sdn Bhd #	100	100
(e)	Vision Technologies Systems, Inc. and its subsidiaries	100	100
	Vision Technologies Aerospace, Incorporated # and its subsidiaries:	100	100
	Aviation Academy of America, Inc. #	100	100
	DalFort Aerospace GP, Inc. * ² #	100	100
	DalFort Aerospace, L.P. * ² #	100	100
	EcoServices, LLC #	50.1	50.1
	VT Aviation Services, Inc. #	100	100
	VT Mobile Aerospace Engineering, Inc. **	100	100
	VT San Antonio Aerospace, Inc. ** and its subsidiary:	100	100
	AERIA Luxury Interiors, LLC * ⁷ #	100	–
	VT Volant Aerospace, LLC #	100	100
	Vision Technologies Electronics, Inc. # and its subsidiary:	100	100
	VT iDirect, Inc. ** and its subsidiaries:	100	100
	iDirect Government, LLC. **	100	100
	iDirect International, Inc. **	100	100
	iDirect Italy S.r.l. **	100	100
	iDirect UK Limited	100	100
	VT iDirect Canada, Inc. **	100	100
	VT iDirect Solutions Limited	100	100
	Vision Technologies Kinetics, Inc. # and its subsidiaries:	100	100
	Miltope Corporation # and its subsidiary:	100	100
	IV Phoenix Group, Inc. #	97	97
	MÄK Technologies, Inc. #	100	100
	Vision Technologies Land Systems, Inc. # and its subsidiaries:	100	100
	Aethon, Inc. * ⁷ #	100	–
	VT Dimensions, Inc. #	100	100
	VT Hackney, Inc. **	100	100
	VT LeeBoy, Inc. **	100	100
	Vision Technologies Marine, Inc. # and its subsidiary:	100	100
	VT Halter Marine, Inc. **	100	100
	VT Systems International, LLC # and its subsidiary:	100	100
	VT Systems Participações Ltda. #	100	100

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12. SUBSIDIARIES (continued)

Details of the subsidiaries are as follows: (continued)

		Effective equity interest held by the Group	
		2017	2016
		%	%
(f)	Singapore Technologies Dynamics Pte Ltd and its subsidiary Innosparcs Pte. Ltd.	100	100
(g)	ST Engineering Financial I Ltd.	100	100
(h)	ST Engineering Financial II Pte. Ltd.	100	100
(i)	ST Engineering Management Services Pte. Ltd.	100	100
(j)	ST Engineering Ventures Pte. Ltd. (formerly known as FusionTech Pte. Ltd.)	100	100
(k)	ST Engineering Ventures Fund Pte. Ltd. ^{*8} (formerly known ITS Technologies Pte Ltd)	100	100
(l)	Kaz-ST Engineering Bastau Limited Liability Partnership	51	51

^{*1} These companies are in the process of liquidation.^{*2} These companies ceased operations.^{*3} The company was amalgamated into ST Aerospace Supplies Pte Ltd from 1 September 2017.^{*4} These companies were dissolved, struck off or had completed its members' voluntary liquidation during the year.^{*5} These companies were amalgamated into ST Electronics (e-Services) Pte. Ltd. from 1 January 2017.^{*6} These companies were amalgamated into ST Electronics (Training & Simulation Systems) Pte. Ltd. from 1 January 2017.^{*7} These companies were acquired or incorporated during the year and was not audited for the purpose of consolidation.^{*8} The ownership of these companies were transferred amongst Group's entities during the year and accounted for as common control transactions.[^] These companies are not audited by KPMG LLP, Singapore and other member firms of KPMG International.[#] Not required to be audited under the law in the country of incorporation.^{*} Audited by member firms of KPMG International for consolidation purposes.

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

12. SUBSIDIARIES (continued)

All subsidiaries that are required to be audited under the law in the country of incorporation are audited by KPMG LLP, Singapore and other member firms of KPMG International, except as indicated above.

- (a) During the financial year, the Group incorporated the following companies:

Name of company	Country of incorporation/ place of business	Equity interest held %
ST Electronics Saudi Arabia Limited	Saudi Arabia	100
AERIA Luxury Interiors, LLC	USA	100

- (b) During the financial year, the Group acquired the following company:

Name of company	Interest acquired %	Consideration \$'000	Fair value of net identifiable assets acquired \$'000
Aethon, Inc.	100	52,565	12,740

- (c) During the financial year, the Group acquired additional equity interests in the following company:

Name of company	Interest acquired %	Interest after acquisition %	Consideration \$'000	Carrying value of net identifiable liabilities acquired \$'000
Technicae Projetos e Serviços Automotivos Ltda.	5.64	100	339	(250)

- (d) During the financial year, the Group made additional capital contribution in the following companies:

Name of company	Capital contribution \$'000	Equity interest before capital contribution %	Equity interest after capital contribution %
ST Aerospace Aircraft Seats Pte. Ltd.	3,574	90	90
ST Aerospace Academy Pte. Ltd.	30,000	100	100
ST Aerospace Resources Pte. Ltd.	14,266	100	100
ST Electronics (Thailand) Limited	12,631	100	100
SDG Kinetics Pte. Ltd. and its subsidiaries	18,162	100	100
Mobility Systems Pte Ltd and its subsidiaries	22,635	100	100
Vision Technologies Aerospace, Incorporated	3,492	100	100
VT Volant Aerospace, LLC	4,505	100	100
Aviation Academy of America, Inc.	5,014	100	100
VT Aviation Services, Inc.	2,303	100	100
Vision Technologies Land Systems, Inc.	28,214	100	100

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

13. ASSOCIATES AND JOINT VENTURES

	Group		Company	
	2017 \$'000	2016 \$'000	2017 \$'000	2016 \$'000
Unquoted shares, at fair value	7,863	–	–	–
Unquoted shares, at cost	330,460	252,540	17,657	17,657
Goodwill on acquisition written off, net	(146)	(146)	–	–
Share of net assets acquired	330,314	252,394	–	–
Impairment in associates and joint ventures	(865)	(865)	–	–
Share of post-acquisition reserves	111,075	154,001	–	–
	440,524	405,530	–	–
Total associates and joint ventures	448,387	405,530	17,657	17,657
Represented by:				
Interest in associates	315,760	344,925		
Interest in joint ventures	132,627	60,605		
	448,387	405,530		

(a) Details of associates are as follows:

Name of associate	Principal activities	Country of incorporation/ place of business	Effective equity interest held by the Group	
			2017 %	2016 %
Airbus Helicopters Southeast Asia Private Limited #	Selling, maintaining and overhauling of helicopters	Singapore	25	25
Composite Technology International Pte Ltd #	Repairing and rebuilding helicopter rotor blades	Singapore	33.33	33.33
Shanghai Technologies Aerospace Company Limited #	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 #	Aircraft and component maintenance, repair, overhaul and other related maintenance business	People's Republic of China	49	49
Turbine Coating Services Pte Ltd #	Repair, refurbishment and upgrading of aircraft jet engine turbine blades and vanes	Singapore	24.5	24.5

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

13. ASSOCIATES AND JOINT VENTURES (continued)**(a) Details of associates are as follows: (continued)**

Name of associate	Principal activities	Country of incorporation/ place of business	Effective equity interest held by the Group	
			2017 %	2016 %
Turbine Overhaul Services Pte Ltd [#]	Repair and service of gas and steam turbine components	Singapore	49	49
WizVision Pte. Ltd. [#]	Providing information technology services and trading of computer accessories	Singapore	22.8	22.8
CityCab Pte Ltd [#]	Rental of taxis and provision of premier bus service, charge card facilities and travel related services	Singapore	46.5	46.5
Timoney Holdings Limited	Design and prototyping services and component supply for the automotive and aerospace engineering sectors	Republic of Ireland	27.68	27.68
TP-STM Water Resources Pte. Ltd. [@]	Collection, purification and distribution of water	Singapore	40	—
NanoScience Innovation Pte Ltd ^{#*1}	Research and development of ultra fine structure, especially nano-scale, materials, devices, equipment and intellectual properties	Singapore	10.17	10.17
Experia Events Pte. Ltd.	Organising and management of conferences, exhibitions and other related activities, including the biennial Singapore Airshow event	Singapore	33	33
Singapore Airshow & Events Pte. Ltd. [^]	Dormant	Singapore	33	33
Janus Technologies, Inc.	Provider of next generation security platforms for enterprise users through its hardware and software solutions	United States of America	10.85	—

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

13. ASSOCIATES AND JOINT VENTURES (continued)

(b) Details of joint ventures are as follows:

Name of joint venture	Principal activities	Country of incorporation/ place of business	Effective equity interest held by the Group	
			2017 %	2016 %
Total Engine Asset Management Pte. Ltd. #	Leasing of engines	Singapore	50	50
WingStar Pte. Ltd. *2	Acquisition, ownership and management of aircraft	Singapore	–	50
Keystone Holdings (Global) Pte. Ltd.	Investment holding	Singapore	50	50
SP Telecommunications Pte Ltd *3	Running, operation, management and supply of telecommunications systems	Singapore	51	–
ST Electronics (Satellite Systems) Pte. Ltd.	Design and development, system integration, manufacturing and sale of satellite equipment	Singapore	51	51
ATREC Pte. Ltd.	Research and technology development in advanced materials for both defence and commercial applications	Singapore	50	50
Takata CPI Singapore Pte Ltd #	Manufacture of pyrotechnic components for seatbelts and air bags used in motor vehicles	Singapore	49	49
First Response Marine Pte. Ltd.	Ship and boat leasing with operator (including chartering)	Singapore	50	50
Fortis Marine Solutions Pte. Ltd. # *1	Provide design and systems engineering services and maintenance of specialised naval vessels	Singapore	51	51
Joint Shipyard Management Services Pte Ltd	Construction and managing workers' dormitories	Singapore	30	30

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

13. ASSOCIATES AND JOINT VENTURES (continued)

(b) Details of joint ventures are as follows: (continued)

Name of joint venture	Principal activities	Country of incorporation/ place of business	Effective equity interest held by the Group	
			2017 %	2016 %
Nova Star Cruises Limited # *4	Provision of ferry services	Canada	10	10
ZHR Marine Limited	Performing reconditioning, testing and maintenance of naval ships and vessels, integrated electronic systems and related ancillary training	Saudi Arabia	33	33

*1 These entities were placed under members' voluntary liquidation.

*2 This entity was wound up during the year.

*3 On 2 May 2017, the Group acquired 51% equity interest in SP Telecommunications Pte Ltd ("SPTel") for a cash consideration of S\$55 million. Following the acquisition, SPTel became a joint venture of the Group. At the acquisition date, based on provisionally determined fair values of the identifiable assets acquired and liabilities assumed of SPTel, a provisional goodwill of S\$2.9 million was recognised within the cost of investment.

*4 This entity has filed an assignment of bankruptcy during the year.

Not audited by KPMG LLP, Singapore and other member firms of KPMG International.

@ Not required to be audited as at the date of this report.

All associates and joint ventures that are required to be audited under the law in the country of incorporation are audited by KPMG LLP, Singapore and other member firms of KPMG International, except as indicated above.

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(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

13. ASSOCIATES AND JOINT VENTURES (continued)

Associates

The following table summarises the information of each of the Group's material associates, based on their respective financial statements prepared in accordance with FRS, 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	Shanghai Technologies Aerospace Company Limited \$'000	ST Aerospace (Guangzhou) Aviation Services Co Ltd \$'000	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
2017								
Percentage of interest	49%	49%	24.5%	49%	46.5%	33%		
Revenue	88,119	58,947	53,538	311,274	366,555	10,219		
Profit/(loss) for the year	10,607	3,218	19,735	49,300	22,131	(5,734)		
Other comprehensive income	(2,641)	(1,316)	(3,980)	(9,361)	—	—		
Total comprehensive income	7,966	1,902	15,755	39,939	22,131	(5,734)		
Attributable to NCI	—	—	—	—	255	—		
Attributable to investee's shareholders	7,966	1,902	15,755	39,939	21,876	(5,734)		
Non-current assets	86,477	81,583	30,195	28,960	204,182	55,303		
Current assets	67,273	28,444	36,640	93,672	75,956	47,546		
Non-current liabilities	—	—	—	—	(21,932)	(3,631)		
Current liabilities	(22,536)	(8,826)	(11,243)	(13,932)	(61,267)	(42,304)		
Net assets	131,214	101,201	55,592	108,700	196,939	56,914		
Attributable to NCI	—	—	—	—	1,470	—		
Attributable to investee's shareholders	131,214	101,201	55,592	108,700	195,469	56,914		
Group's interest in net assets of investee at beginning of the year	67,271	48,657	12,470	67,576	108,622	23,974	16,355	344,925
Group's share of:								
– Profit/(loss) for the year	5,197	1,577	4,835	24,162	10,172	(1,892)	1,906	45,957
– Total other comprehensive income	(1,294)	(645)	(975)	(4,587)	—	—	395	(7,106)
Total comprehensive income	3,903	932	3,860	19,575	10,172	(1,892)	2,301	38,851
Group's contribution during the year	—	—	—	—	—	—	9,663	9,663
Dividends received during the year	(6,879)	—	(2,710)	(33,883)	(27,899)	(3,300)	(3,008)	(77,679)
Carrying amount of interest in investee at end of the year	64,295	49,589	13,620	53,268	90,895	18,782	25,311	315,760

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13. ASSOCIATES AND JOINT VENTURES (continued)

Associates (continued)

Name of associate	Flugzeugwerke GmbH \$'000	Elbe Aerospace Company Limited \$'000	Shanghai Technologies Aerospace Company Limited \$'000	ST Aerospace (Guangzhou) Aviation Services Co Ltd \$'000	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
2016										
Percentage of interest	55%	49%	49%	49%	24.5%	49%	46.5%	33%		
Revenue	—	91,671	34,034	35,828	195,216	389,503	53,345			
Profit for the year	—	9,650	4,008	15,619	43,679	28,567	17,085			
Other comprehensive income	—	(6,359)	(4,999)	947	2,139	—	—			
Total comprehensive income	—	3,291	(991)	16,566	45,818	28,567	17,085			
Attributable to NCI	—	—	—	—	—	259	—			
Attributable to investee's shareholders	—	3,291	(991)	16,566	45,818	28,308	17,085			
Non-current assets	—	89,443	64,290	59,128	29,007	222,630	57,937			
Current assets	—	69,127	47,292	2,895	216,105	106,412	33,784			
Non-current liabilities	—	—	—	—	—	(28,341)	(3,416)			
Current liabilities	—	(21,282)	(12,281)	(11,127)	(107,202)	(65,626)	(15,657)			
Net assets	—	137,288	99,301	50,896	137,910	235,075	72,648			
Attributable to NCI	—	—	—	—	—	1,480	—			
Attributable to investee's shareholders	—	137,288	99,301	50,896	137,910	233,595	72,648			
Group's interest in net assets of investee at beginning of the year	121,330	66,630	14,367	11,760	71,995	104,202	18,336	14,052	422,672	
Group's share of:										
– Profit for the year	—	4,728	1,964	3,826	21,401	13,163	5,638	5,320	56,040	
– Total other comprehensive income	—	(3,115)	(2,450)	233	1,050	—	—	(165)	(4,447)	
Total comprehensive income	—	1,613	(486)	4,059	22,451	13,163	5,638	5,155	51,593	
Group's contribution during the year	—	—	34,776	—	—	—	—	—	34,776	
Dividends received during the year	—	(972)	—	(3,349)	(26,870)	(8,743)	—	(2,852)	(42,786)	
Disposal of an associate during the year	(121,330)	—	—	—	—	—	—	—	(121,330)	
Carrying amount of interest in investee at end of the year	—	67,271	48,657	12,470	67,576	108,622	23,974	16,355	344,925	

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13. ASSOCIATES AND JOINT VENTURES (continued)**Joint venture**

The following table summarises the information of each of the Group's material joint ventures, adjusted for any differences in 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	Keystone Holdings (Global) Pte. Ltd. \$'000	Total Engine Asset Management Pte Ltd. \$'000	Telecommunication SP Pte Ltd \$'000	Immaterial joint ventures \$'000	Total \$'000
2017					
Percentage of interest	50%	50%	51%		
Revenue	15,477	24,003	11,499		
Profit/(loss) for the year	1,465	6,015	(6,256)		
Other comprehensive income ^a	(2,669)	(5,282)	–		
Total comprehensive income	(1,204)	733	(6,256)		
^a Includes:					
– Depreciation and amortisation of:	8,903	9,542	4,105		
– Interest expense of:	3,311	5,435	–		
– Income tax expense/(credit) of:	149	1,405	(634)		
Non-current assets	128,006	303,550	29,717		
Current assets ^b	17,336	26,261	82,715		
Non-current liabilities ^c	(64,258)	(258,174)	(4,054)		
Current liabilities ^d	(23,772)	(5,839)	(12,452)		
Net assets excluding goodwill	57,312	65,798	95,926		
^b Includes cash and cash equivalents of:	16,635	14,101	78,510		
^c Includes non-current financial liabilities (excluding trade and other payables and provisions)	64,258	258,174	–		
^d Includes current financial liabilities (excluding trade and other payables and provisions)	23,772	4,948	–		
Group's interest in net assets of investee at beginning of the year	15,560	26,025	–	19,020	60,605
Share of total comprehensive income	(602)	367	(3,191)	2,949	(477)
Group's contribution during the year	14,271	6,837	52,113	–	73,221
Dividends received during the year	(573)	(330)	–	(2,447)	(3,350)
Group's share of net assets	28,656	32,899	48,922	19,522	129,999
Goodwill	–	–	2,628	–	2,628
Carrying amount of interest in investee at end of the year	28,656	32,899	51,550	19,522	132,627

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13. ASSOCIATES AND JOINT VENTURES (continued)**Joint venture (continued)**

Name of joint venture	Keystone Holdings (Global) Pte. Ltd. \$'000	Total Engine Asset Management Pte Ltd. \$'000	Fortis Marine Solutions Pte. Ltd. \$'000	Immaterial joint ventures \$'000	Total \$'000
2016					
Percentage of interest	50%	50%	51%		
Revenue	6,760	58,509	108		
Profit/(loss) for the year	1,684	8,692	(518)		
Other comprehensive income ^a	1,604	1,286	—		
Total comprehensive income	3,288	9,978	(518)		
^a Includes:					
– Depreciation and amortisation of:	1,822	7,072	—		
– Interest expense of:	702	3,394	—		
– Income tax expense of:	101	1,608	39		
Non-current assets	111,493	168,003	—		
Current assets ^b	5,973	25,965	11,815		
Non-current liabilities ^c	(54,181)	(139,527)	—		
Current liabilities ^d	(32,166)	(2,390)	(159)		
Net assets	31,119	52,051	11,656		
^b Includes cash and cash equivalents of:	4,912	2,543	10,978		
^c Includes non-current financial liabilities (excluding trade and other payables and provisions)	54,181	139,527	—		
^d Includes current financial liabilities (excluding trade and other payables and provisions)	32,166	2,380	—		
Group's interest in net assets of investee at beginning of the year	—	21,036	6,209	11,643	38,888
Share of total comprehensive income	1,644	4,989	(264)	2,996	9,365
Group's contribution during the year	13,916	—	—	386	14,302
Dividends received during the year	—	—	—	(1,950)	(1,950)
Carrying amount of interest in investee at end of the year	15,560	26,025	5,945	13,075	60,605

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14. INVESTMENTS

	Note	2017 \$'000	Group 2016 \$'000
Quoted investments			
Equity shares, at fair value (Available-for-sale)	39	357	639
Equity shares, at fair value (Fair value through profit or loss)	39	–	364
		<u>357</u>	<u>1,003</u>
Unquoted investments			
Equity shares (Available-for-sale)			
Non-related corporations, net of impairment losses		9,359	10,114
Bonds, at fair value (Available-for-sale)	39	350,975	499,812
Interest rate: 1.875% to 7.625% (2016: 1.29% to 5.75%) per annum			
Maturity: 21.03.2018 to 28.03.2073 (2016: 1.2.2017 to 31.12.2049)			
Venture capital funds and limited partnership, at fair value	39	12	12
Total unquoted investments		<u>360,346</u>	<u>509,938</u>
Total investments, net of impairment losses		<u>360,703</u>	<u>510,941</u>
Represented by:			
Short-term investments		357	188,890
Long-term investments		<u>360,346</u>	<u>322,051</u>
		<u>360,703</u>	<u>510,941</u>

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15. INTANGIBLE ASSETS

				Commercial and intellectual property rights
The Group	Goodwill \$'000	Dealer network \$'000	Development expenditure \$'000	\$'000
Cost				
At 1.1.2016	531,165	24,274	87,068	75,252
Additions	–	–	75,187	–
Acquisition of a subsidiary/finalisation of purchase price allocation	23,534	150,454	78,414	–
Disposal of a subsidiary	–	–	–	(517)
Write-off	–	–	–	–
Translation difference	9,159	(1,928)	42	1,734
At 31.12.2016 and 1.1.2017	563,858	172,800	240,711	76,469
Additions	–	–	70,548	2,721
Acquisition of a subsidiary	39,825	–	–	20,406
Translation difference	(37,198)	6,301	1,641	(5,092)
At 31.12.2017	566,485	179,101	312,900	94,504
Accumulated amortisation and impairment losses				
At 1.1.2016	48,577	13,614	16,044	62,248
Amortisation for the year *	–	7,373	24,302	2,600
Impairment losses +	6,732	657	–	1,933
Disposal of a subsidiary	–	–	–	(517)
Write-off	–	–	–	–
Translation difference	1,406	240	1,018	1,435
At 31.12.2016 and 1.1.2017	56,715	21,884	41,364	67,699
Amortisation for the year *	–	7,620	14,260	3,265
Impairment losses +	–	–	–	–
Translation difference	(2,422)	(226)	(2,269)	(4,213)
At 31.12.2017	54,293	29,278	53,355	66,751
Net book value				
At 31.12.2017	512,192	149,823	259,545	27,753
At 31.12.2016	507,143	150,916	199,347	8,770
At 1.1.2016	482,588	10,660	71,024	13,004

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Film cost inventory \$'000	Brands \$'000	Licenses \$'000	Technology agreement \$'000	Authorised repair centre agreement \$'000	Others \$'000	Total \$'000
11,803	84,554	55,790	35,702	5,914	11,332	922,854
–	–	1,572	–	–	64	76,823
–	–	–	–	(57)	7,595	259,940
–	–	–	–	–	–	(517)
(11,803)	–	–	–	–	(54)	(11,857)
–	1,711	125	762	–	(9)	11,596
–	86,265	57,487	36,464	5,857	18,928	1,258,839
–	–	–	–	2	–	73,271
–	–	–	–	–	–	60,231
–	(6,115)	(21)	(2,721)	–	–	(43,205)
–	80,150	57,466	33,743	5,859	18,928	1,349,136
11,803	12,502	4,982	7,683	–	8,431	185,884
–	1,316	2,434	2,650	1,339	9,629	51,643
–	–	–	–	–	–	9,322
–	–	–	–	–	–	(517)
(11,803)	–	–	–	–	–	(11,803)
–	263	81	282	–	–	4,725
–	14,081	7,497	10,615	1,339	18,060	239,254
–	1,314	2,414	2,636	1,339	495	33,343
–	–	–	–	–	11	11
–	(876)	(13)	(865)	–	–	(10,884)
–	14,519	9,898	12,386	2,678	18,566	261,724
–	65,631	47,568	21,357	3,181	362	1,087,412
–	72,184	49,990	25,849	4,518	868	1,019,585
–	72,052	50,808	28,019	5,914	2,901	736,970

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15. INTANGIBLE ASSETS (continued)

- * Amortisation charge of \$33,343,000 (2016: \$51,643,000) is recognised in the income statement as part of:
 - Other operating expenses of \$15,072,000 (2016: \$21,716,000); and
 - Cost of sales of \$18,271,000 (2016: \$29,927,000)
- * In the prior year,
 - an impairment loss on goodwill of \$6,732,000 was recognised in other operating expenses in the income statement as the recoverable amount of two CGUs were determined to be lower than the carrying amount.
 - the Group assessed that certain licenses and commercial and intellectual property rights were impaired as these intangible assets were not expected to be generating future economic benefits for the Group. Hence, impairment losses of \$2,590,000 were recognised last year.

Impairment testing of goodwill

For the purpose of impairment testing, goodwill is allocated to the Group's business divisions. The recoverable amounts of the CGUs are determined based on value-in-use calculations, using cashflow projections derived from the financial budgets approved by management for the next five years. The aggregate carrying amounts of goodwill allocated to each CGU within the business divisions and the key assumptions used in determining the recoverable amount of each CGU are as follows:

	Group		Pre-tax discount rate		Terminal value growth rate	
	2017	2016	2017	2016	2017	2016
	\$'000	\$'000	%	%	%	%
Aerospace						
Aircraft Maintenance & Modification	13,400	14,392	10.5 – 12.5	9.5 – 12.8	2.0 – 2.5	2.0 – 3.5
Component/Engine Repair & Overhaul	13,097	14,153	14.1	10.4	2.5	3.0
Engineering & Material Services	26,683	25,569	6.9 – 12.6	6.5 – 9.8	2.0	1.3 – 2.0
Electronics						
Communication & Sensor Systems Group	241,427	261,234	10.5 – 13.5	10.4 – 12.7	4.0 – 5.0	4.0 – 5.0
Software Systems Group	27,536	28,764	8.6 – 22.2	8.5 – 19.6	2.0 – 3.0	2.0 – 3.0
Land Systems						
Automotive	155,544	125,744	12.9 – 16.0	7.8 – 18.6	4.0	4.2 – 5.0
Others	34,505	37,287	12.4	11.7	3.0	3.0
	512,192	507,143				

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15. INTANGIBLE ASSETS (continued)**Impairment testing of goodwill (continued)**

The discount rate used is estimated based on past experience and the industry weighted average cost of capital.

The long-term terminal value 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 compound annual growth rate estimated by management by reference to forecasts included in industry reports and expected market development.

Sensitivity to changes in assumptions:

- (a) In the prior year, following the impairment in two of the CGUs within the business divisions, the recoverable amount in these CGUs are approximately equal to the carrying amounts. Therefore, any adverse movement in a key assumption would lead to a further impairment in these CGUs.
- (b) Management has identified the following change in the financial budgets approved by management as set out below could cause the carrying amount to exceed the recoverable amount.

Business Divisions	Assumption	Change required for carrying amount to equal the recoverable amount	
		2017 %	2016 %
Others	Sales growth rate (average of next 5 years)	0.4	0.6

No sensitivity analysis was disclosed for the remaining CGUs as the Group believes that any reasonable possible change in the key assumptions is not likely to materially cause the recoverable amount to be lower than its carrying amount.

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16. FINANCE LEASE RECEIVABLES

The Group entered into finance lease arrangements with customers with terms for one year (2016: one to two years) and at an effective interest rates of 5.6% (2016: 5.6%) per annum.

The Group	Gross investment in finance lease/present value of minimum lease receivables \$'000	Allowance for doubtful lease receivables \$'000	Net investment in finance lease \$'000
2017			
Within 1 year	819	(819)	–
2016			
Within 1 year	885	(885)	–

	Group	
	2017 \$'000	2016 \$'000
Individually assessed		
Doubtful lease receivables	819	885
Allowance for doubtful lease receivables	(819)	(885)
	–	–

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17. DEFERRED TAX ASSETS AND LIABILITIES

(a) Recognised deferred tax assets and liabilities

Deferred tax assets and liabilities are attributable to the following:

The Group	Assets		Liabilities	
	2017 \$'000	2016 \$'000	2017 \$'000	2016 \$'000
Property, plant and equipment	(267)	(255)	110,251	113,806
Intangible assets	–	–	180,852	195,360
Allowance for doubtful debts	(990)	(1,655)	–	–
Allowance for inventory obsolescence	(13,865)	(25,581)	–	–
Provisions and accruals	(121,108)	(131,691)	–	–
Unabsorbed capital allowances and unutilised tax losses	(26,844)	(25,072)	–	–
Fair value of derivative financial instruments designated as cash flow hedges	(666)	(12,860)	5,401	72
Fair value of defined benefit plan	(13,124)	(10,087)	–	–
Other items	(8,675)	(10,228)	20,188	32,255
Deferred tax (assets)/liabilities	(185,539)	(217,429)	316,692	341,493
Set off of tax	111,492	124,901	(111,492)	(124,901)
Net deferred tax (assets)/ liabilities	(74,047)	(92,528)	205,200	216,592

The Company	Assets		Liabilities	
	2017 \$'000	2016 \$'000	2017 \$'000	2016 \$'000
Property, plant and equipment	–	–	1,458	44
Provisions and accruals	(3,653)	(4,105)	–	–
Unabsorbed capital allowances and unutilised tax losses	–	(795)	–	–
Other items	(5)	–	–	43
Deferred tax (assets)/liabilities	(3,658)	(4,900)	1,458	87
Set off of tax	1,458	87	(1,458)	(87)
Net deferred tax assets	(2,200)	(4,813)	–	–

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17. DEFERRED TAX ASSETS AND LIABILITIES (continued)**(b) Movement in deferred tax balances during the year:**

The Group	As at 1.1.2016 \$'000	Recognised in profit or loss \$'000	Recognised in other comprehen- sive income \$'000	Acquired in business combinations/ finalisation of purchase price allocation \$'000	Divest- ment of subsidiaries \$'000	Utilisation of tax losses \$'000
Property, plant and equipment	113,490	(1,734)	–	971	(2)	–
Intangible assets	82,455	(6,371)	–	117,766	–	–
Allowance for doubtful debts	(3,196)	(100)	–	–	1,615	–
Allowance for inventory obsolescence	(28,861)	731	–	(22)	2,690	–
Provisions and accruals	(130,291)	(548)	–	(1,078)	774	–
Unabsorbed capital allowances and unutilised tax losses	(23,013)	(16,444)	–	–	–	14,654
Fair value of derivative financial instruments designated as cash flow hedges	(4,848)	(149)	3,019	(10,949)	–	–
Fair value of defined benefit plan	–	–	(2,570)	(7,638)	–	–
Other items	23,528	(3,163)	(6)	74	640	711
	29,264	(27,778)	443	99,124	5,717	15,365

The Company	As at 1.1.2016 \$'000	Recognised in profit or loss \$'000	As at 31.12.2016 \$'000	Recognised in profit or loss \$'000	Utilisation of tax losses \$'000	As at 31.12.2017 \$'000
Property, plant and equipment	307	(263)	44	1,414	–	1,458
Provisions and accruals	(4,973)	868	(4,105)	452	–	(3,653)
Unabsorbed capital allowances and unutilised tax losses	(1,181)	386	(795)	(1,791)	2,586	–
Other items	1,147	(1,104)	43	(48)	–	(5)
	(4,700)	(113)	(4,813)	27	2,586	(2,200)

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Exchange difference \$'000	As at 31.12.2016 \$'000	Recognised in profit or loss \$'000	Recognised in other comprehen- sive income \$'000	Acquired in business combinations \$'000	Utilisation of tax losses \$'000	Exchange difference \$'000	As at 31.12.2017 \$'000
826	113,551	(699)	—	—	—	(2,868)	109,984
1,510	195,360	(17,402)	—	7,647	—	(4,753)	180,852
26	(1,655)	569	—	—	—	96	(990)
(119)	(25,581)	10,613	—	—	—	1,103	(13,865)
(548)	(131,691)	8,388	—	—	—	2,195	(121,108)
(269)	(25,072)	(20,329)	—	—	17,090	1,467	(26,844)
139	(12,788)	259	17,514	—	84	(334)	4,735
121	(10,087)	—	(2,555)	—	—	(482)	(13,124)
243	22,027	(7,439)	(17)	—	(2,705)	(353)	11,513
1,929	124,064	(26,040)	14,942	7,647	14,469	(3,929)	131,153

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17. DEFERRED TAX ASSETS AND LIABILITIES (continued)**(c) Unrecognised deferred tax assets**

Deferred tax assets have not been recognised in respect of the following items:

	Group	
	2017	2016
	\$'000	\$'000
Tax losses	413,285	468,987
Deductible temporary differences	17,869	19,336
Unabsorbed wear and tear allowance and investment allowance	5,470	4,560
	<u>436,624</u>	<u>492,883</u>

The tax benefits have not been recognised in the financial statements due to the uncertainty over the sufficiency of future taxable profits to be generated in the foreseeable future.

The use of these potential tax benefits is subject to the agreement of the tax authorities and compliance with certain provisions of the tax legislation of the respective countries in which the subsidiaries operate.

(d) Unrecognised temporary differences relating to investments in subsidiaries

As at 31 December 2017, a deferred tax liability of \$121,028,000 (2016: \$145,718,000) for temporary difference of \$470,431,000 (2016: \$510,973,000) 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 be retained for organic growth and acquisitions.

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18. INVENTORIES AND WORK-IN-PROGRESS

	Group	
	2017	2016
	\$'000	\$'000
Inventories of equipment and spares	753,397	686,674
Work-in-progress in excess of progress billings		
Work-in-progress, including profits recognised	4,851,129	4,732,408
Progress billings	(3,840,206)	(3,520,804)
	1,010,923	1,211,604
Total inventories and work-in-progress at lower of cost and net realisable value	1,764,320	1,898,278
Progress billings in excess of work-in-progress		
Work-in-progress, including profits recognised	5,077,331	4,740,173
Progress billings	(5,839,814)	(5,360,504)
	(762,483)	(620,331)

In 2017, raw materials, consumables and changes in finished goods and work-in-progress recognised as cost of sales amounted to \$5,052,661,000 (2016: \$5,027,908,000).

Allowances for inventory obsolescence and foreseeable losses

As at 31 December 2017, the inventories are stated after allowance for inventory obsolescence of \$366,574,000 (2016: \$356,651,000) and work-in-progress in excess of progress billings and progress billings in excess of work-in-progress are stated after provision for foreseeable losses of \$9,788,000 (2016: \$9,377,000) and \$25,419,000 (2016: \$8,143,000) respectively.

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19. TRADE RECEIVABLES

	Group	
	2017	2016
	\$'000	\$'000
Not past due and not impaired	559,286	656,163
Past due and not impaired	256,088	302,566
	815,374	958,729
Collectively assessed		
Gross receivables	4,211	4,781
Allowance for doubtful debts	(4,211)	(4,781)
	–	–
Individually assessed		
Gross receivables	37,563	43,582
Allowance for doubtful debts	(37,563)	(43,582)
	–	–
Unbilled receivables	830,742	500,478
Allowance for unbilled receivables	(292)	(1,225)
	830,450	499,253
Trade receivables, net	1,645,824	1,457,982

At 31 December 2017, trade receivables of the Group included retentions of \$43,290,000 (2016: \$40,843,000) related to projects in progress.

Trade receivables denominated in currencies other than the functional currencies of the Company and its subsidiaries as at 31 December are as follows:

- \$189,620,000 (2016: \$236,755,000) denominated in USD
- \$35,920,000 (2016: \$36,458,000) denominated in Euro

Trade receivables amounting to \$2,571,000 (2016: \$7,461,000) are arranged to be repaid through letters of credit issued by reputable banks.

A subsidiary within the Group has not recognised \$13,985,000 (2016: \$16,500,000) of trade receivable due from one of its customers in view of uncertainty over the collectability of the debts. The amount would be recognised in the financial statements upon receipt.

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20. AMOUNTS DUE FROM RELATED PARTIES

	Group		Company	
	2017	2016	2017	2016
	\$'000	\$'000	\$'000	\$'000
Trade:				
Subsidiaries	–	–	2,607	7,756
Associates	2,955	7,650	–	–
Joint ventures	4,462	4,687	–	–
Related corporations	20,016	10,795	51	27
	27,433	23,132	2,658	7,783
Non-trade:				
Subsidiaries * ¹	–	–	740,250	699,108
Joint ventures * ²	5,579	6,292	–	–
Related corporations	65	–	–	–
	5,644	6,292	740,250	699,108
Allowance for doubtful debts	–	–	(9,500)	–
	33,077	29,424	733,408	706,891
Receivable:				
Within 1 year	28,271	24,618	388,894	199,634
After 1 year	4,806	4,806	344,514	507,257
	33,077	29,424	733,408	706,891

There were no significant amounts due from related parties denominated in currencies other than the functional currencies of the Group as at 31 December 2017 and 31 December 2016.

Amounts due from related parties denominated in currencies other than the functional currency of the Company as at 31 December 2017 is \$152,983,000 (2016: \$162,599,000) denominated in USD.

*¹ Included in the amounts due from subsidiaries (non-trade) are:

- (a) loans of \$611,579,000 (2016: \$693,886,000) bearing interest at rates ranging 0.56% to 2.46% (2016: 0.72% to 2.46%) per annum. The loans are unsecured and repayable from 3 March 2018 to 31 October 2019;
- (b) unsecured interest-free loans of \$9,500,000 (2016: \$20,307,000) which were fully impaired. The fully impaired loans in 2016 were forgiven in the prior year; and
- (c) dividend receivable of \$110,000,000 from a subsidiary (2016: nil).

*² Included in the amounts due from joint ventures (non-trade) is a loan of \$4,806,000 (2016: \$4,806,000) bearing interest at 6.38% (2016: 6.38%) per annum, which is the effective interest rate. The loan is unsecured and repayable by 2029.

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21. ADVANCES AND OTHER RECEIVABLES

	Note	Group		Company	
		2017 \$'000	2016 \$'000	2017 \$'000	2016 \$'000
Deposits		18,669	20,495	35	12
Interest receivables		5,280	7,047	382	368
Other recoverables		38,403	32,213	12,144	1,024
Non-trade receivables		18,889	38,124	17	18
Advance payments to suppliers		135,606	178,303	–	–
Prepayments		66,474	57,268	345	662
Derivative financial instruments	39	20,501	4,048	–	–
Housing and car loans and advances to staff		2,836	3,074	–	–
Loans to third parties		167	179	–	–
		306,825	340,751	12,923	2,084
Receivable:					
Within 1 year		286,419	338,217	12,923	2,084
After 1 year		20,406	2,534	–	–
		306,825	340,751	12,923	2,084

22. BANK BALANCES AND OTHER LIQUID FUNDS

	Group		Company	
	2017 \$'000	2016 \$'000	2017 \$'000	2016 \$'000
Fixed deposits with financial institutions	371,724	530,811	316,352	469,047
Cash and bank balances	627,279	374,079	280,142	119,815
	999,003	904,890	596,494	588,862
Deposits pledged	(1,389)	(1,258)	–	–
Cash and cash equivalents	997,614	903,632	596,494	588,862

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.

Fixed deposits with financial institutions mature at varying periods within twelve months (2016: twelve months) from the financial year-end. Interest rates range from 0% to 3.75% (2016: 0% to 6.5%) per annum, which are also the effective interest rates.

At the reporting date, cash and cash equivalents for the Group include \$541,958,000 (2016: \$492,676,000) cash from subsidiaries and joint ventures pooled together and managed centrally by the Company in bank balances and fixed deposits as part of the Group cash management and treasury activities.

Cash and bank balances of \$1,389,000 (2016: \$1,258,000) have been placed with banks as security for letters of credit issued to third parties. Cash and cash equivalents denominated in currencies other than the functional currencies of the Company and its subsidiaries as at 31 December are as follows:

- \$222,044,000 (2016: \$432,363,000) denominated in USD
- \$94,480,000 (2016: \$29,707,000) denominated in Euro

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23. TRADE PAYABLES AND ACCRUALS

	Note	Group		Company	
		2017 \$'000	2016 \$'000	2017 \$'000	2016 \$'000
Trade payables		736,075	822,022	–	–
Non-trade payables		84,696	91,181	14,058	11,339
Purchase of property, plant and equipment		1,546	1,433	–	–
Accrued operating expenses ^{*1}		886,499	877,861	14,529	21,806
Accrued interest payable		16,554	17,651	–	–
Derivative financial instruments	39	10,117	50,103	40	–
		1,735,487	1,860,251	28,627	33,145
Payable:					
Within 1 year		1,612,509	1,722,488	21,019	24,148
After 1 year		122,978	137,763	7,608	8,997
		1,735,487	1,860,251	28,627	33,145

Trade payables denominated in currencies other than the functional currencies of the Company and its subsidiaries as at 31 December are as follows:

- \$57,144,000 (2016: \$89,674,000) denominated in USD
- \$28,030,000 (2016: \$32,054,000) denominated in Euro

^{*1} Included in the accrued operating expenses is an amount of \$349,079,000 (2016: \$375,170,000) for its obligations under its employee compensation schemes.

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24. AMOUNTS DUE TO RELATED PARTIES

	Group		Company	
	2017 \$'000	2016 \$'000	2017 \$'000	2016 \$'000
Trade:				
Subsidiaries	–	–	2,812	1,985
Associates	8,166	3,784	–	–
Joint ventures	244	22,509	–	–
Related corporations	2,372	2,166	48	8
	10,782	28,459	2,860	1,993
Non-trade:				
Subsidiaries * ¹	–	–	1,133,437	1,179,251
Joint ventures	93,246	–	76,363	–
Related corporations	31	7	–	–
	93,277	7	1,209,800	1,179,251
	104,059	28,466	1,212,660	1,181,244
Payable:				
Within 1 year	104,042	28,449	545,066	504,827
After 1 year	17	17	667,594	676,417
	104,059	28,466	1,212,660	1,181,244

There were no significant amounts due to related parties denominated in currencies other than the functional currencies of the Group as at 31 December 2017 and 31 December 2016.

Amounts due to related parties denominated in currencies other than the functional currency of the Company as at 31 December 2017 are \$462,715,000 (2016: \$477,553,000) denominated in USD.

*¹ Included in the amounts due to subsidiaries (non-trade) are:

- loans of \$606,733,000 (2016: \$642,313,000) bearing interest at 5.03% (2016: 4.75%) per annum. The loans are unsecured and repayable on 16 July 2019.
- an amount of \$541,958,000 (2016: \$492,676,000) placed by subsidiaries and joint ventures to the Company under a cash pooling arrangement.

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25. PROVISIONS

Movements in provisions are as follows:

The Group	Warranties \$'000	Liquidated damages \$'000	Foreseeable losses \$'000	Closure costs \$'000	Total \$'000
2017					
At beginning of the year	200,381	43,030	19,645	11,606	274,662
Charge/(write-back) to profit or loss	34,377	(9,555)	1,046	–	25,868
Provision utilised	(32,395)	(12,453)	(6,963)	(11,173)	(62,984)
Translation difference	(2,171)	(117)	(18)	–	(2,306)
At end of the year	200,192	20,905	13,710	433	235,240
2016					
At beginning of the year	206,084	24,926	26,514	–	257,524
Charge to profit or loss	27,263	20,377	3,929	11,606	63,175
Provision utilised	(33,645)	(2,343)	(9,072)	–	(45,060)
Acquisition of a subsidiary	1,252	–	–	–	1,252
Disposal of a subsidiary	(1,399)	–	(1,782)	–	(3,181)
Translation difference	826	70	56	–	952
At end of the year	200,381	43,030	19,645	11,606	274,662

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26. BORROWINGS

The Group	Note	Non-current \$'000	Current \$'000	Total \$'000
2017				
Unsecured fixed rate bonds	(a)	667,750	–	667,750
Bank loans	(b)	210,640	214,217	424,857
Lease obligations	(c)	16,017	622	16,639
Other loans	(d)	15	6,803	6,818
		<u>894,422</u>	<u>221,642</u>	<u>1,116,064</u>
2016				
Unsecured fixed rate bonds	(a)	721,098	–	721,098
Bank loans	(b)	253,471	85,053	338,524
Lease obligations	(c)	18,124	661	18,785
Other loans	(d)	155	1,713	1,868
		<u>992,848</u>	<u>87,427</u>	<u>1,080,275</u>

(a) Unsecured fixed rate bonds

	Group	
	2017 \$'000	2016 \$'000
Principal	668,500	722,400
Unamortised discount	(750)	(1,302)
	<u>667,750</u>	<u>721,098</u>
Unamortised discount:		
At beginning of the year	1,302	1,733
Amortisation for the year	(471)	(446)
Translation difference	(81)	15
	<u>750</u>	<u>1,302</u>

On 16 July 2009, the Group issued US\$500 million 4.80% Notes due 2019 under its US\$1.2 billion Multicurrency Medium Term Note Programme. The bonds bear interest at a fixed rate of 4.80% per annum and interest is payable every six months from the date of issue. The bonds are unconditionally and irrevocably guaranteed by the Company.

At the reporting date, the Company does not consider it probable that a claim will be made against the Company under the guarantee.

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26. BORROWINGS (continued)**(b) Secured and unsecured bank loans**

Currency	Effective interest rate		Maturity		Group	
	2017	2016	2017	2016	2017	2016
	%	%			\$'000	\$'000
SGD	1.15	1.00	2018	2017	25,000	25,000
USD	1.56 – 4.63	1.14 – 2.31	2018 – 2020	2017 – 2020	321,639	242,726
RMB	4.75 – 5.66	4.35 – 5.66	2018 – 2019	2017 – 2018	32,422	43,006
BRL	–	23.30	–	2017	–	1,031
EUR	1.35 – 1.59	0.63 – 1.59	2018 – 2026	2017 – 2026	45,796	26,761
					424,857	338,524
Unsecured					361,402	252,065
Secured					63,455	86,459
					424,857	338,524

There are bank loans which are secured by assets as follows:

Secured by	Loan amount (\$)
Certain property, plant and equipment of subsidiaries	\$57,032,000 (2016: \$57,678,000)
Subsidiary's land use right	\$6,423,000 (2016: \$6,510,000)

Bank loans denominated in currencies other than the functional currency of the Company and its subsidiaries as at 31 December are as follows:

- \$42,206,000 (2016: \$43,344,000) denominated in USD

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26. BORROWINGS (continued)**(c) Lease obligations**

A subsidiary leases certain land, buildings and equipment from a foreign Airport Authority under a finance lease arrangement until 31 October 2041, with an option to terminate the lease at any time with a 36-month written notice. The leased assets are pledged as collateral against the lease.

The obligations under the finance leases to be paid by the subsidiaries are as follows:

The Group	Within 1 year \$'000	Between 1 and 5 years \$'000	After 5 years \$'000	Total \$'000
2017				
Minimum lease payment	1,280	4,590	26,654	32,524
Interest	(658)	(2,666)	(12,561)	(15,885)
Present value of payment	622	1,924	14,093	16,639
2016				
Minimum lease payment	1,353	5,040	30,082	36,475
Interest	(692)	(2,845)	(14,153)	(17,690)
Present value of payment	661	2,195	15,929	18,785

	Group	
	2017 \$'000	2016 \$'000
Repayable:		
Within 1 year	622	661
After 1 year	16,017	18,124
	16,639	18,785

Lease terms do not contain restrictions concerning dividends, additional debt or further leasing.

(d) Other loans

Included in the other loans are:

- (i) US dollar denominated term notes of \$100,000 (US\$75,000) (2016: \$250,000 (US\$173,000)) and \$45,000 (US\$33,000) (2016: \$77,000 (US\$53,000)) owing to the Pennsylvania Industrial Development Authority and the Industrial Properties Corporation, respectively, by a US entity of the Group. These notes are secured by land and buildings of the entity and bear effective interest, respectively, at 2.8% and 4% (2016: 2.75% and 4%) per annum, and are payable through 1 September 2018 and 28 June 2019, respectively; and
- (ii) A RMB denominated loan of \$6,673,000 (RMB32,520,000) (2016: \$1,541,000 (RMB7,410,000)) from a non-controlling shareholder of a subsidiary. This loan is unsecured, bears effective interest at 7.5% to 9% (2016: 9%) per annum, and is repayable within the next twelve months.

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26. BORROWINGS (continued)**(d) Other loans**

Reconciliation of movements of liabilities to cash flows arising from financing activities

The Group	Liabilities				Total \$'000
	Borrowings \$'000	Trade payables and accruals \$'000	Amounts due to related parties \$'000	Deposit pledged \$'000	
Balance as at 1 January 2017	1,080,275	1,860,251	28,466	(1,258)	2,967,734
Changes from financing cash flows					
Proceeds from bank loans	171,412	–	–	–	171,412
Proceeds from loan from non-controlling interests of a subsidiary	5,152	–	–	–	5,152
Proceeds of a loan from a joint venture	–	–	36,463	–	36,463
Repayment of bank loans	(65,702)	–	–	–	(65,702)
Repayment of other loans	(137)	–	–	–	(137)
Repayment of lease obligations	(784)	–	–	–	(784)
Repayment of loan to a joint venture	–	–	(19,607)	–	(19,607)
Interest paid	–	(41,824)	–	–	(41,824)
Deposit pledged	–	–	–	(131)	(131)
Total changes from financing cash flows	109,941	(41,824)	16,856	(131)	84,842
Changes arising from obtaining or losing control of subsidiaries or other businesses	–	9,504	–	–	9,504
The effect of changes in foreign exchange rates	(74,623)	(25,236)	–	–	(99,859)
Change in fair value	–	(39,986)	–	–	(39,986)
Other changes					
Liability-related					
Working capital changes	–	(67,949)	58,737	–	(9,212)
Interest expense	471	40,727	–	–	41,198
Total liability-related other changes	471	(27,222)	58,737	–	31,986
Balance as at 31 December 2017	1,116,064	1,735,487	104,059	(1,389)	2,954,221

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27. DEFERRED INCOME

	Group	
	2017	2016
	\$'000	\$'000
Government compensation	25,434	31,154
Government grants	37,230	41,997
Deferred rents	7,122	4,008
	69,786	77,159
Current	630	–
Non-current	69,156	77,159
	69,786	77,159

Government compensation and grants relate mainly to grants received:

- (a) for the relocation of a subsidiary's manufacturing facility in the People's Republic of China; and
- (b) to subsidise the cost of capital assets.

28. EMPLOYEE BENEFITS

	Group	
	2017	2016
	\$'000	\$'000
Net defined benefit asset	(243)	(151)
Total employee benefit asset	(243)	(151)
Net defined benefit liabilities	100,514	82,438
Liability for staff benefits	4,646	4,678
Total employee benefit liabilities	105,160	87,116
Non-current	102,669	85,200
Current	2,491	1,916
	105,160	87,116
Net defined benefit liabilities		
Present value of unfunded obligations	107,366	89,179
Fair value of plan assets	(7,095)	(6,892)
	100,271	82,287

Certain subsidiaries of the Group provide pension plans for its employees. These pension plans are recognised in the Group's financial statements as defined benefit liability/(asset) that corresponds to whether the plan's funded asset is lesser/(exceeded) the pension liability. A net defined benefit asset of \$243,000 (2016:\$151,000) was recognised for a particular pension plan as its funded asset exceeded its pension liability. The surplus of \$243,000 (2016:\$151,000) cannot be offset against other pension liabilities as there is no legally enforceable right to use these surplus to settle obligations under the other plans.

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28. EMPLOYEE BENEFITS (continued)**Movement in net defined (asset)/liability**

The following table shows a reconciliation from the opening balances to the closing balances for net defined benefit (asset)/liability and its components.

	Defined benefit obligation		Fair value of plan assets		Net defined benefit liability/(asset)	
	2017 \$'000	2016 \$'000	2017 \$'000	2016 \$'000	2017 \$'000	2016 \$'000
The Group						
Balance at 1 January	89,706	–	(7,419)	–	82,287	–
Included in profit or loss						
Current service cost	4,975	3,843	–	–	4,975	3,843
Interest cost/(income)	1,737	1,812	(162)	(127)	1,575	1,685
Administrative expenses	–	–	(238)	(222)	(238)	(222)
Translation difference	770	98	(698)	(90)	72	8
	7,482	5,753	(1,098)	(439)	6,384	5,314
Included in OCI						
Remeasurements						
loss/(gain):						
• Actuarial loss/(gain) arising from:						
– demographic assumptions	8,662	–	–	–	8,662	–
– financial assumptions	(1,880)	6,543	–	(11)	(1,880)	6,532
– experience assumptions	1,918	1,878	8	137	1,926	2,015
• Return on plan assets excluding interest income	–	–	(30)	(14)	(30)	(14)
	8,700	8,421	(22)	112	8,678	8,533
Others						
Contributions paid by the employer	881	821	–	(369)	881	452
Benefits paid	(2,427)	(1,993)	448	203	(1,979)	(1,790)
Change in measurement	–	172	–	(172)	–	–
Acquisition of a subsidiary	–	70,672	–	(306)	–	70,366
Translation difference	3,532	(947)	488	(140)	4,020	(1,087)
Others	–	6,807	–	(6,308)	–	499
Balance at 31 December	107,874	89,706	(7,603)	(7,419)	100,271	82,287

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28. EMPLOYEE BENEFITS (continued)**Movement in net defined (asset)/liability (continued)**

	Group	
	2017	2016
	\$'000	\$'000
Represented by:		
Net defined benefit asset	(243)	(151)
Net defined benefit liability	100,514	82,438
	<u>100,271</u>	<u>82,287</u>

The expenses are recognised in the following line items in profit or loss:

	Group	
	2017	2016
	\$'000	\$'000
Cost of sales	6,146	5,150
Administrative expenses	(12)	26
Other operating expenses	(25)	49
Finance cost	275	89
Defined benefit obligation expenses	<u>6,384</u>	<u>5,314</u>

The fair values of planned assets in each category are as follows:

	Group	
	2017	2016
	\$'000	\$'000
Equity securities	228	207
Government bonds	426	378
Derivatives	97	93
Funds managed by a trustee	2,163	2,046
Funds with insurance companies	4,689	4,695
Fair value of planned assets	<u>7,603</u>	<u>7,419</u>

All equity securities and government bonds have quoted prices in active markets. All government bonds have an average rating of A+.

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28. EMPLOYEE BENEFITS (continued)**Defined benefit obligation****(a) Actuarial assumptions**

The following relates to the actuarial assumptions (expressed as weighted-averages) of the significant post employment defined benefit plans in a subsidiary. The remaining defined benefit plans are not material to the Group and additional disclosures are not shown at the reporting date:

	2017 %	Group 2016 %
Discount rate	1.8	1.7
Future salary growth	2.8	2.8
Future pension growth	1.5	1.7

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:

	2017	Group 2016
Longevity at age 65 for current pensioners		
Males	19.4	19.3
Females	23.5	23.4
Longevity at age 65 for current members aged 45		
Males	22.0	21.9
Females	25.9	25.9

At 31 December 2017, the weighted-average duration of the defined benefit obligation was 18.9 years (2016: 14.2 years).

(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.

The Group	2017		2016	
	Increase \$'000	Decrease \$'000	Increase \$'000	Decrease \$'000
Discount rate (0.5% movement)	(8,044)	9,206	(5,155)	5,278
Future salary growth (0.25% movement)	988	(932)	212	(193)
Future pension growth (0.25% movement)	243	(220)	736	(696)
Future mortality (10% movement)	–	1,041	–	580

Although the analysis does not take account of the full distribution of cash flows expected under the plan, it does provide an approximation of the sensitivity of the assumptions shown.

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29. SHARE CAPITAL

	Group and Company	
	2017	2016
	\$'000	\$'000
Issued and fully paid		
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.

30. TREASURY SHARES

	Group and Company	
	2017	2016
	\$'000	\$'000
At beginning of the year	(44,081)	(66,870)
Purchased during the year	(15,748)	(3,137)
Reissue of treasury shares pursuant to share plans	36,959	25,926
At end of the year	(22,870)	(44,081)

Treasury shares relate to ordinary shares of the Company that are held by the Company.

During the financial year, the Company purchased 4,500,000 (2016: 1,088,900) of its ordinary shares by way of on-market purchases. The shares, held as treasury shares, were included as deduction against shareholders' equity.

The cost of treasury shares re-issued pursuant to the share option plans amounted to \$23,272,000 (2016: \$10,399,000). In addition, 4,292,460 (2016: 4,890,801) treasury shares, at a cost of \$13,687,000 (2016: \$15,527,000), were reissued pursuant to its RSP.

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31. SHARE-BASED PAYMENT ARRANGEMENTS

Singapore Technologies Engineering Share Option Plan (ESOP)

The Company ceased to grant options under the ESOP with effect from 2007. Information regarding ESOP is as follows:

- (a) The exercise price of the options is equal to volume-weighted average price for the shares on the SGX over the three consecutive trading days immediately preceding the date of grant.
- (b) The options are exercisable at the end of the first year after date of grant, in accordance with a vesting schedule to be determined by ERCC and are settled in cash.
- (c) The options granted expire after five years for non-executive directors and 10 years for the employees of the Company and its subsidiaries.

During the year, 7,323,524 (2016: 3,276,310) options were exercised under ESOP and settled by reissuance of treasury shares.

At the end of the financial year, outstanding options granted to eligible employees and directors of the Company are as follows:

(i) Options outstanding under the ESOP

	Number of shares	
	2017	2016
ESOP		
At beginning of the year	10,051,479	17,636,741
Exercised	(7,323,524)	(3,276,310)
Lapsed	(2,727,955)	(4,308,952)
At end of the year	–	10,051,479
Exercisable at end of the year	–	10,051,479

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31. SHARE-BASED PAYMENT ARRANGEMENTS (continued)**Singapore Technologies Engineering Share Option Plan (ESOP) (continued)****(ii) Details of share options**

Details of share options to subscribe for ordinary shares pursuant to ESOP are as follows:

2017

Date of Grant	Balance as at 1.1.2017	Options lapsed	Options exercised	Balance as at 31.12.2017	No. of holders at 31.12.2017	Exercise Price (\$)	Exercisable period
15.3.2007	4,874,992	869,510	4,005,482	–	–	3,230	16.3.2008 to 15.3.2017
10.8.2007	5,176,487	1,858,445	3,318,042	–	–	3,610	11.8.2008 to 10.8.2017
	<u>10,051,479</u>	<u>2,727,955</u>	<u>7,323,524</u>	<u>–</u>			

2016

Date of Grant	Balance as at 1.1.2016	Options lapsed	Options exercised	Balance as at 31.12.2016	No. of holders at 31.12.2016	Exercise Price (\$)	Exercisable period
9.2.2006	3,434,439	3,411,231	23,208	–	–	3,010	10.2.2007 to 9.2.2016
10.8.2006	3,590,392	541,416	3,048,976	–	–	2,840	11.8.2007 to 10.8.2016
15.3.2007	5,228,849	157,780	196,077	4,874,992	448	3,230	16.3.2008 to 15.3.2017
10.8.2007	5,383,061	198,525	8,049	5,176,487	579	3,610	11.8.2008 to 10.8.2017
	<u>17,636,741</u>	<u>4,308,952</u>	<u>3,276,310</u>	<u>10,051,479</u>			

The options were exercised on a regular basis throughout the year and the weighted average share price for options exercised during the year was \$3.68 (2016: \$3.29). The weighted average remaining contractual life for these options is nil (2016: 0.41 year).

The fair value of services received in return for share options granted are measured by reference to the fair value of share options granted. The estimate of the fair value of the services received is measured based on a binomial model, taking into account the terms and conditions upon which the options were granted.

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31. SHARE-BASED PAYMENT ARRANGEMENTS (continued)**Singapore Technologies Engineering Performance Share Plan 2010 (PSP2010)**

Outstanding Awards under PSP2010 are as follow:

	2017	Year of grant		Total
		2016	2015	
Number of performance shares				
At grant date	1,714,650	1,949,000	1,841,900	5,505,550
Lapsed	(165,815)	(209,606)	(122,210)	(497,631)
Outstanding as at 31.12.2017	1,548,835	1,739,394	1,719,690	5,007,919

During the current and prior year, the Group did not meet the pre-determined target performance level and hence, no performance shares were awarded in respect of grant made in 2014 and 2013 respectively under PSP2010.

The fair value of the performance shares is determined on conditional grant date using the Monte Carlo simulation model.

The significant inputs to the model used for the conditional grants are as follows:

	2017	Year of grant	
		2016	2015
Market conditions			
Volatility of Defensive Index (%)	n.a.	n.a.	9.18
Volatility of the Company's shares (%)	18.50	17.78	14.71
Correlation of Index Constituents / Defensive Index vs. the Company (%)	-7.3 – 59.9	12.9 – 67.3	57.2
Risk-free rate (%)	1.36	1.12	1.45
Share price (\$)	3.66	3.23	3.43
Cost of equity (%)	7.10	7.00	7.60
Dividend yield	(– Management's forecast in line with dividend policy –)		

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31. SHARE-BASED PAYMENT ARRANGEMENTS (continued)**Singapore Technologies Engineering Restricted Share Plan 2010 (RSP2010)**

Outstanding Awards under RSP2010 are as follow:

Date of grant	Number of restricted shares as at grant date	Number of restricted shares lapsed	Number of restricted shares released	Balance outstanding as at 31.12.2017
<i>RSP2010</i>				
16 March 2011	7,380,041	1,033,826	6,343,239	2,976
22 March 2013	4,347,000	1,951,743	2,395,257	–
13 March 2014	4,873,600	2,490,459	1,875,842	507,299
4 April 2014	300,000	–	300,000	–
28 April 2014	1,404,751	–	1,404,751	–
16 March 2015	12,000	–	12,000	–
18 March 2015	5,054,850	943,347	2,329,106	1,782,397
5 June 2015	24,000	–	16,000	8,000
18 March 2016	5,358,700	1,304,827	1,200,505	2,853,368
4 July 2016	289,661	–	193,107	96,554
1 August 2016	14,930	–	4,976	9,954
3 October 2016	152,901	–	76,450	76,451
14 November 2016	173,077	–	57,692	115,385
1 March 2017	16,600	–	8,300	8,300
27 March 2017	5,112,063	148,202	93,646	4,870,215
10 April 2017	2,800	–	–	2,800
16 May 2017	145,100	–	145,100	–
18 July 2017	13,484	–	–	13,484
30 August 2017	65,275	–	–	65,275

During the year, restricted shares amounting to 4,292,460 (2016: 4,890,801) ordinary shares were awarded under RSP2010. These shares were awarded by reissuance of treasury shares.

The fair value of the restricted shares is determined at conditional grant date using the Monte Carlo simulation model.

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31. SHARE-BASED PAYMENT ARRANGEMENTS (continued)**Singapore Technologies Engineering Restricted Share Plan 2010 (RSP2010) (continued)**

The significant inputs to the model used for the conditional grant in 2016 and 2017 are as follows:

	Year of grant	
	2017	2016
Volatility of the Company's shares (%)	18.50	17.73
Risk-free rate (%)	0.97 – 1.55	0.813 – 1.337
Share price (\$)	3.66	3.23
Dividend yield	(--Management's forecast in line with dividend policy--)	

32. CAPITAL RESERVES

Included in capital reserve is:

- (a) an amount of \$115,948,000 (2016: \$115,948,000) relating to share premium of the respective pooled enterprises, namely Singapore Technologies Aerospace Ltd, Singapore Technologies Electronics Limited, Singapore Technologies Kinetics Ltd and Singapore Technologies Marine Ltd classified as capital reserve for the Group upon the pooling of interests during the financial year ended 31 December 1997; and
- (b) a realised gain of \$3,807,000 and \$3,834,000 for the Company and the Group respectively on re-issuance of treasury shares under share-based payment arrangements of the Company as at 31 December 2017. In 2016, there was a realised loss of \$2,791,000 and \$2,764,000 for the Company and the Group respectively.

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33. OTHER RESERVES

	Note	Foreign currency translation reserve \$'000	Statutory reserve \$'000	Fair value reserve \$'000	Share-based payment reserve \$'000	Premium paid on acquisition of non- controlling interests \$'000	Total \$'000
The Group							
At 1.1.2016		(107,308)	5,330	(40,924)	82,666	(5,259)	(65,495)
Other comprehensive income							
Net fair value changes on available-for-sale financial assets	(i)	–	–	1,089	–	–	1,089
Net fair value changes on cash flow hedges	(ii)	–	–	572	–	–	572
Realisation of cash flow hedge reserve arising from disposal of an associate		–	–	11,368	–	–	11,368
Foreign currency translation differences	(iii)	503	–	(1)	–	(35)	467
Share of foreign currency translation differences of associates and joint ventures		(2,809)	–	–	–	–	(2,809)
Reclassification of foreign currency translation reserve to profit or loss arising from disposal of foreign entities		9,446	–	–	–	–	9,446
Total comprehensive income for the year, net of tax		7,140	–	13,028	–	(35)	20,133
Cost of share-based payment		–	–	–	9,515	–	9,515
Treasury shares reissued pursuant to share plans		–	–	–	(16,719)	–	(16,719)
Acquisition of non-controlling interests in a subsidiary without a change in control		–	–	–	–	(731)	(731)
Disposal of a subsidiary		–	(3,474)	–	–	–	(3,474)
Transfer from retained earnings to statutory reserve		–	118	–	–	–	118
At 31.12.2016		(100,168)	1,974	(27,896)	75,462	(6,025)	(56,653)

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33. OTHER RESERVES (continued)

The Group	Note	Foreign currency translation reserve \$'000	Statutory reserve \$'000	Fair value reserve \$'000	Share-based payment reserve \$'000	Premium paid on acquisition of non- controlling interests \$'000	Total \$'000
At 1.1.2017		(100,168)	1,974	(27,896)	75,462	(6,025)	(56,653)
Other comprehensive income							
Net fair value changes on available-for-sale financial assets (i)		–	–	8,670	–	–	8,670
Net fair value changes on cash flow hedges (ii)		–	–	42,119	–	–	42,119
Share of net fair value changes on cash flow hedges of joint ventures (ii)		–	–	(127)	–	–	(127)
Foreign currency translation differences (iii)		(48,053)	–	(2)	–	125	(47,930)
Share of foreign currency translation differences of associates and joint ventures		(11,102)	–	–	–	–	(11,102)
Reclassification of foreign currency translation reserve to profit or loss arising from disposal of foreign entities		2,144	–	–	–	–	2,144
Total comprehensive income for the year, net of tax		(57,011)	–	50,660	–	125	(6,226)
Cost of share-based payment		–	–	–	14,509	–	14,509
Treasury shares reissued pursuant to share plans		–	–	–	(18,599)	–	(18,599)
Acquisition of non-controlling interests in a subsidiary without a change in control		–	–	–	–	(589)	(589)
Transfer from retained earnings to statutory reserve		–	90	–	–	–	90
At 31.12.2017		(157,179)	2,064	22,764	71,372	(6,489)	(67,468)

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33. OTHER RESERVES (continued)

	Group	
	2017	2016
	\$'000	\$'000
(i) Net fair value changes on available-for-sale financial assets:		
– Net fair value changes during the year	9,627	3,955
– Reclassification adjustment to profit or loss on disposal of financial assets		
in finance costs, net	(510)	(1,295)
– Reclassification to profit or loss on impairment	(447)	(1,571)
	<u>8,670</u>	<u>1,089</u>
(ii) Net fair value changes on cash flow hedges:		
– Net fair value changes during the year	39,618	(1,871)
– Reclassification adjustment to profit or loss on occurrence of forecast		
transaction in finance costs, net	1,598	(314)
– Recognised in the carrying value of non-financial assets on occurrence		
of the hedged transactions	776	2,757
	<u>41,992</u>	<u>572</u>
(iii) Foreign currency translation differences arising from:		
– Translation of quasi equity loans forming part of net investments in		
foreign entities	5,255	(1,705)
– Translation of foreign currency loans used as hedging instruments for		
effective net investment hedges	25,225	(7,859)
– Translation of foreign entities	(78,533)	10,067
	<u>(48,053)</u>	<u>503</u>

As at 31 December 2017, bonds amounting to \$312.9 million (US\$234 million) (2016: \$338.1 million (US\$234 million)) have been designated as a hedge of the net investment in Vision Technologies Systems, Inc. and its subsidiaries (US subsidiaries) and are being used to hedge the Group's exposure to foreign exchange risk on this investment.

Exchange gain or loss on the re-translation of these bonds is transferred to other comprehensive income to offset any exchange gain or loss on translation of the net investment in the US subsidiaries. There is no ineffectiveness in the hedge during the year.

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33. OTHER RESERVES (continued)

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 comprise of 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 records the cumulative fair value changes of available-for-sale financial assets 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.

34. DIVIDENDS

	Group and Company	
	2017	2016
	\$'000	\$'000
Final dividend paid in respect of the previous financial year of 10.0 cents (2016: 5.0 cents) per share	312,250	156,125
Special dividend paid in respect of the previous financial year of nil cents (2016: 5.0 cents) per share	–	156,125
Interim dividend paid in respect of the current financial year of 5.0 cents (2016: 5.0 cents) per share	155,996	155,412
	468,246	467,662
Additional final dividend paid in respect of the previous financial year due to issue of shares before books closure date	(605)	(1,732)
	467,641	465,930

The Directors propose a final dividend of 10.0 cents (2016: 10.0 cents) per share amounting to \$312.2 million (2016: \$312.2 million), in respect of the financial year ended 31 December 2017. These dividends have not been recognised as a liability as at year end as they are subject to approval of the shareholders at the Annual General Meeting of the Company.

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35. RELATED PARTY INFORMATION**Key management personnel compensation**

Key management personnel of the Group are those persons having the authority and responsibility for planning, directing and controlling activities of the Group. The executive directors and senior management executives of the Group Companies are considered as key management personnel.

	Group	
	2017	2016
	\$'000	\$'000
Short-term employee benefits	38,468	34,493
Contributions to defined contribution plans	825	746
Share-based payments	8,141	5,569
	<u>47,434</u>	<u>40,808</u>

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	
	2017	2016
	\$'000	\$'000
Associates of the Group		
Sales and services rendered	10,137	10,423
Purchases and services received	(41,054)	(30,123)
Dividend income	<u>77,679</u>	<u>42,786</u>
Joint ventures of the Group		
Sales and services rendered	17,501	21,018
Purchases and services received	(28,554)	(23,466)
Dividend income	<u>3,350</u>	<u>1,950</u>
Other related parties*		
Sales and services rendered	46,226	49,544
Purchases and services received	(27,918)	(20,765)
Rental expense	(5,994)	(8,009)
Rental income	<u>2,216</u>	<u>2,402</u>

* Other related parties refer to subsidiaries, associates and joint ventures of immediate holding company.

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36. COMMITMENTS**(i) Capital commitments**

	Group	
	2017	2016
	\$'000	\$'000
Capital expenditure contracted but not provided in the financial statements	34,621	52,328

(ii) Leases – As lessee

Future minimum lease payments under non-cancellable operating leases are as follows:

	Group	
	2017	2016
	\$'000	\$'000
Third parties		
Within 1 year	48,267	46,506
Between 1 and 5 years	122,879	130,658
After 5 years	188,381	206,243
	359,527	383,407
Related parties		
Within 1 year	5,657	5,342
Between 1 and 5 years	14,708	15,430
After 5 years	24,821	28,419
	45,186	49,191

The Group has several operating lease agreements for leasehold land and buildings, office premises and computers. Lease terms do not contain restrictions on the Group activities concerning dividends, additional debt or further leasing.

None of the operating leases is subject to contingent rent arrangements.

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36. COMMITMENTS (continued)**(iii) Leases – As lessor**

The Group has entered into commercial leases on its aircraft, aircraft engines and certain property, plant and equipment. The non-cancellable leases have lease term ranging from 1 to 15 years.

The future lease payment receivables under non-cancellable operating leases are as follows:

	Group	
	2017	2016
	\$'000	\$'000
Within 1 year	16,926	13,614
Between 1 and 5 years	25,657	28,727
After 5 years	9,876	11,650
	<u>52,459</u>	<u>53,991</u>

(iv) Investments

As at 31 December 2017, the Group has outstanding commitments in respect of uncalled capital to the extent of \$0.2 million (2016: \$0.2 million) in subsidiaries.

(v) Contingent liabilities (unsecured)

The Group is a party to various claims that arise in the normal course of the Group's business. The total liability 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.

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37. SEGMENT INFORMATION

For management purposes, the Group is organised on a worldwide basis into four major operating segments. The management of the Company reviews the segments' operating results regularly in order to allocate resources to the segments and to assess the segments' performance.

The operating segments and principal activities identified within the Group are outlined below:

Segments	Principal activities
Aerospace	Provides a spectrum of maintenance and engineering services that include airframe, engine and component maintenance, repair and overhaul, engineering design, development and technical services; and aviation materials and management services, including Total Aviation Support. It also provides leasing of aircraft and aircraft engines and the manufacture and sale of aircraft components.
Electronics	Delivers innovative system solutions to government, commercial, defence, and industrial customers worldwide. It specialises in the design, development and integration of advanced electronics and communications systems, such as broadband radio frequency and satellite communication, e-Government solutions, information communications technologies and IT, rail and traffic management, real-time command and control, modelling and simulation, eLearning and interactive digital media, training services, intelligent building management and information security.
Land Systems	Provides design and engineering services, manufacture, sales and knowhow transfer of military and commercial vehicles, automotive subsystems, robotic systems, armament, weapons, weapon systems, ammunition and explosives. It also provides engineering services for assembly, upgrading/modifications, maintenance, repair and overhaul of vehicles and weapon systems, and trading in motor vehicles, equipment, vehicle spares and related accessories, integrated logistics management, integrated facilities management, warehousing.
Marine	Provides turnkey building, repair and conversion services for a wide spectrum of naval and commercial vessels. In shipbuilding, it has the proven capabilities to provide turnkey solutions from concept definition to detailed design, construction, on-board system installation and integration, testing, commissioning to through-life support. It has also established a track record in providing high engineering content ship repair and ship conversion services for a worldwide clientele. It also provides a suite of sustainable environmental engineering solutions.
Others *	Research and development, treasury, investment holding and provision of management, consultancy and other support services.

* None of these segments meets any of the quantitative thresholds for determining reportable segments in financial years 2017 and 2016.

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37. SEGMENT INFORMATION (continued)

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.

Inter-segment pricing is based on terms negotiated between the parties which are intended to reflect competitive terms.

	Aerospace \$'000	Electronics \$'000	Land Systems \$'000	Marine \$'000	Others \$'000	Elimination \$'000	Group \$'000
2017							
Revenue							
External sales	2,535,265	2,107,667	1,243,511	637,444	95,604	–	6,619,491
Inter-segment sales	11,990	31,171	19,148	87	6,021	(68,417)	–
	<u>2,547,255</u>	<u>2,138,838</u>	<u>1,262,659</u>	<u>637,531</u>	<u>101,625</u>	<u>(68,417)</u>	<u>6,619,491</u>
Reportable segment							
profit from operations	270,837	206,773	70,231	14,795	(90,537)	81,246	553,345
Other income	13,793	14,911	11,230	7,122	545,228	(552,340)	39,944
Other expenses	(5,261)	(66)	(1,766)	(109)	(1)	5,925	(1,278)
Finance income	8,061	1,778	935	2,690	133,759	(109,001)	38,222
Finance costs	(10,801)	(8,771)	(6,820)	(3,196)	(110,459)	83,776	(56,271)
Share of results of associates and joint ventures, net of tax	41,171	(2,282)	11,229	1,106	–	(1,892)	49,332
Profit before taxation	317,800	212,343	85,039	22,408	477,990	(492,286)	623,294
Taxation	(51,525)	(33,477)	3,677	4,641	(6,465)	(4,718)	(87,867)
Non-controlling interests	(22,172)	(77)	(1,296)	–	–	–	(23,545)
Profit attributable to shareholders	<u>244,103</u>	<u>178,789</u>	<u>87,420</u>	<u>27,049</u>	<u>471,525</u>	<u>(497,004)</u>	<u>511,882</u>
Other assets	2,912,667	2,185,630	1,560,510	935,769	4,941,982	(4,511,574)	8,024,984
Associates and joint ventures	248,168	54,523	108,233	10,493	25,520	1,450	448,387
Segment assets	<u>3,160,835</u>	<u>2,240,153</u>	<u>1,668,743</u>	<u>946,262</u>	<u>4,967,502</u>	<u>(4,510,124)</u>	<u>8,473,371</u>
Segment liabilities	<u>2,195,746</u>	<u>1,931,636</u>	<u>1,344,733</u>	<u>827,415</u>	<u>2,754,115</u>	<u>(3,101,663)</u>	<u>5,951,982</u>
Capital expenditure	170,519	83,678	33,137	44,176	14,435	–	345,945
Depreciation and amortisation	103,537	47,810	32,503	28,875	4,276	(42)	216,959
Impairment losses	11	–	314	–	196	–	521
Other non-cash expenses	188	141	102	–	–	–	431

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37. SEGMENT INFORMATION (continued)

	Aerospace \$'000	Electronics \$'000	Land Systems \$'000 (Restated) #	Marine \$'000	Others \$'000 (Restated) #	Elimination \$'000	Group \$'000
2016							
Revenue							
External sales	2,484,337	1,884,733	1,390,071	840,582	84,014	–	6,683,737
Inter-segment sales	8,520	25,768	15,245	578	6,375	(56,486)	–
	<u>2,492,857</u>	<u>1,910,501</u>	<u>1,405,316</u>	<u>841,160</u>	<u>90,389</u>	<u>(56,486)</u>	<u>6,683,737</u>
Reportable segment							
profit from operations	240,431	191,846	4,119	63,576	(93,380)	64,491	471,083
Other income	22,736	19,400	26,245	7,548	480,858	(488,972)	67,815
Other expenses	(4,339)	(15)	(1,675)	(124)	–	6,138	(15)
Finance income	11,431	4,089	2,372	3,866	45,817	(33,884)	33,691
Finance costs	(12,038)	(7,827)	(7,199)	(596)	(59,767)	41,720	(45,707)
Share of results of associates and joint ventures, net of tax	42,097	305	14,896	851	–	5,617	63,766
Profit before taxation	300,318	207,798	38,758	75,121	373,528	(404,890)	590,633
Taxation	(49,102)	(33,194)	(21,831)	(7,370)	19,488	(5,761)	(97,770)
Non-controlling interests	(16,831)	(58)	8,534	6	–	–	(8,349)
Profit attributable to shareholders	<u>234,385</u>	<u>174,546</u>	<u>25,461</u>	<u>67,757</u>	<u>393,016</u>	<u>(410,651)</u>	<u>484,514</u>
Other assets	2,770,573	2,054,854	1,592,285	967,208	5,011,293	(4,436,690)	7,959,523
Associates and joint ventures	244,263	1,565	126,737	8,666	17,657	6,642	405,530
Segment assets	<u>3,014,836</u>	<u>2,056,419</u>	<u>1,719,022</u>	<u>975,874</u>	<u>5,028,950</u>	<u>(4,430,048)</u>	<u>8,365,053</u>
Segment liabilities	<u>2,030,556</u>	<u>1,783,937</u>	<u>1,471,566</u>	<u>809,473</u>	<u>2,842,261</u>	<u>(3,016,936)</u>	<u>5,920,857</u>
Capital expenditure	200,041	80,070	37,664	10,235	1,193	(25)	329,178
Depreciation and amortisation	112,988	45,536	40,149	28,422	20,268	(42)	247,321
Impairment losses	2,667	8	37,492	–	1,571	–	41,738
Other non-cash expenses	393	56	314	–	–	–	763

* Pursuant to the transfer of ST Synthesis Pte Ltd (ST Synthesis) to Land Systems sector with effect from 1 January 2017 as part of the business rationalisation to provide a one-stop integrated solution to Land Systems sector customers, comparative FY2016 figures in the income statement and segmental information were restated.

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37. SEGMENT INFORMATION (continued)**(i) 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, employee benefits and deferred tax assets, are based on the location of those assets.

	Revenue		Non-current assets	
	2017	2016	2017	2016
The Group	\$'000	\$'000	\$'000	\$'000
Asia	4,790,828	4,599,078	2,071,813	2,005,125
USA	1,219,072	1,524,481	915,986	867,663
Europe	552,621	494,651	559,755	457,397
Others	56,970	65,527	94,251	96,347
	6,619,491	6,683,737	3,641,805	3,426,532

(ii) Analysis by geographical areas

Revenue is based on the location of customers regardless of where the goods are produced or services rendered.

	Revenue	
	2017	2016
The Group	\$'000	\$'000
Asia	4,066,561	3,951,297
USA	1,359,722	1,631,675
Europe	725,719	610,188
Others	467,489	490,577
	6,619,491	6,683,737

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38. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group and the Company are exposed to financial risks, namely, interest rate, foreign exchange, market, liquidity and credit risks, arising from its operations and the use of financial instruments. The Group's principal financial instruments, other than foreign exchange contracts and derivatives, comprise bank guarantees, performance bonds, bank loans and overdrafts, 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 ("Permitted Transactions"). 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.

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		Company	
	2017	2016	2017	2016
	\$'000	\$'000	\$'000	\$'000
Fixed rate instruments				
Financial assets	376,530	535,617	316,352	469,047
Financial liabilities	(818,211)	(850,380)	–	–
	(441,681)	(314,763)	316,352	469,047
Variable rate instruments				
Financial assets	350,975	499,812	611,579	693,886
Financial liabilities	(297,853)	(229,895)	(606,733)	(642,313)
	53,122	269,917	4,846	51,573

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38. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Interest rate risk (continued)

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 10-year bonds issued, bank loans and lease commitments. 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 and cross-currency interest rate swaps. An increase of 50 basis points in interest rate at the reporting date would lead to a reduction of the Group's profit or loss and other comprehensive income by approximately \$1.5 million (2016: \$1.1 million) and \$6.8 million (2016: \$7.7 million) respectively. A decrease in 50 basis points in interest rate at the reporting date would increase the Group's profit or loss and other comprehensive income by approximately \$1.5 million (2016: \$1.1 million) and \$7.0 million (2016: \$7.5 million) respectively. This analysis assumes that all other variables remain constant.

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 functional currencies of the Company and its subsidiaries. The Group's foreign exchange exposures are primarily from USD and Euro, and manage its exposure through forward currency contracts, cross currency interest rate swaps and embedded derivatives.

The Company's centralised Treasury Unit monitors the current and projected foreign currency cash flow 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 the Company had assessed that a reasonable change in the exchange rate would not result in any significant impact on the Group's results.

Market Risk

The Group has strategic investments in quoted equity shares. The market value of these investments will fluctuate with market conditions.

No sensitivity analysis was disclosed as the Company had assessed that a reasonable change in the market value of these investments would not result in any significant impact on the Group's results.

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38. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)**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.

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.

The Group	Contractual cash flow \$'000	Within 1 year \$'000	Between 1 and 5 years \$'000	More than 5 years \$'000
2017				
Bank loans	(439,014)	(217,399)	(206,407)	(15,208)
Bonds	(718,058)	(32,088)	(685,970)	–
Other loans	(7,418)	(7,403)	(15)	–
Lease obligations	(32,524)	(1,280)	(4,590)	(26,654)
Trade and other payables	(1,829,429)	(1,706,434)	(120,379)	(2,616)
Derivative financial instruments:				
• Gross-settled forward currency contracts				
– payments	(1,291,846)	(697,921)	(587,116)	(6,809)
– receipts	1,312,620	709,860	596,041	6,719
• Net-settled interest rate swaps	2,769	441	2,328	–
• Net-settled cross currency interest rate swaps	8,624	1,529	7,095	–
Financial guarantee	(84,856)	(84,856)	–	–
2016				
Bank loans	(352,097)	(85,785)	(254,127)	(12,185)
Bonds	(810,629)	(34,675)	(775,954)	–
Other loans	(1,892)	(1,551)	(341)	–
Lease obligations	(36,475)	(1,353)	(5,040)	(30,082)
Trade and other payables	(1,847,896)	(1,710,116)	(135,674)	(2,106)
Derivative financial instruments:				
• Gross-settled forward currency contracts				
– payments	(1,186,418)	(744,840)	(441,578)	–
– receipts	1,153,563	716,980	436,583	–
• Net-settled interest rate swaps	1,616	(788)	2,404	–
• Net-settled cross currency interest rate swaps	25,298	2,136	23,162	–
Financial guarantee	(52,000)	(52,000)	–	–

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38. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)**Liquidity risk (continued)**

The Company	Contractual cash flow \$'000	Within 1 year \$'000	Between 1 and 5 years \$'000
2017			
Trade payables and accruals	28,587	20,979	7,608
Amounts due to related parties	1,212,660	545,066	667,594
Derivative financial instruments:			
• Gross-settled forward currency contracts			
– payments	(2,695)	(2,695)	–
– receipts	2,655	2,655	–
Intra-group financial guarantee	270,074	270,074	–
2016			
Trade payables and accruals	(33,145)	(24,148)	(8,997)
Amounts due to related parties	(1,181,244)	(504,827)	(676,417)
Intra-group financial guarantee	(187,824)	(187,824)	–

For derivative financial instruments, the cash inflows/(outflows) represent the contractual undiscounted cash flows relating to these instruments. The amounts are compiled on a net basis for derivatives that are net-settled. Gross inflows and outflows are included for derivatives that are gross-settled on a simultaneous basis. Net-settled derivative financial assets are included in the maturity analysis as they are held to hedge the cash flow variability of the Group's bank loans and bonds.

Except for the cash flow arising from the intra-group financial guarantee, it is not expected that the cash flows included in the maturity analysis of the Group and the Company could occur significantly earlier, or at significantly different amounts.

At the reporting date, the Company does not consider it probable that a claim will be made against the Company under the intra-group financial guarantee.

Credit risk

Credit risk, or the risk of counterparties defaulting, 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.

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38. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)**Credit risk (continued)**

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at the reporting date is:

	Group		Company	
	2017	2016	2017	2016
	\$'000	\$'000	\$'000	\$'000
Investments	360,703	510,941	–	–
Finance lease receivables	–	–	–	–
Derivative financial instruments, non-current	33,082	32,967	–	–
Trade receivables	1,646,876	1,459,876	–	–
Amounts due from related parties	33,077	29,424	733,408	706,891
Advances and other receivables	104,745	105,180	12,578	1,422
Bank balances and other liquid funds	999,003	904,890	596,494	588,862
Recognised financial assets	<u>3,177,486</u>	<u>3,043,278</u>	<u>1,342,480</u>	<u>1,297,175</u>

The Group limits its exposure to credit risk on investments held by investing mostly in bonds of high credit ratings. Management actively monitors the credit ratings 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 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 2017, there were no significant concentrations of credit risk, except for 32% (2016: 38%) of trade debts excluding unbilled receivables relating to three major customers of the Group. The table below analyses the trade receivables by the Group's main reportable segments.

	Group	
	2017	2016
	\$'000	\$'000
Aerospace	607,422	584,730
Electronics	684,993	515,146
Land Systems	200,107	241,573
Marine	140,313	97,526
Others	14,041	20,901
	<u>1,646,876</u>	<u>1,459,876</u>

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38. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)**Credit risk (continued)**

The ageing of financial assets excluding cash and cash equivalents, investments and derivative financial instruments, net of impairment losses, are as follows:

	Group		Company	
	2017	2016	2017	2016
	\$'000	\$'000	\$'000	\$'000
Not past due *	1,476,669	1,239,095	733,408	708,313
1 – 90 days	234,836	264,562	–	–
91 – 180 days	36,699	36,372	–	–
181 – 360 days	14,298	39,231	–	–
> 360 days	1,695	11,172	–	–
	1,764,197	1,590,432	733,408	708,313

* This includes unbilled receivables which relates to services rendered but not billed.

The movements in allowance for impairment losses in respect of financial assets excluding cash and cash equivalents, investments and derivative financial instruments are as follows:

	Group		Company	
	2017	2016	2017	2016
	\$'000	\$'000	\$'000	\$'000
At beginning of the year	56,907	78,278	–	13,562
Charge to profit or loss	5,642	19,223	9,500	6,700
Allowance utilised	(12,418)	(11,113)	–	(20,307)
Acquisition of a subsidiary	78	(28,511)	–	–
Translation difference	(2,025)	(970)	–	45
At end of the year	48,184	56,907	9,500	–

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39. CLASSIFICATION AND FAIR VALUE OF FINANCIAL INSTRUMENTS

The Group	Carrying amount					Fair value				
	Loans and receivables	Fair value through profit or loss	Available -for-sale	Liabilities at amortised cost	Derivatives used for hedging	Total carrying amount	Level 1	Level 2	Level 3	Total
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
2017										
Financial assets measured at fair value										
Investments	–	–	351,344	–	–	351,344	357	350,975	12	351,344
Associates	–	7,863	–	–	–	7,863	–	7,863	–	7,863
Derivatives financial instruments	–	18,247	–	–	35,336	53,583	–	53,583	–	53,583
	–	26,110	351,344	–	35,336	412,790	357	412,421	12	412,790
Financial assets not measured at fair value										
Investments	–	–	9,359	–	–	9,359				
Trade receivables	1,646,876	–	–	–	–	1,646,876				
Amounts due from related parties	33,077	–	–	–	–	33,077				
Advances and other receivables	84,244	–	–	–	–	84,244				
Bank balances and other liquid funds	999,003	–	–	–	–	999,003				
	2,763,200	–	9,359	–	–	2,772,559				
Financial liabilities measured at fair value										
Derivatives financial instruments	–	(3,459)	–	–	(22,211)	(25,670)	–	(25,670)	–	(25,670)
Financial liabilities not measured at fair value										
Creditors and accruals	–	–	–	(1,725,370)	–	(1,725,370)				
Amounts due to related parties	–	–	–	(104,059)	–	(104,059)				
Borrowings	–	–	–	(1,116,064)	–	(1,116,064)				
	–	–	–	(2,945,493)	–	(2,945,493)				

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39. CLASSIFICATION AND FAIR VALUE OF FINANCIAL INSTRUMENTS (continued)

The Group	Carrying amount						Fair value			
	Loans and receivables \$'000	Fair value through profit or loss \$'000	Available -for-sale \$'000	Liabilities at amortised cost \$'000	Derivatives used for hedging \$'000	Total carrying amount \$'000	Level 1 \$'000	Level 2 \$'000	Level 3 \$'000	Total \$'000
2016										
Financial assets measured at fair value										
Investments	—	364	500,463	—	—	500,827	1,003	499,812	12	500,827
Derivatives financial instruments	—	28,894	—	—	8,121	37,015	—	37,015	—	37,015
	—	29,258	500,463	—	8,121	537,842	1,003	536,827	12	537,842
Financial assets not measured at fair value										
Investments	—	—	10,114	—	—	10,114				
Trade receivables	1,459,876	—	—	—	—	1,459,876				
Amounts due from related parties	29,424	—	—	—	—	29,424				
Advances and other receivables	101,132	—	—	—	—	101,132				
Bank balances and other liquid funds	904,890	—	—	—	—	904,890				
	2,495,322	—	10,114	—	—	2,505,436				
Financial liabilities measured at fair value										
Derivatives financial instruments	—	(13,776)	—	—	(55,762)	(69,538)	—	(69,538)	—	(69,538)
Financial liabilities not measured at fair value										
Creditors and accruals	—	—	—	(1,810,148)	—	(1,810,148)				
Amounts due to related parties	—	—	—	(28,466)	—	(28,466)				
Borrowings	—	—	—	(1,080,275)	—	(1,080,275)				
	—	—	—	(2,918,889)	—	(2,918,889)				

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39. CLASSIFICATION AND FAIR VALUE OF FINANCIAL INSTRUMENTS (continued)

	Carrying amount				Fair value			
	Loans and receivables \$'000	Fair value through profit or loss \$'000	Liabilities at amortised cost \$'000	Total carrying amount \$'000	Level 1 \$'000	Level 2 \$'000	Level 3 \$'000	Total \$'000
The Company								
2017								
Financial assets not measured at fair value								
Amounts due from related parties	733,408	–	–	733,408				
Advances and other receivables	12,578	–	–	12,578				
Bank balances and other liquid funds	596,494	–	–	596,494				
	<u>1,342,480</u>	<u>–</u>	<u>–</u>	<u>1,342,480</u>				
Financial liabilities measured at fair value								
Derivatives financial instruments	–	40	–	40	–	40	–	40
Financial liabilities not measured at fair value								
Trade payables and accruals	–	–	(28,587)	(28,587)				
Amounts due to related parties	–	–	(1,212,660)	(1,212,660)				
	<u>–</u>	<u>–</u>	<u>(1,241,247)</u>	<u>(1,241,247)</u>				
2016								
Financial assets not measured at fair value								
Amounts due from related parties	706,891	–	–	706,891				
Advances and other receivables	1,422	–	–	1,422				
Bank balances and other liquid funds	588,862	–	–	588,862				
	<u>1,297,175</u>	<u>–</u>	<u>–</u>	<u>1,297,175</u>				
Financial liabilities not measured at fair value								
Trade payables and accruals	–	–	(33,145)	(33,145)				
Amounts due to related parties	–	–	(1,181,244)	(1,181,244)				
	<u>–</u>	<u>–</u>	<u>(1,214,389)</u>	<u>(1,214,389)</u>				

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39. CLASSIFICATION AND FAIR VALUE OF FINANCIAL INSTRUMENTS (continued)

Fair value

The Group has an established approach with respect to the 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 FRS, including the level in the fair value hierarchy the resulting fair value estimate should be classified.

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	Available-for-sale – Equity investments (quoted)	Determined by reference to their quoted bid prices for these investments as at balance sheet date.
	Fair value through profit or loss – Equity investments (quoted)	
Level 2	Available-for-sale – Bonds (unquoted)	Determined based on quoted market prices.
	Derivatives – Forward currency contracts – Cross currency interest rate swaps – Interest rate swaps – Embedded derivatives	Determined based on broker quotes. Similar contract are traded in an active market and the quotes reflect the actual transactions in similar instruments.
	Fair value through profit or loss – Investment in associates	Determined by reference to the most recent purchase price.
Level 3	Available-for-sale – Venture capital funds and limited partnership	Determined by reference to valuation provided by non-related fund managers based on non-observable data. 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.

There were no transfers between Level 1, Level 2 and Level 3 during 2017 and 2016.

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39. CLASSIFICATION AND FAIR VALUE OF FINANCIAL INSTRUMENTS (continued)**Fair value (continued)**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	
	2017	2016
	\$'000	\$'000
Equity instruments (unquoted)		
Opening balance	12	12
Total gain or loss:		
– recognised in other comprehensive income	–	–
Closing balance	<u>12</u>	<u>12</u>

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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39. CLASSIFICATION AND FAIR VALUE OF FINANCIAL INSTRUMENTS (continued)

Derivative financial instruments included in Balance Sheet are as follows:

		2017			2016		
		Contractual/ notional amount \$'000	Estimated fair value		Contractual/ notional amount \$'000	Estimated fair value	
	Note		Asset \$'000	Liability \$'000		Asset \$'000	Liability \$'000
Cash flow hedges							
Forward currency contracts:							
– to hedge confirmed sales in foreign currencies	(a)(i)	576,409	19,445	(4,136)	559,209	370	(28,518)
– to hedge firm purchase commitments in foreign currencies	(a)(ii)	269,182	3,816	(2,533)	148,701	2,871	(1,503)
– to hedge accounts receivable in foreign currencies	(a)(i)	9,410	283	(15)	64,495	2,122	(294)
– to hedge accounts payable in foreign currencies	(a)(i)	12,024	254	(50)	18,487	51	(397)
Interest rate swaps	(b)	207,235	2,035	–	223,944	221	(84)
Embedded derivatives	(a)(i)	322,926	5,671	(11,302)	277,606	–	(20,828)
Fair value hedges							
Forward currency contracts:							
– to hedge confirmed sales in foreign currencies	(a)(i)	146,880	628	(2,134)	51,221	2,397	(260)
– to hedge firm purchase commitments in foreign currencies	(a)(i)	–	–	–	–	–	–
– to hedge accounts receivable in foreign currencies	(a)(i)	–	–	–	30,490	–	(632)
– to hedge accounts payable in foreign currencies	(a)(i)	354	–	(18)	6,490	89	(1)
Embedded derivatives	(a)(i)	132,321	2,551	(1,928)	45,640	–	(3,245)
Non-hedging instruments							
Forward currency contracts:							
– sales	(a)(ii)	227,002	5,082	(2,312)	244,440	206	(13,776)
– purchases	(a)(ii)	67,426	2,599	(135)	24,500	4,420	–
Cross currency interest rate swaps	(c)	124,025	10,788	–	124,025	23,767	–
Embedded derivatives	(a)(ii)	8,137	431	(1,107)	8,137	501	–
Total			53,583	(25,670)		37,015	(69,538)
Less: Current portion			(20,501)	10,117		(4,048)	50,103
Non-current portion			33,082	(15,553)		32,967	(19,435)

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39. CLASSIFICATION AND FAIR VALUE OF FINANCIAL INSTRUMENTS (continued)

(a) Forward currency contracts

- (i) As at 31 December 2017, the Group has forward currency contracts and embedded derivatives separated from the foreign currency portion of sales contracts amounting to \$1,469,506,000 (2016: \$1,202,339,000) designated as hedges of confirmed sales in foreign currencies, firm purchase commitments in foreign currencies, accounts receivable in foreign currencies and accounts payable in foreign currencies.

The maturity dates of the forward currency contracts and embedded derivatives separated from the foreign currency portion of the sales contracts approximate the timing of the expected cash flows of their respective hedged items, which are on varying periods up to seven years (2016: eight years) from the financial year-end.

- (ii) As at 31 December 2017, the Group has outstanding forward currency contracts and embedded derivatives separated from the foreign currency portion of sales contracts amounting to \$302,565,000 (2016: \$277,077,000). These were not designated as accounting hedges, but were used to economically hedge confirmed sales in foreign currencies and firm purchase commitments in foreign currencies.

(b) Interest rate swaps

As at 31 December 2017, the Group has outstanding interest rate swaps amounting to \$207,235,000 (2016: \$223,944,000), which are designated as cash flow hedges.

The USD interest rate swaps are being used to hedge the exposure to variability in cash flows associated with the floating rate of the unsecured USD long-term loans. Under the USD interest rate swaps, the Group pays fixed rates of interest of 1.57% to 1.63% (2016: 1.15% to 1.67%) per annum and receives variable rates of interest equal to the LIBOR per annum on the notional amount. The USD interest rate swaps have the same maturity terms as the unsecured USD long-term loans with maturity periods ranging from 2018 to 2020 (2016: 2018 to 2020).

(c) Cross currency interest rate swaps

As at 31 December 2017, the Group has outstanding cross currency interest rate swaps amounting to \$124,025,000 (2016: \$124,025,000), which are not designated as hedging instruments.

The swaps are being used to economically hedge the foreign currency exposure of the US\$500 million bond liability and convert the fixed USD bond interest rate of 4.8% (2016: 4.8%) per annum to floating SGD interest rate at 6-month SOR plus margins. The effective SGD interest rates range from 3.6% to 3.9% (2016: 3.6% to 4.5%) per annum.

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39. CLASSIFICATION AND FAIR VALUE OF FINANCIAL INSTRUMENTS (continued)**Master netting or similar agreements**

The disclosures set out in the tables below include financial assets and financial liabilities that are offset in the Group's and the Company's balance sheets; or are subject to an enforceable master netting arrangement, irrespective of whether they are offset in the balance sheets.

Financial instruments such as trade receivables and trade payables are not disclosed in the tables below unless they are offset in the balance sheets.

The derivative transactions that the Group and the Company enter into, are not subject to master netting arrangements. These derivative transactions are also not offset into the balance sheets as the Group and its counterparties do not intend to settle on a net basis or to realise the assets and settle the liabilities simultaneously.

The following table sets out the carrying amounts of recognised financial instruments that are subject to the above agreements.

	Gross amounts of recognised financial instruments \$'000	Gross amounts of recognised financial instruments offset in the balance sheets \$'000	Net amounts of financial instruments presented in the balance sheets \$'000	Related financial instruments that are not offset \$'000	Net amount \$'000
The Group					
31 December 2017					
Financial assets					
Trade receivables	—	—	—	—	—
Financial liabilities					
Trade payables	—	—	—	—	—
31 December 2016					
Financial assets					
Trade receivables	—	—	—	—	—
Financial liabilities					
Trade payables	2	—	2	—	2

The gross amounts of financial assets and financial liabilities and their net amounts as presented in the balance sheets that are disclosed in the above tables are measured at amortised cost.

The amounts in the above table that are offset in the balance sheets are measured on the same basis.

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40. NON-CONTROLLING INTERESTS IN SUBSIDIARIES

The following table summarises the information relating to each of the Group's subsidiaries with material NCI, based on their respective (consolidated) financial statements prepared in accordance with FRS, modified for fair value adjustments on acquisition and differences in Group's accounting policies. The summarised financial information is not adjusted for percentage ownership held by NCI.

Name of NCI	ST Aerospace Services Co Pte. Ltd. \$'000	EcoServices, LLC \$'000	Elbe Flugzeugwerke GmbH \$'000	STELOP Pte. Ltd. \$'000	Other individually immaterial subsidiaries \$'000	Intra-group elimination \$'000	Total \$'000
2017							
NCI percentage	20%	49.9%	45%	49.95%			
Principal place of business/ Country of incorporation	Singapore	USA	Germany	Singapore			
Revenue	260,475	27,196	489,127	42,233			
Profit	34,539	3,106	28,205	285			
Other comprehensive income	4,904	(4,361)	28,297	–			
Total comprehensive income	39,443	(1,255)	56,502	285			
Attributable to NCI:							
– Profit/(loss)	6,908	1,550	12,692	145	2,700	(450)	23,545
– Other comprehensive income	981	(2,176)	12,734	–	383	9	11,931
– Total comprehensive income	7,889	(626)	25,426	145	3,083	(441)	35,476
Non-current assets	55,021	23,411	533,691	2,674			
Current assets	209,938	34,999	304,341	53,910			
Non-current liabilities	(9,769)	–	(243,243)	–			
Current liabilities	(76,378)	(4,269)	(178,575)	(44,961)			
Net assets	178,812	54,141	416,214	11,623			
Net assets attributable to NCI	35,762	27,016	187,296	5,806	23,915	1,614	281,409
Cash flows from operating activities	50,231	(4,913)	89,780	8,218			
Cash flows from investing activities	(6,111)	(919)	(74,184)	(100)			
Cash flows from financing activities *	(46,610)	(4,527)	17,814	6,987			
Net (decrease)/increase in cash and cash equivalents	(2,490)	(10,359)	33,410	15,105			
* including dividends to NCI	(12,000)	(1,507)	–	–			

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)*

40. NON-CONTROLLING INTERESTS IN SUBSIDIARIES (continued)

Name of NCI	ST Aerospace Services Co Pte. Ltd. \$'000	EcoServices, LLC \$'000	Elbe Flugzeugwerke GmbH \$'000	STELOP Pte. Ltd. \$'000	Guizhou Jonyang Kinetics Co., Ltd \$'000	Jiangsu Huatong Kinetics Co., Ltd \$'000	Other individually immaterial subsidiaries \$'000	Intra- group elimination \$'000	Total \$'000
2016									
NCI percentage	20%	49.9%	45%	49.95%	–	24.7%			
Principal place of business/ Country of incorporation	Singapore	USA	Germany	Singapore	China	China			
Revenue	248,788	29,183	427,702	46,181	24,801	12,754			
Profit/(loss)	37,714	3,850	14,127	553	(1,847)	(70,031)			
Other comprehensive income	(2,769)	1,248	1,319	–	(5,700)	(1,976)			
Total comprehensive income	34,945	5,098	15,446	553	(7,547)	(72,007)			
Attributable to NCI:									
– Profit/(loss)	7,543	1,921	6,357	276	(740)	(10,406)	3,189	209	8,349
– Other comprehensive income	(554)	623	594	–	(2,280)	(488)	(59)	(384)	(2,548)
– Total comprehensive income	6,989	2,544	6,951	276	(3,020)	(10,894)	3,130	(175)	5,801
Non-current assets	56,476	28,822	489,570	2,287	–	66,294			
Current assets	240,509	34,858	224,751	56,304	–	14,666			
Non-current liabilities	(14,303)	–	(215,829)	–	–	(31,154)			
Current liabilities	(83,353)	(5,264)	(135,876)	(46,042)	–	(49,806)			
Net assets	199,329	58,416	362,616	12,549	–	–			
Net assets attributable to NCI	39,866	29,150	163,177	6,268	–	–	22,730	743	261,934
Cash flows from operating activities	38,602	13,480	36,202	(1,817)	–	(12,538)			
Cash flows from investing activities	(3,453)	(509)	(12,912)	(23)	–	1,189			
Cash flows from financing activities *	(26,892)	(5,250)	22,087	(3,221)	–	9,724			
Net increase/ (decrease) in cash and cash equivalents	8,257	7,721	45,377	(5,061)	–	(1,625)			
* including dividends to NCI	(6,000)	(1,348)	–	(605)	–	–			

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

41. CAPITAL MANAGEMENT

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 the 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.

The Group is currently in a net debt position after inclusion of present value of operating lease obligations. The Group 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 other than those imposed by local regulatory bodies.

	Group	
	2017	2016
	\$'000	\$'000
Gross debt		
Bank loans	424,857	338,524
Bonds	667,750	721,098
Capitalised lease obligations	16,639	18,785
Present value of operating leases	293,724	330,585
Other loans	6,818	1,868
Financial guarantees	84,856	52,000
	<u>1,494,644</u>	<u>1,462,860</u>
Shareholders' funds		
Share capital	895,926	895,926
Treasury shares	(22,870)	(44,081)
Capital and other reserves	52,314	56,557
Retained earnings	<u>1,314,610</u>	<u>1,273,860</u>
	<u>2,239,980</u>	<u>2,182,262</u>
Non-controlling interests	<u>281,409</u>	<u>261,934</u>
	<u>2,521,389</u>	<u>2,444,196</u>
Gross debt/equity ratio	0.6	0.6
Cash and cash equivalents	997,614	903,632
Funds under management	350,975	499,812
	<u>1,348,589</u>	<u>1,403,444</u>
Gross debt (excluding bank overdrafts)	<u>(1,494,644)</u>	<u>(1,462,860)</u>
Net debt position	<u>(146,055)</u>	<u>(59,416)</u>

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

42. SUBSEQUENT EVENT

- (a) On 6 February 2018, the Group entered into an agreement with SatixFy UK Limited to invest 49% equity stake in a joint venture company for a consideration of S\$26 million (US\$20 million).
- (b) On 8 February 2018, the Group entered into an agreement to divest 5% equity stake in an associate, ST Aerospace (Guangzhou) Aviation Services Company Limited (STA Guangzhou) to Japan Airlines Co., Ltd for a consideration of S\$9.2 million (US\$7 million). Upon completion, which is subject to customary closing conditions, the Group will own 44% stake in STA Guangzhou.

SECTORAL FINANCIAL REVIEW

- AEROSPACE

INCOME STATEMENT

	2017 \$'000	2016 \$'000
Revenue	2,547,255	2,492,857
Cost of sales	(2,110,063)	(2,081,493)
Gross profit	437,192	411,364
Distribution and selling expenses	(10,487)	(12,059)
Administrative expenses	(119,356)	(118,873)
Other operating expenses	(36,512)	(40,001)
Profit from operations	270,837	240,431
Other income	13,793	22,736
Other expenses	(5,261)	(4,339)
Other income, net	8,532	18,397
Finance income	8,061	11,431
Finance costs	(10,801)	(12,038)
Finance costs, net	(2,740)	(607)
Share of results of associates and joint ventures, net of tax	41,171	42,097
Profit before taxation	317,800	300,318
Taxation	(51,525)	(49,102)
Profit for the year	266,275	251,216
Attributable to:		
Shareholder of the Company	244,103	234,385
Non-controlling interests	22,172	16,831
	266,275	251,216

SECTORAL FINANCIAL REVIEW

– AEROSPACE

BALANCE SHEET

	2017 \$'000	2016 \$'000
ASSETS		
Non-current assets		
Property, plant and equipment	848,949	833,628
Associates and joint ventures	248,168	244,263
Investments	12	12
Intangible assets	473,671	433,294
Long-term receivables	18,552	2,333
Deferred tax assets	18,993	27,356
Derivative financial instruments	3,663	221
Employee benefits	243	151
	1,612,251	1,541,258
Current assets		
Inventories and work-in-progress	484,222	475,477
Trade receivables	607,422	584,730
Amount due from related parties	38,462	24,301
Advances and other receivables	95,582	116,023
Short-term investments	–	364
Bank balances and other liquid funds	322,896	272,683
	1,548,584	1,473,578
TOTAL ASSETS	3,160,835	3,014,836
EQUITY AND LIABILITIES		
Current liabilities		
Advance payments from customers	92,977	98,760
Trade payables and accruals	682,975	640,341
Amount due to related parties	338,085	244,950
Provisions	54,250	61,503
Progress billing in excess of work-in-progress	254,913	165,426
Provision for taxation	62,014	60,941
Borrowings	53,902	64,805
Employee benefits	2,491	1,916
Other payables	–	700
	1,541,607	1,339,342
NET CURRENT ASSETS	6,977	134,236
Non-current liabilities		
Advance payments from customers	126,040	192,438
Trade payables and accruals	57,163	70,238
Deferred tax liabilities	157,117	158,831
Borrowings	99,642	83,771
Employee benefits	101,793	84,531
Derivative financial instruments	–	6,734
Amount due to related parties	112,384	94,671
	654,139	691,214
TOTAL LIABILITIES	2,195,746	2,030,556
NET ASSETS	965,089	984,280
Share capital and reserves	701,679	740,805
Non-controlling interests	263,410	243,475
	965,089	984,280
TOTAL EQUITY AND LIABILITIES	3,160,835	3,014,836

SECTORAL FINANCIAL REVIEW

– AEROSPACE

STATEMENT OF CASH FLOWS

	2017 \$'000	2016 \$'000
Net cash from operating activities	392,908	469,077
Net cash used in investing activities	(143,054)	(177,632)
Proceeds from sale of property, plant and equipment	1,124	3,237
Dividends from associates and joint ventures	47,054	33,906
Dividends from investments	7	4
Purchase of property, plant and equipment	(123,073)	(137,620)
Acquisition of subsidiary (net of cash acquired)	–	9,127
Investment in joint ventures and an associate	(21,108)	(34,776)
Proceeds from disposal of a subsidiary	–	10,911
Proceeds from sale of an investment	388	–
Development of intangible assets	(47,446)	(62,421)
Net cash used in financing activities	(194,181)	(254,213)
Capital contribution from non-controlling interests	397	448
Proceeds from bank loans	56,805	154,578
Repayment of bank loans	(46,922)	(60,624)
Repayment of lease obligations, net	(784)	(947)
Proceeds from loans with related corporations	92,817	2,140
Loan to related corporations	(6,017)	–
Repayment of loans with related corporations	(93,156)	(251,943)
Dividends paid to shareholder	(174,904)	(80,639)
Dividends paid to non-controlling interests	(14,081)	(8,024)
Interest paid	(8,336)	(9,202)
Net increase in cash and cash equivalents	55,673	37,232
Cash and cash equivalents at beginning of the year	272,683	234,274
Exchange difference on cash and cash equivalents at beginning of the year	(5,460)	1,177
Cash and cash equivalents at end of the year	322,896	272,683

SECTORAL FINANCIAL REVIEW

- AEROSPACE

FINANCIAL HIGHLIGHTS

	2017 \$'000	2016 \$'000	2015 \$'000	2014 \$'000	2013 \$'000
Income Statement					
Revenue	2,547,255	2,492,857	2,095,614	2,071,464	2,088,105
Profit					
EBITDA	374,374	353,419	293,483	321,637	342,022
EBIT	270,837	240,431	222,013	261,471	291,828
PBT	317,800	300,318	290,600	282,999	319,442
Net Profit	244,103	234,385	226,720	220,144	259,214
Balance Sheet					
Property, plant and equipment	848,949	833,628	820,145	671,068	679,552
Intangible and other assets	761,576	706,002	465,133	470,953	469,284
Inventories and work-in-progress	484,222	475,477	494,257	560,001	666,523
Trade receivables, deposits and prepayments	743,192	727,046	626,286	579,149	551,883
Bank balances and other liquid funds	322,896	272,683	234,274	243,856	382,226
Current liabilities	1,541,607	1,339,342	1,262,967	1,139,953	1,519,751
Non-current liabilities	654,139	691,214	611,257	639,407	703,080
Share capital	368,512	368,512	368,512	368,512	152,512
Capital and other reserves	(4,563)	(9,517)	(18,560)	(41,493)	(37,753)
Retained earnings	337,730	381,810	336,358	341,402	338,557
Non-controlling interests	263,410	243,475	79,561	77,246	73,321
Financial Indicators					
Earnings per share (cents)	52.10	50.03	48.39	46.99	102.65
Net assets value per share (cents)	149.77	158.12	146.49	142.67	179.52
Return on sales (%)	10.5	10.1	11.2	11.1	12.7
Return on equity (%)	30.6	28.1	29.2	29.2	48.0
Return on total assets (%)	8.4	8.3	8.9	9.1	9.7
Return on capital employed (%)	13.2	13.7	16.9	15.7	19.6
Productivity Data					
Average staff strength (numbers)	8,192	7,600	7,126	7,314	7,370
Revenue per employee (\$)	310,944	328,008	294,080	283,219	283,325
Net profit per employee (\$)	29,798	30,840	31,816	30,099	35,172
Employment costs	752,319	747,045	625,475	607,228	648,113
Employment costs per \$ of revenue (\$)	0.30	0.30	0.30	0.29	0.31
Economic Value Added	140,431	154,055	169,548	162,092	217,064
Economic Value Added spread (%)	7.1	7.9	11.1	10.1	14.4
Economic Value Added per employee (\$)	17,142	20,270	23,793	22,162	29,452
Value added	1,189,126	1,178,284	1,002,326	975,569	1,035,479
Value added per employee (\$)	145,157	155,037	140,658	133,384	140,499
Value added per \$ of employment costs (\$)	1.58	1.58	1.60	1.61	1.60
Value added per \$ of gross property, plant and equipment (\$)	0.70	0.72	0.64	0.72	0.79
Value added per \$ of revenue (\$)	0.47	0.47	0.48	0.47	0.50

SECTORAL FINANCIAL REVIEW

- ELECTRONICS

INCOME STATEMENT

	2017 \$'000	2016 \$'000
Revenue	2,138,838	1,910,501
Cost of sales	(1,579,735)	(1,369,016)
Gross profit	559,103	541,485
Distribution and selling expenses	(90,901)	(95,215)
Administrative expenses	(177,462)	(164,522)
Other operating expenses	(83,967)	(89,902)
Profit from operations	206,773	191,846
Other income	14,911	19,400
Other expenses	(66)	(15)
Other income, net	14,845	19,385
Finance income	1,778	4,089
Finance costs	(8,771)	(7,827)
Finance costs, net	(6,993)	(3,738)
Share of results of associate and joint ventures, net of tax	(2,282)	305
Profit before taxation	212,343	207,798
Taxation	(33,477)	(33,194)
Profit for the year	178,866	174,604
Attributable to:		
Shareholder of the Company	178,789	174,546
Non-controlling interests	77	58
	178,866	174,604

SECTORAL FINANCIAL REVIEW - ELECTRONICS

BALANCE SHEET

	2017 \$'000	2016 \$'000
ASSETS		
Non-current assets		
Property, plant and equipment	233,744	212,030
Associate and joint ventures	54,523	1,565
Investments	9,359	10,114
Intangible assets	333,744	347,989
Long-term trade receivable	1,052	966
Deferred tax assets	20,850	25,889
Derivative financial instruments	163	845
	653,435	599,398
Current assets		
Inventories and work-in-progress	499,125	589,492
Trade receivables	683,941	514,180
Amounts due from related parties	32,426	38,020
Advances and other receivables	75,662	79,149
Bank balances and other liquid funds	295,564	236,180
	1,586,718	1,457,021
TOTAL ASSETS	2,240,153	2,056,419
EQUITY AND LIABILITIES		
Current liabilities		
Advance payments from customers	173,660	204,375
Trade payables and accruals	484,990	474,434
Amounts due to related parties	181,705	101,719
Provisions	66,559	64,347
Progress billings in excess of work-in-progress	467,473	380,396
Provision for taxation	42,358	45,649
	1,416,745	1,270,920
NET CURRENT ASSETS	169,973	186,101
Non-current liabilities		
Advance payments from customers	145,755	148,317
Trade payables and accruals	34,229	34,620
Deferred tax liabilities	7,949	7,700
Employee benefits	876	669
Deferred income	10,842	3,108
Derivative financial instruments	824	-
Amounts due to related parties	314,416	318,603
	514,891	513,017
TOTAL LIABILITIES	1,931,636	1,783,937
NET ASSETS	308,517	272,482
Share capital and reserves	302,410	265,872
Non-controlling interests	6,107	6,610
	308,517	272,482
TOTAL EQUITY AND LIABILITIES	2,240,153	2,056,419

SECTORAL FINANCIAL REVIEW

- ELECTRONICS

STATEMENT OF CASH FLOWS

	2017 \$'000	2016 \$'000
Net cash from operating activities	207,822	148,504
Net cash used in investing activities	(136,988)	(77,459)
Proceeds from sale of property, plant and equipment	43	66
Proceeds from disposal of an associate	–	731
Proceeds from disposal of investments	–	253
Dividends from an associate	114	137
Purchase of property, plant and equipment	(59,028)	(65,881)
Investment in a joint venture	(55,013)	–
Purchase of an investment	–	(9)
Acquisition of other intangible assets	(23,104)	(12,756)
Net cash used in financing activities	(7,202)	(106,209)
Repayment of related parties loans	(207,183)	(79,467)
Repayment of loans by a related party	–	17,500
Repayment of loans to a joint venture	(19,607)	(7,000)
Proceeds from related parties loans	194,891	117,719
Proceeds of loans from a joint venture	36,463	2,000
Loans to a related party	–	(17,500)
Dividends paid to shareholder	(5,363)	(133,274)
Dividends paid to non-controlling interests	–	(605)
Interest paid	(6,272)	(5,568)
Deposits pledged	(131)	(14)
Net increase/(decrease) in cash and cash equivalents	63,632	(35,164)
Cash and cash equivalents at beginning of the year	234,952	270,221
Exchange difference on cash and cash equivalents at beginning of the year	(4,379)	(105)
Cash and cash equivalents at end of the year	294,205	234,952

SECTORAL FINANCIAL REVIEW - ELECTRONICS

FINANCIAL HIGHLIGHTS

	2017 \$'000	2016 \$'000	2015 \$'000	2014 \$'000	2013 \$'000
Income Statement					
Revenue	2,138,838	1,910,501	1,743,174	1,614,079	1,682,278
Profit					
EBITDA	254,583	237,382	218,570	212,733	194,652
EBIT	206,773	191,846	178,699	174,371	165,546
PBT	212,343	207,798	190,952	183,968	170,328
Net Profit	178,789	174,546	163,000	152,143	137,119
Balance Sheet					
Property, plant and equipment	233,744	212,030	185,192	179,704	170,244
Intangible and other assets	419,536	388,241	377,131	348,855	315,530
Inventories and work-in-progress	499,125	589,492	528,333	381,322	280,051
Trade receivables, deposits and prepayments	792,184	630,476	499,940	606,661	489,634
Bank balances and other liquid funds	295,564	236,180	271,435	277,528	478,062
Current liabilities	1,416,745	1,270,920	1,114,278	1,086,428	1,081,005
Non-current liabilities	514,891	513,017	523,445	510,536	457,767
Share capital	52,522	52,522	52,522	52,522	52,522
Capital and other reserves	(3,244)	23,432	15,802	(5,135)	(20,609)
Retained earnings	253,132	189,918	148,764	144,460	150,841
Non-controlling interests	6,107	6,610	7,220	5,259	11,995
Financial Indicators					
Earnings per share (cents)	170.20	166.16	155.17	144.84	130.53
Net assets value per share (cents)	287.89	253.10	206.66	182.63	173.98
Return on sales (%)	8.4	9.1	9.4	9.5	8.3
Return on equity (%)	41.2	44.0	46.8	47.1	43.7
Return on total assets (%)	8.0	8.5	8.8	8.5	8.1
Return on capital employed (%)	21.5	23.1	23.7	22.2	23.3
Productivity Data					
Average staff strength (numbers)	6,570	6,568	6,293	5,933	5,678
Revenue per employee (\$)	325,546	290,880	277,002	272,051	296,280
Net profit per employee (\$)	27,213	26,575	25,902	25,644	24,149
Employment costs	632,285	622,933	591,543	536,807	527,360
Employment costs per \$ of revenue (\$)	0.30	0.33	0.34	0.33	0.31
Economic Value Added	144,747	138,891	130,117	118,650	106,127
Economic Value Added Spread (%)	15.3	17.0	17.8	16.6	18.1
Economic Value Added per employee (\$)	22,032	21,147	20,676	19,998	18,691
Value added	905,422	887,570	833,641	764,967	737,285
Value added per employee (\$)	137,812	135,136	132,471	128,934	129,849
Value added per \$ of employment costs (\$)	1.43	1.42	1.41	1.43	1.40
Value added per \$ of gross property, plant and equipment (\$)	1.80	1.95	2.13	2.12	2.23
Value added per \$ of revenue (\$)	0.42	0.46	0.48	0.47	0.44

SECTORAL FINANCIAL REVIEW – LAND SYSTEMS

INCOME STATEMENT

	2017 \$'000	2016 \$'000 Restated *
Revenue	1,262,659	1,405,316
Cost of sales	(1,030,876)	(1,164,095)
Gross profit	231,783	241,221
Distribution and selling expenses	(40,177)	(57,193)
Administrative expenses	(86,300)	(102,432)
Other operating expenses	(35,075)	(77,477)
Profit from operations	70,231	4,119
Other income	11,230	26,245
Other expenses	(1,766)	(1,675)
Other income, net	9,464	24,570
Finance income	935	2,372
Finance costs	(6,820)	(7,199)
Finance costs, net	(5,885)	(4,827)
Share of results of associates and joint ventures, net of tax	11,229	14,896
Profit before taxation	85,039	38,758
Taxation	3,677	(21,831)
Profit for the year	88,716	16,927
Attributable to:		
Shareholder of the Company	87,420	25,461
Non-controlling interests	1,296	(8,534)
	88,716	16,927

* Pursuant to the transfer of ST Synthesis to Land Systems sector with effect from 1 January 2017 as part of the business rationalisation to provide a one stop integrated solution to Land Systems sector customers, comparative FY2016 figures were restated.

SECTORAL FINANCIAL REVIEW - LAND SYSTEMS

BALANCE SHEET

	2017 \$'000	2016 \$'000 Restated *
ASSETS		
Non-current assets		
Property, plant and equipment	296,739	298,689
Associates and joint ventures	108,233	126,737
Investments	-	86
Intangible assets	245,371	200,881
Deferred tax assets	12,753	18,246
Amounts due from related parties	5,719	6,180
Derivative financial instruments	12,099	1,780
	680,914	652,599
Current assets		
Inventories and work-in-progress	569,188	547,476
Trade receivables	200,107	256,720
Amounts due from related parties	12,116	11,852
Advances and other receivables	67,861	74,596
Derivative financial instruments	2,857	1,997
Bank balances and other liquid funds	135,700	173,782
	987,829	1,066,423
TOTAL ASSETS	1,668,743	1,719,022
EQUITY AND LIABILITIES		
Current liabilities		
Advance payments from customers	110,970	240,724
Trade payables and accruals	326,726	350,573
Amounts due to related parties	25,849	83,868
Progress billings in excess of work-in-progress	5,501	7,895
Provisions	65,835	100,206
Provision for taxation	20,466	29,585
Borrowings	15,322	11,064
Derivative financial instruments	5,432	12,614
	576,101	836,529
NET CURRENT ASSETS	411,728	229,894
Non-current liabilities		
Advance payments from customers	355,778	250,073
Trade payables and accruals	4,680	499
Amounts due to related parties	319,588	282,490
Borrowings	15	155
Deferred income	34,756	32,054
Deferred tax liabilities	40,744	63,329
Derivative financial instruments	13,071	6,437
	768,632	635,037
TOTAL LIABILITIES	1,344,733	1,471,566
NET ASSETS	324,010	247,456
Share capital and reserves	312,575	236,125
Non-controlling interests	11,435	11,331
	324,010	247,456
TOTAL EQUITY AND LIABILITIES	1,668,743	1,719,022

SECTORAL FINANCIAL REVIEW

- LAND SYSTEMS

STATEMENT OF CASH FLOWS

	2017 \$'000	2016 \$'000 Restated *
Net cash from operating activities	29,023	47,695
Cash flows used in investing activities	(52,010)	(8,899)
Proceeds from sale of property, plant and equipment	80	254
Proceeds from sale of unquoted equity investment	93	3
Proceeds from disposal of a subsidiary	8,324	18,615
Acquisition of subsidiary, net of cash acquired	(50,005)	—
Acquisition of subsidiary under common control	(6,876)	—
Dividends from associates and a joint venture	29,511	9,893
Purchase of property, plant and equipment	(30,416)	(36,092)
Purchase of intangible assets	(2,721)	(1,572)
Cash flows used in financing activities	(12,994)	(67,485)
Interest paid	(3,783)	(6,988)
Repayment of short-term related party loans	(18,208)	(11,952)
Proceeds from short-term related party loans	2,718	581
Repayment of short-term immediate holding company loans	(42,700)	(32,000)
Proceeds from short-term immediate holding company loans	—	15,200
Proceeds from long-term related party loans	56,449	—
Repayment of long-term related party loans	(8,956)	(18,957)
Repayment of short-term loans	(137)	(161)
Proceeds from short-term bank loans	3,161	7,802
Repayment of short-term bank loans	(3,859)	(10,287)
Proceeds from a short-term loan from non-controlling interest	5,152	—
Dividends paid to shareholder	—	(13,500)
Dividends paid to related parties	(679)	—
Dividends paid to non-controlling interests	(1,929)	(2,009)
Acquisition of non-controlling interests in a subsidiary	(223)	(167)
Return of capital to non-controlling interest of a subsidiary	—	(1,178)
Deposits discharged	—	6,131
Net decrease in cash and cash equivalents	(35,981)	(28,689)
Cash and cash equivalents at beginning of the year	173,752	202,080
Exchange difference on cash and cash equivalents at beginning of the year	(2,101)	361
Cash and cash equivalents at end of the year	135,670	173,752

SECTORAL FINANCIAL REVIEW - LAND SYSTEMS

FINANCIAL HIGHLIGHTS

	2017 \$'000	2016 \$'000 Restated *	2015 \$'000 Restated *	2014 \$'000 Restated *	2013 \$'000 Restated *
Income Statement					
Revenue	1,262,659	1,405,316	1,485,591	1,482,086	1,564,434
Profit					
EBITDA	102,734	44,268	94,768	79,368	122,635
EBIT	70,231	4,119	54,553	40,001	82,171
PBT	85,039	38,758	73,256	57,829	102,979
Net Profit	87,420	25,461	62,618	51,536	84,853
Balance Sheet					
Property, plant and equipment	296,739	298,689	356,472	373,943	332,479
Intangible and other assets	381,313	349,727	362,014	339,596	349,416
Inventories and work-in-progress	569,188	547,476	664,498	677,302	677,059
Trade receivables, deposits and prepayment	285,803	349,348	420,554	554,338	526,886
Bank balances and other liquid funds	135,700	173,782	208,241	292,977	260,014
Current liabilities	576,101	836,529	966,904	988,985	920,924
Non-current liabilities	768,632	635,037	773,858	975,968	902,133
Share capital	194,445	194,445	194,445	194,445	194,445
Capital and other reserves	(4,380)	5,911	14,695	13,739	23,224
Retained earnings	122,510	35,769	20,334	15,640	47,304
Non-controlling interests	11,435	11,331	41,543	49,379	57,824
Financial Indicators					
Earnings per share (cents)	16.62	4.84	11.91	9.80	16.13
Net assets value per share (cents)	59.43	44.89	43.63	42.55	50.38
Return on sales (%)	7.0	1.2	3.9	3.1	5.5
Return on equity (%)	16.5	6.0	16.7	13.9	20.6
Return on total assets (%)	5.3	1.0	2.9	2.1	4.0
Return on capital employed (%)	9.7	3.3	6.9	5.3	10.7
Productivity Data					
Average staff strength (numbers)	4,899	5,801	6,839	7,208	7,467
Revenue per employee (\$)	257,738	242,254	217,223	205,617	209,513
Net profit per employee (\$)	17,844	4,389	9,156	7,150	11,364
Employment costs	363,173	369,438	377,217	365,175	362,675
Employment costs per \$ of revenue (\$)	0.29	0.26	0.25	0.25	0.23
Economic Value Added	27,274	(39,512)	16,760	6,312	53,986
Economic Value Added spread (%)	3.7	(6.0)	0.9	(0.3)	5.5
Economic Value Added per employee (\$)	5,567	(6,811)	2,451	876	7,230
Value added	489,184	512,960	518,512	509,483	532,784
Value added per employee (\$)	99,854	88,426	75,817	70,683	71,352
Value added per \$ of employment costs (\$)	1.35	1.39	1.37	1.40	1.47
Value added per \$ of gross property, plant and equipment (\$)	0.67	0.72	0.71	0.70	0.81
Value added per \$ of revenue (\$)	0.39	0.37	0.35	0.34	0.34

* Pursuant to the transfer of ST Synthesis to Land Systems sector with effect from 1 January 2017 as part of the business rationalisation to provide a one stop integrated solution to Land Systems sector customers, comparative FY2013 to FY2016 figures were restated.

SECTORAL FINANCIAL REVIEW

- MARINE

INCOME STATEMENT

	2017 \$'000	2016 \$'000
Revenue	637,531	841,160
Cost of sales	(559,857)	(727,591)
Gross profit	77,674	113,569
Distribution and selling expenses	(18,557)	(8,460)
Administrative expenses	(33,254)	(32,809)
Other operating expenses	(11,068)	(8,724)
Profit from operations	14,795	63,576
Other income	7,122	7,548
Other expenses	(109)	(124)
Other income, net	7,013	7,424
Finance income	2,690	3,866
Finance costs	(3,196)	(596)
Finance (costs)/income, net	(506)	3,270
Share of results of associate and joint ventures, net of tax	1,106	851
Profit before taxation	22,408	75,121
Taxation	4,641	(7,370)
Profit for the year	27,049	67,751
Attributable to:		
Shareholder of the Company	27,049	67,757
Non-controlling interests	-	(6)
	27,049	67,751

SECTORAL FINANCIAL REVIEW

- MARINE

BALANCE SHEET

	2017 \$'000	2016 \$'000
ASSETS		
Non-current assets		
Property, plant and equipment	319,653	315,031
Associate and joint ventures	10,493	8,666
Intangible assets	121	134
Long-term receivables	1,854	1,129
Deferred tax assets	27,002	21,334
Amounts due from related parties	4,806	4,806
Derivative financial instruments	2,400	2,397
	366,329	353,497
Current assets		
Inventories and work-in-progress	179,708	239,936
Trade receivables	140,313	96,598
Amounts due from related parties	147,909	153,011
Advances and other receivables	27,252	50,972
Bank balances and other liquid funds	84,751	81,860
	579,933	622,377
TOTAL ASSETS	946,262	975,874
EQUITY AND LIABILITIES		
Current liabilities		
Advance payments from customers	269,133	286,860
Trade payables and accruals	210,068	242,581
Amounts due to related parties	147,210	61,461
Provisions	46,921	47,042
Progress billings in excess of work-in-progress	33,581	65,811
Provision for taxation	10,562	304
Short-term bank loans	9,359	11,558
	726,834	715,617
NET CURRENT LIABILITIES	(146,901)	(93,240)
Non-current liabilities		
Other long-term payables	19,298	23,409
Deferred income	37,230	41,997
Amounts due to related parties	43,327	26,343
Derivative financial instruments	726	2,107
	100,581	93,856
TOTAL LIABILITIES	827,415	809,473
NET ASSETS	118,847	166,401
Share capital and reserves	118,847	166,375
Non-controlling interests	-	26
	118,847	166,401
TOTAL EQUITY AND LIABILITIES	946,262	975,874

SECTORAL FINANCIAL REVIEW

– MARINE

STATEMENT OF CASH FLOWS

	2017 \$'000	2016 \$'000
Net cash (used in)/from operating activities	(4,351)	51,604
Net cash used in investing activities	(44,336)	(9,794)
Proceeds from disposal of property, plant and equipment	590	27
Purchase of property, plant and equipment	(44,176)	(10,171)
Dividends from a joint venture	1,050	800
Investment in associate and joint venture	(1,800)	(386)
Acquisition of other intangible assets	–	(64)
Net cash from/(used in) financing activities	52,947	(38,588)
Proceeds from short-term bank loans	–	37,097
Repayment of short-term bank loans	(1,396)	(43,856)
Proceeds from related party loans	109,660	52,929
Loans to related parties	(70,000)	(51,000)
Repayment of loans by related parties	95,000	61,000
Dividends paid to shareholder	(77,158)	(94,287)
Interest paid	(3,116)	(471)
Return of capital to non-controlling interests	(43)	–
Net increase in cash and cash equivalents	4,260	3,222
Cash and cash equivalents at beginning of the year	81,860	78,605
Exchange difference on cash and cash equivalents at beginning of the year	(1,369)	33
Cash and cash equivalents at end of the year	84,751	81,860

SECTORAL FINANCIAL REVIEW

- MARINE

FINANCIAL HIGHLIGHTS

	2017 \$'000	2016 \$'000	2015 \$'000	2014 \$'000	2013 \$'000
Income Statement					
Revenue	637,531	841,160	958,373	1,341,951	1,238,847
Profit					
EBITDA	43,670	91,998	101,404	127,933	152,993
EBIT	14,795	63,576	71,795	100,835	134,479
PBT	22,408	75,121	88,275	122,780	146,310
Net Profit	27,049	67,757	85,725	108,086	109,955
Balance Sheet					
Property, plant and equipment	319,653	315,031	332,533	334,075	324,043
Intangible and other assets	40,016	32,531	30,219	28,776	70,050
Inventories and work-in-progress	179,708	239,936	205,539	110,445	112,178
Trade receivables, deposits and prepayment	322,134	306,516	355,956	416,932	301,487
Bank balances and other liquid funds	84,751	81,860	78,605	224,027	333,058
Current liabilities	726,834	715,617	709,493	856,315	846,639
Non-current liabilities	100,581	93,856	101,234	99,068	103,680
Share capital	50,856	50,856	50,856	50,856	50,856
Capital and other reserves	12,444	9,863	9,051	2,494	28,425
Retained earnings	55,547	105,656	132,186	105,484	111,178
Non-controlling interests	—	26	32	38	38
Financial Indicators					
Earnings per share (cents)	13.83	34.65	43.83	55.27	56.22
Net assets value per share (cents)	60.77	85.07	98.22	81.22	97.39
Return on sales (%)	4.2	8.1	8.9	8.1	8.9
Return on equity (%)	16.7	35.2	39.2	58.4	50.7
Return on total assets (%)	2.9	6.9	8.5	9.7	9.6
Return on capital employed (%)	9.1	25.3	41.3	42.9	63.3
Productivity Data					
Average staff strength (numbers)	1,522	1,690	1,822	1,884	1,871
Revenue per employee (\$)	418,877	497,728	526,001	712,288	662,131
Net profit per employee (\$)	17,772	40,093	47,050	57,370	58,768
Employment costs	139,138	154,490	173,487	180,390	197,545
Employment costs per \$ of revenue (\$)	0.22	0.18	0.18	0.13	0.16
Economic Value Added	9,897	51,113	76,544	93,593	114,848
Economic Value Added spread (%)	3.4	19.7	35.8	37.3	58.2
Economic Value Added per employee (\$)	6,503	30,244	42,011	49,678	61,383
Value added	208,752	264,414	294,698	336,164	366,414
Value added per employee (\$)	137,156	156,458	161,744	178,431	195,839
Value added per \$ of employment costs (\$)	1.50	1.71	1.70	1.86	1.85
Value added per \$ of gross property, plant and equipment (\$)	0.28	0.37	0.41	0.49	0.56
Value added per \$ of revenue (\$)	0.33	0.31	0.31	0.25	0.30

SHAREHOLDING STATISTICS

AS AT 26 FEBRUARY 2018

SHARE CAPITAL

Paid-Up Capital (including treasury shares)	:	S\$895,925,583.405
Number of issued ordinary shares (excluding treasury shares)	:	3,115,797,366
Number of ordinary shares held in treasury	:	6,697,831
Percentage of such holding against the total number of issued ordinary shares (excluding ordinary shares held in treasury)	:	0.21%
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 26 February 2018, 48.95% 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	869	2.29	18,220	0.00
100 --- 1,000	5,162	13.58	4,287,094	0.14
1,001 --- 10,000	25,093	66.00	115,067,597	3.69
10,001 --- 1,000,000	6,858	18.04	260,582,047	8.36
1,000,001 and above	35	0.09	2,735,842,408	87.81
	38,017	100.00	3,115,797,366	100.00

Substantial Shareholder	Number of Shares			%*
	Direct Interest	Deemed Interest	Total Interest	
Temasek Holdings (Private) Limited	1,554,764,574	33,526,878 ⁽¹⁾	1,588,291,452	50.97

Notes:

⁽¹⁾ Includes deemed interests held through subsidiaries and associated companies.

* The percentage of issued ordinary shares is calculated based on the number of issued ordinary shares of the Company as at 26 February 2018, excluding any ordinary shares held in treasury as at that date.

SHAREHOLDING STATISTICS

AS AT 26 FEBRUARY 2018

MAJOR SHAREHOLDERS LIST – TOP 20

No.	Name	No. of Shares Held	%*
1	Temasek Holdings (Private) Limited	1,554,764,574	49.90
2	Citibank Nominees Singapore Pte Ltd	341,687,931	10.97
3	DBS Nominees (Private) Limited	298,941,945	9.60
4	DBSN Services Pte. Ltd.	157,288,650	5.05
5	HSBC (Singapore) Nominees Pte Ltd	95,086,387	3.05
6	United Overseas Bank Nominees (Private) Limited	85,482,755	2.74
7	BPSS Nominees Singapore (Pte.) Ltd.	46,920,108	1.51
8	Raffles Nominees (Pte.) Limited	36,667,351	1.18
9	Vestal Investments Pte. Ltd.	28,501,000	0.92
10	DB Nominees (Singapore) Pte Ltd	23,068,783	0.74
11	OCBC Nominees Singapore Private Limited	8,164,054	0.26
12	Mrs Lee Li Ming Nee Ong	6,590,000	0.21
13	DBS Vickers Securities (Singapore) Pte Ltd	5,944,547	0.19
14	Morgan Stanley Asia (Singapore) Securities Pte Ltd	5,732,837	0.18
15	Philip Securities Pte Ltd	5,647,950	0.18
16	OCBC Securities Private Limited	3,528,023	0.11
17	Tan Pheng Hock	2,995,900	0.10
18	Heng Siew Eng	2,630,000	0.08
19	Merrill Lynch (Singapore) Pte. Ltd.	2,576,587	0.08
20	UOB Kay Hian Private Limited	2,442,110	0.08
		<u>2,714,661,492</u>	<u>87.13</u>

* The percentage of issued ordinary shares is calculated based on the number of issued ordinary shares of the Company as at 26 February 2018, excluding any ordinary shares held in treasury as at that date.

SGX LISTING MANUAL REQUIREMENTS

31 DECEMBER 2017

(CURRENCY – SINGAPORE DOLLARS)

INTERESTED PERSON TRANSACTIONS

Interested person transactions carried out during the financial year pursuant to the Shareholders' Mandate obtained under Chapter 9 of the Listing Manual of the Singapore Exchange Securities Trading Limited ("SGX") by the Group are as follows:

	Aggregate value of all transactions excluding transactions conducted under a shareholders mandate pursuant to Rule 920 of the SGX Listing Manual		Aggregate value of all transactions conducted under a shareholders mandate pursuant to Rule 920 of the SGX Listing Manual	
	FY2017 \$'000	FY2016 \$'000	FY2017 \$'000	FY2016 \$'000
Transactions for the Sale of Goods and Services				
CapitaLand Limited and its Associates	-	-	-	157
SembCorp Industries Ltd and its Associates	-	-	2,548	5,394
SembCorp Marine Ltd and its Associates	-	-	-	746
SATS Ltd. and its Associates	-	-	857	191
StarHub Ltd and its Associates	-	-	-	5,915
Singapore Airlines Limited and its Associates	-	-	222	1,528
SIA Engineering Company Limited and its Associates	-	-	102	-
Singapore Telecommunications Limited and its Associates	-	-	414	2,693
Temasek Holdings (Private) Limited and its Associates (non-listed)	-	-	23,262	8,040
	-	-	27,405	24,664
Transactions for the Purchase of Goods and Services				
SATS Ltd. and its Associates	-	-	3,353	2,345
SembCorp Industries Ltd and its Associates	-	-	-	260
SembCorp Marine Ltd and its Associates	-	-	-	-
Singapore Airlines Limited and its Associates	-	-	-	-
Singapore Telecommunications Limited and its Associates	-	-	3,268	4,006
StarHub Ltd and its Associates	-	-	1,114	1,700
Mapletree Industrial Trust	-	-	1,068	1,068
Temasek Holdings (Private) Limited and its Associates (non-listed)	55,326	-	9,905	10,190
	55,326	-	18,708	19,569
Total Interested Person Transactions	55,326	-	46,113	44,233

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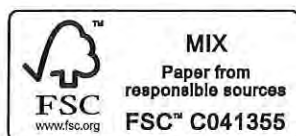
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ANNUAL REPORT 2017



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**END OF CITY OF PENSACOLA UPDATED APPLICATION FOR FUNDS
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