

# First-Half 2020 Results

14 August 2020

# Agenda

- Group Highlights
- Outlook
- Appendix
  - Aerospace
  - Electronics
  - Land Systems
  - Marine

# Group Highlights

# Group Highlights

All figures are denominated in S\$m unless indicated otherwise

1H2020

Revenue

3,572

+2% y-o-y

EBIT

299.2

-3% y-o-y

PBT

286.4

-13% y-o-y

Net Profit

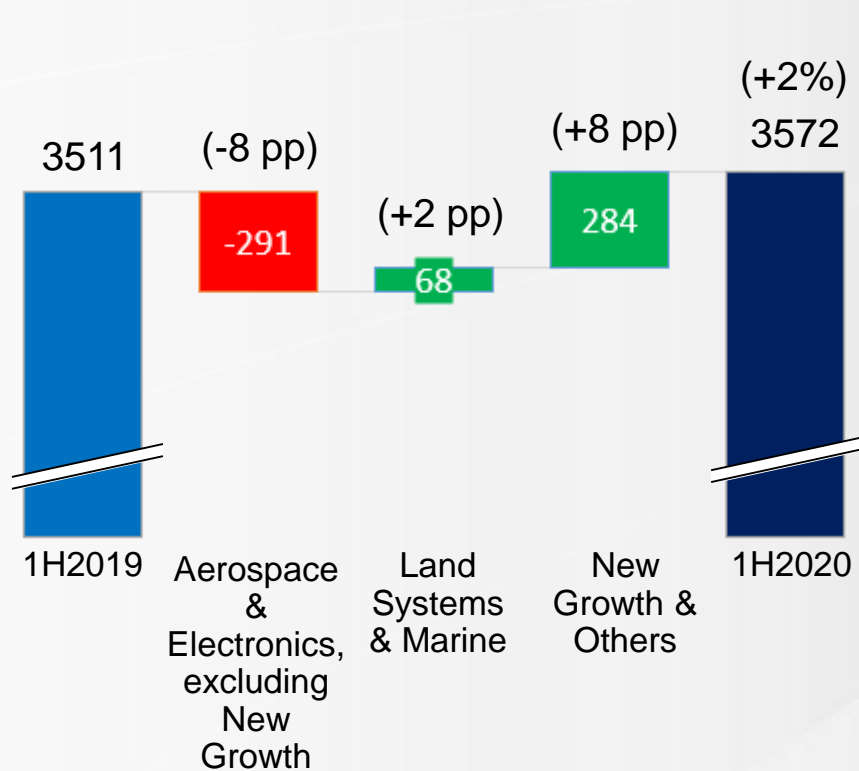
257.4

-4% y-o-y

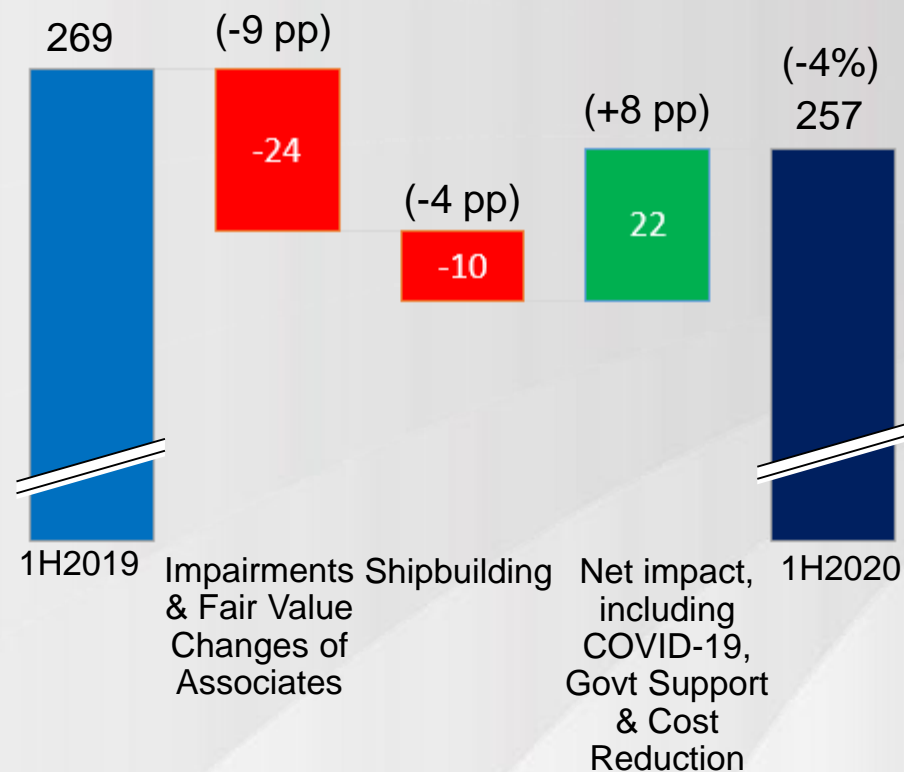
# 1H2020 Revenue & Net Profit

All figures are denominated in S\$m unless indicated otherwise

## Revenue



## Net Profit



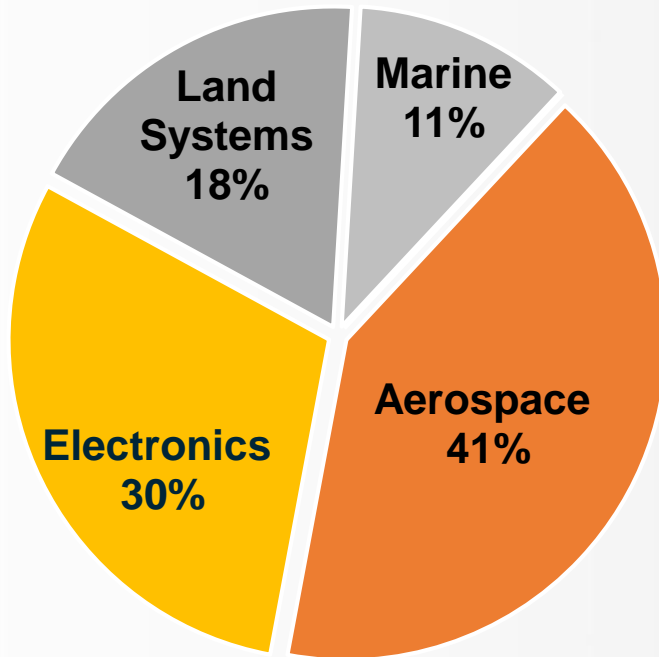
\* COVID-19: Arising from customer demand reduction, supply chain challenges and workforce disruptions

Note: amounts may not add due to rounding

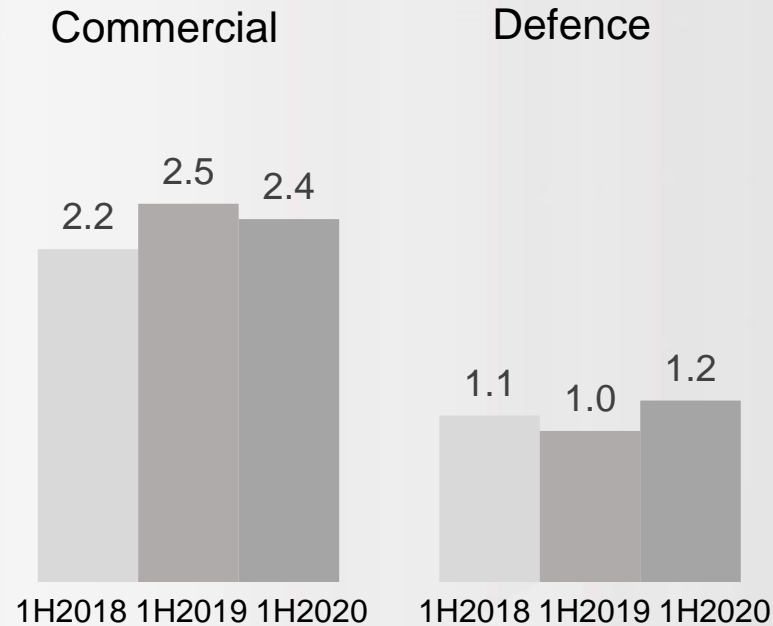
# Group Revenue Breakdown

All figures are denominated in S\$m unless indicated otherwise

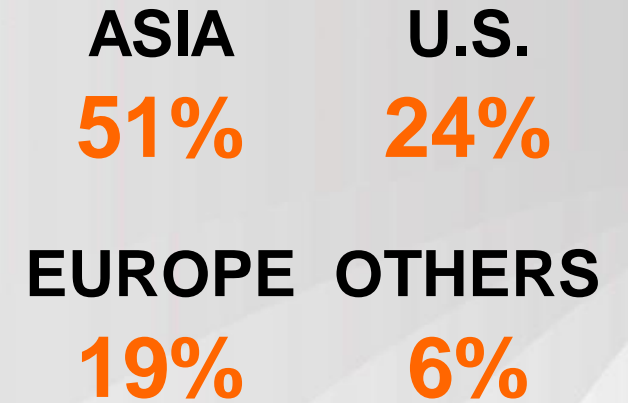
## 1H2020 Revenue



## 1H2020 Revenue by type



## 1H2020 Revenue by location of customers

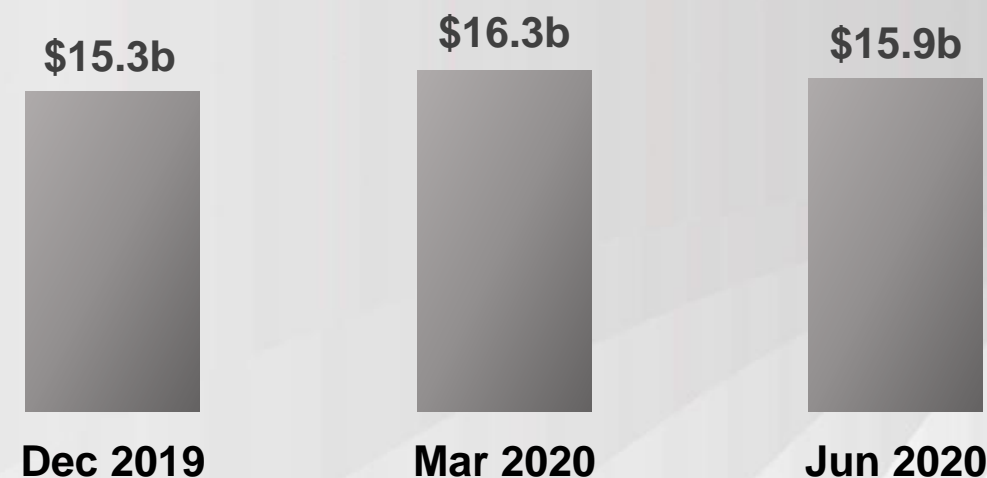


# New Contracts & Order Book

## New Contracts

- Aerospace and Electronics sectors collectively secured about \$1.1b worth of new contracts in 2Q2020, bringing their total contract wins to about \$2.7b in 1H2020
- These values exclude new contracts secured by Land Systems and Marine sectors

## Order Book



Order book as at 30 Jun 2020: **\$15.9b**;  
about **\$3.2b** to be delivered in 2H2020

# Group Revenue

S\$m	1H2020	1H2019	Change
Aerospace	1,470	1,458	+1%
Electronics	1,069	1,088	-2%
Land Systems	644	673	-4%
Marine	385	288	+34%
Others	4	4	-
<b>Group</b>	<b>3,572</b>	<b>3,511</b>	<b>+2%</b>

With effect from 1 January 2020, Miltope was re-organised from Others into Electronics sector and all comparatives were restated in conformance with current year classification.

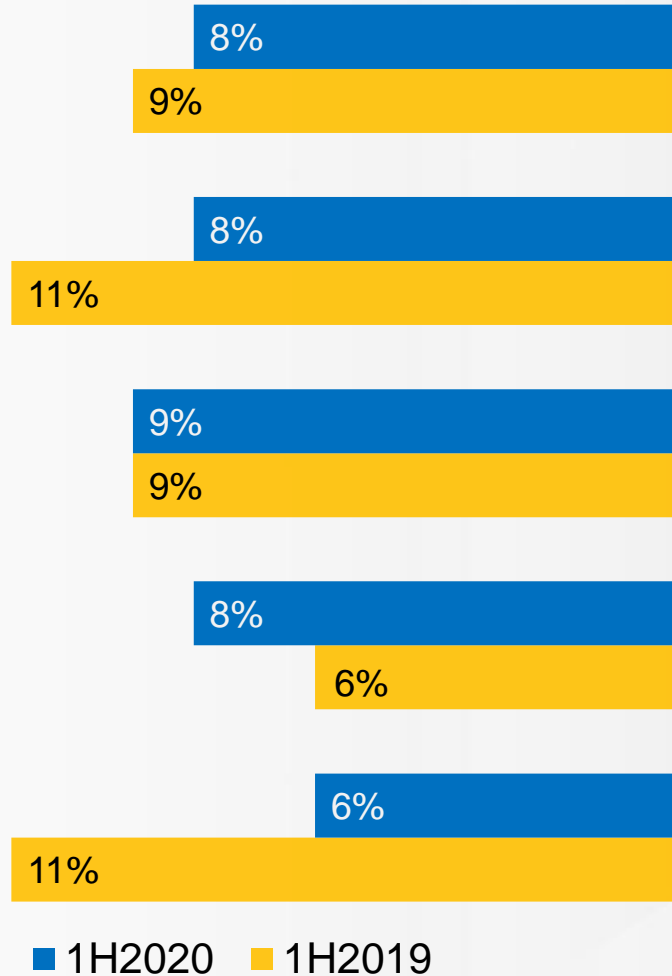


# Group Net Profit

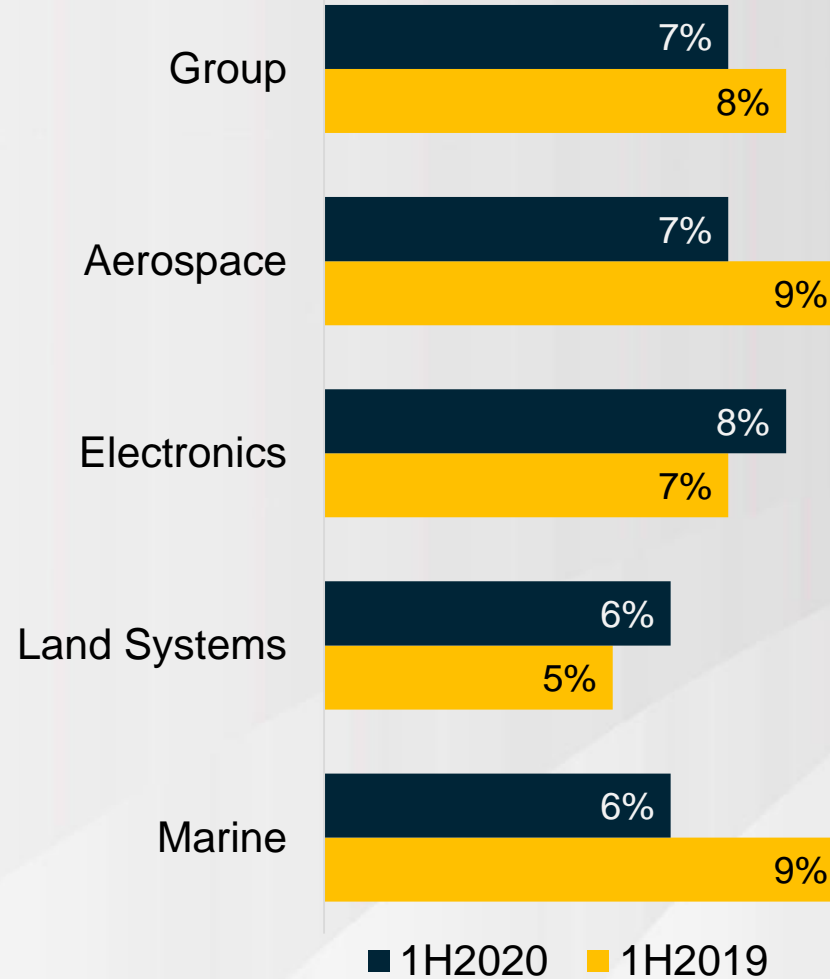
S\$m	1H2020	1H2019	Change
Aerospace	105.0	127.0	-17%
Electronics	87.6	81.6	+7%
Land Systems	41.8	35.6	+17%
Marine	21.4	26.3	-19%
Others	1.6	(1.2)	NM
<b>Group</b>	<b>257.4</b>	<b>269.3</b>	<b>-4%</b>

# Group Margins

## PBT Margin



## Net Profit Margin



# Balance Sheet

S\$m	30 Jun 2020	31 Dec 2019
Property, plant & equipment	1,793	1,805
Right-of-use assets	498	484
Intangible assets	2,036	1,980
Other non-current assets	625	613
Current assets	4,490	4,639
<b>Total assets</b>	<b>9,442</b>	<b>9,521</b>
Current liabilities	3,849	5,446
Non-current liabilities	3,094	1,584
<b>Total liabilities</b>	<b>6,943</b>	<b>7,030</b>
Share capital and reserves	2,230	2,222
Non-controlling interests	269	269
<b>Total equity and liabilities</b>	<b>9,442</b>	<b>9,521</b>

# Statement of Cash Flows

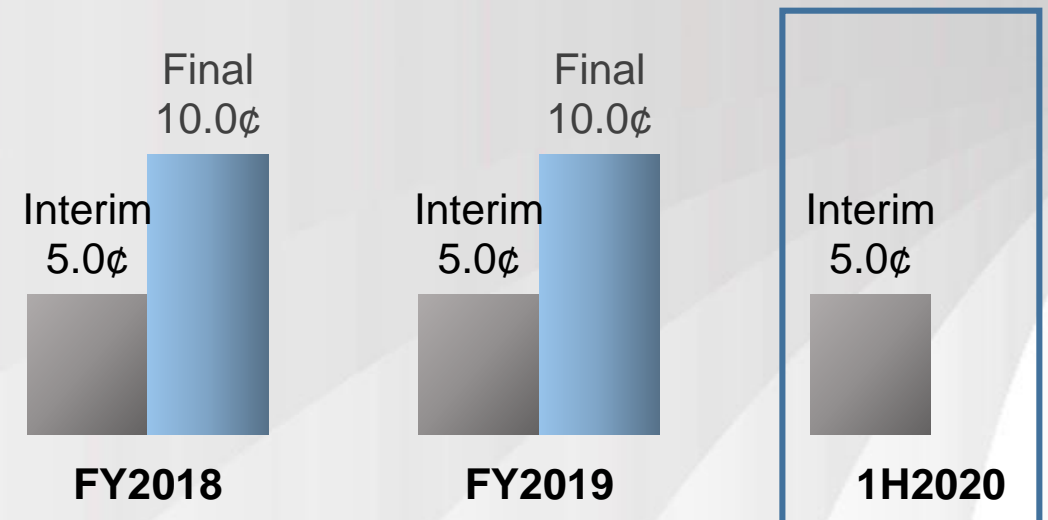
S\$m	1H2020	1H2019
Net cash from/(used in)		
Operating activities	1,017	423
Investing activities	(151)	(823)
Financing activities	(984)	308
Net decrease in CCE *	(118)	(92)
CCE at beginning of the period	452	414
Exchange difference	8	(1)
CCE at end of the period	<b>342</b>	<b>321</b>

\* CCE - Cash & Cash Equivalents

# 1H2020 Interim Dividend of 5.0 Cents per Share

- Board approved interim dividend of 5.0 cents per ordinary share, payable on 2 Sep 2020
- 1H2020 interim dividend is consistent with previous years
- Retained earnings was \$1,390m or 44.5 cents per share as at year-end 2019 at group level
- FY2020 dividends can be adequately funded out of past years' retained earnings

Dividend per Ordinary Share



# Outlook

# President & CEO's Message

“We entered the COVID-19 pandemic from a position of strength. Our technology and engineering foundation built up over the years, our strong balance sheet, our diverse business mix and robust order book helped us weather the impact of COVID-19 and maintain even-keel for our first half results.

We are cognisant of the ‘tail wind’ afforded us through the various government support schemes (especially the Singapore government’s JSS) for 2020. We do not expect such support beyond this year. We are working to position the Group to come out of the pandemic stronger and more competitive. This means focusing on cost reduction, productivity and talent acquisition, organising for growth and serving our customers better. We are also alert to opportunities that have emerged or been accentuated as a result of COVID-19. We are well positioned to benefit from areas like Passenger-to-Freighter conversion and smart city solutions, including safe access control management.

We are maintaining our guidance for FY2020 revenue to come in between 5% and 15% lower versus FY2019.”

~ Vincent Chong, President & CEO, ST Engineering

# Appendix



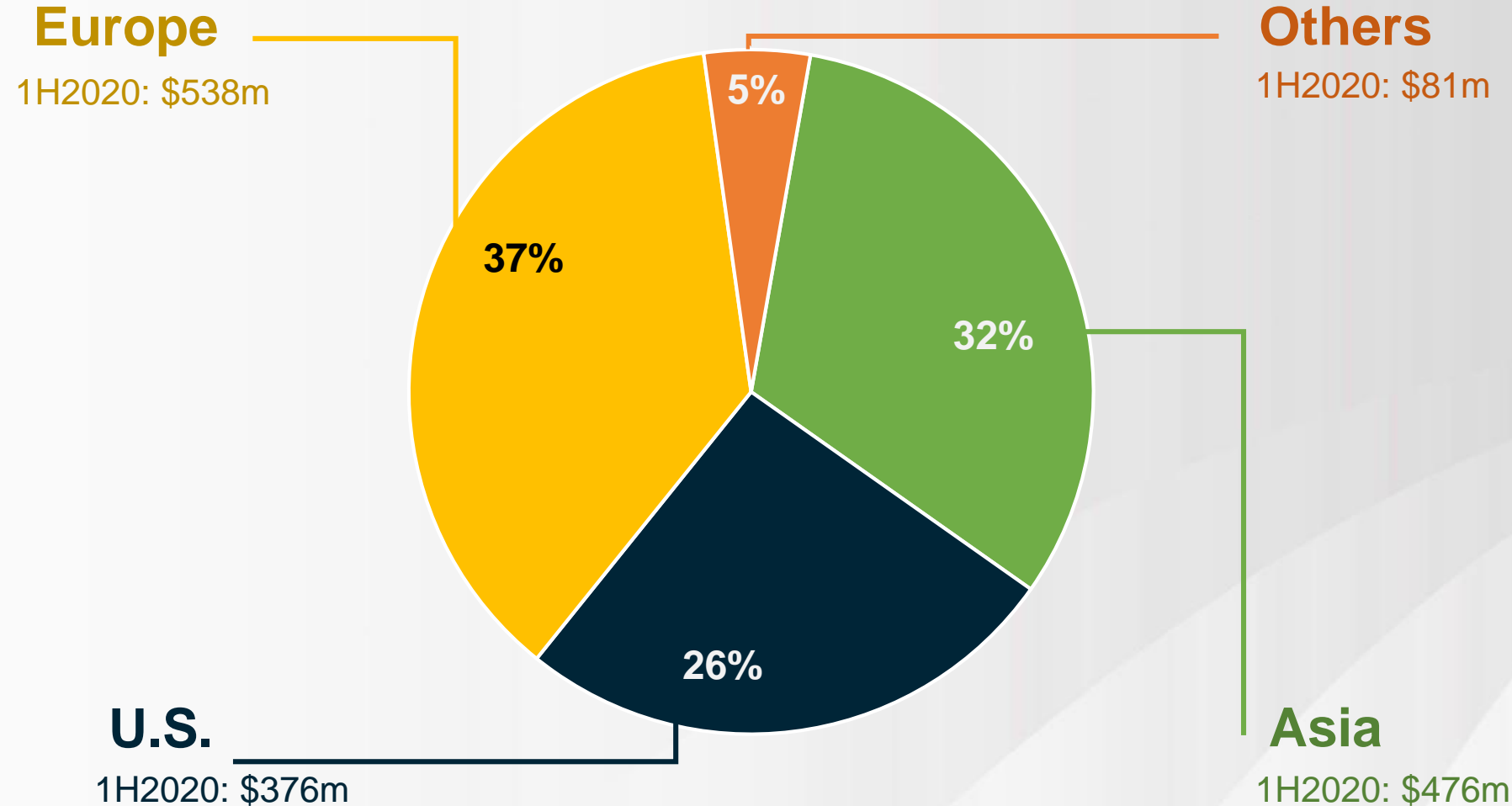
# Group

# Group Profit before Tax (PBT)

S\$m	1H2020	1H2019	Change
Aerospace	120.3	158.5	-24%
Electronics	96.6	98.4	-2%
Land Systems	49.2	42.2	+17%
Marine	22.1	31.5	-30%
Others	(1.8)	(1.0)	NM
<b>Group</b>	<b>286.4</b>	<b>329.6</b>	<b>-13%</b>

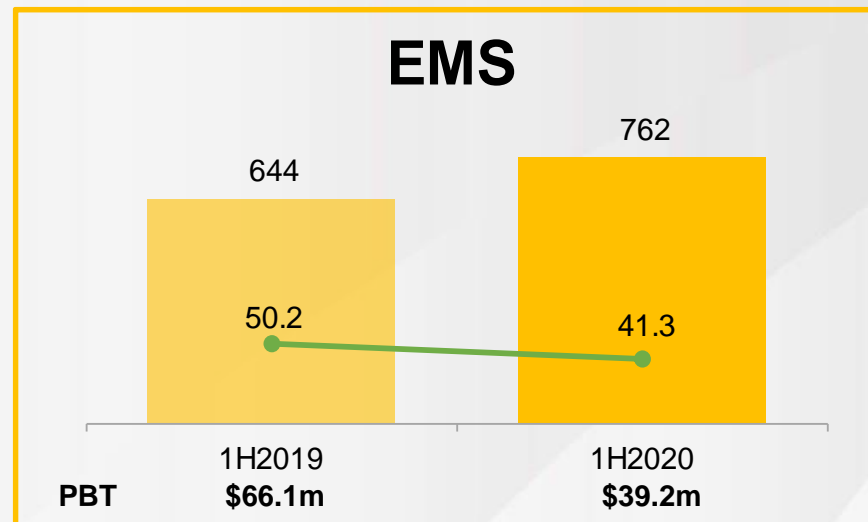
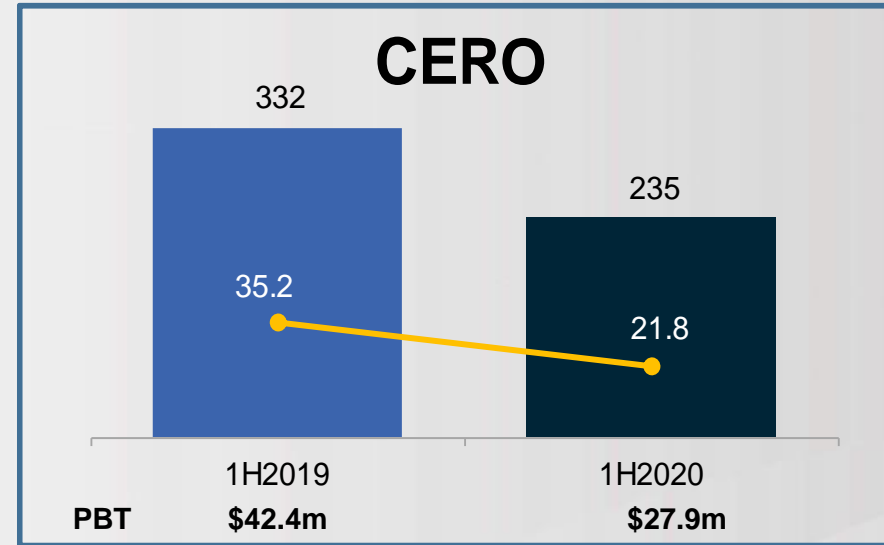
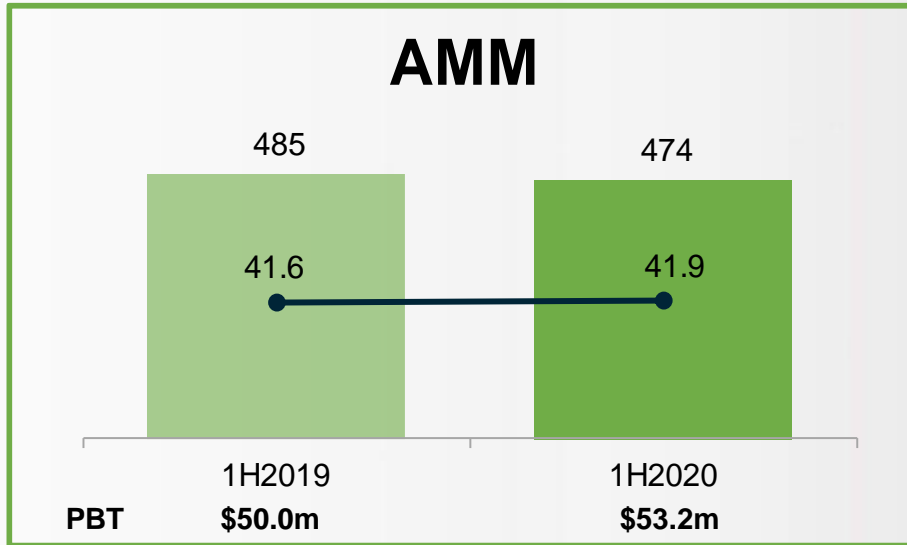
# Aerospace

# Aerospace Revenue by geography (by location of customers)



Note: Revenue includes inter-segment sales

# Aerospace Revenue, PBT and Net Profit by business group



Legend:

Bar: Revenue (\$m)

Line: Net Profit (\$m)

Note: Revenue includes inter-segment sales

# Aerospace

1H2020 vs 1H2019

<b>Revenue</b>	<b>\$1,470m</b>	<b>▲ \$12m or 1%</b>	<ul style="list-style-type: none"><li>• Full six months' contribution from MRAS as compared to two-and-a-half months in prior year</li></ul> Partially offset by <ul style="list-style-type: none"><li>• Lower revenue from AMM and CERO business groups due to reduced activities arising from COVID-19</li></ul>
<b>PBT</b>	<b>\$120.3m</b>	<b>▼ \$38.2m or 24%</b>	<ul style="list-style-type: none"><li>• Impairments and lower activities</li><li>• Share of lower profits from associates and joint ventures</li></ul> Partially offset by <ul style="list-style-type: none"><li>• Full six months' contribution from MRAS</li><li>• Government support</li></ul>
<b>Net Profit</b>	<b>\$105.0m</b>	<b>▼ \$22.0m or 17%</b>	<ul style="list-style-type: none"><li>• In line with lower PBT</li></ul> Partially offset by <ul style="list-style-type: none"><li>• Lower tax expense</li><li>• Share of losses by NCI</li></ul>

# Aerospace – 1H2020 in Review

- Secured about \$1.4b worth of new contracts, including:
  - Multi-year engine and component MRO contracts to support T'way Air's Boeing 737 fleet
  - A 5-year nacelle maintenance contract to support Qantas' Boeing 737-800 and A330 fleet
  - A 3-year heavy maintenance contract for Alaska Airlines' A320 fleet
  - Passenger-to-freighter (P2F) conversion orders for two A321 units from BBAM and conversion and leasing of a A321P2F unit for Qantas
  - A 2-year exclusive heavy maintenance contract for up to 40 CFM56-7B engines for an Asian air carrier
  - A multi-year heavy maintenance contract to support a Chinese cargo airline's Boeing 767 fleet

# Aerospace – 1H2020 in Review

- Entered into agreements for the sale of 30 aircraft engines through engine leasing JV into a securitisation structure
- Strengthened core capabilities
  - Entered into an agreement with Vietnam Airlines to explore setting up airframe MRO JV in Vietnam
  - Became a licensed service centre for LEAP-1B engines
  - Attained EASA Supplement Type Certification for A321P2F conversion
  - Received first-ever authorisation from CAAS to perform aircraft inspection using drones
  - Entered into collaboration with Wilhelmsen Ships Service to develop solutions to enable Beyond Visual Line of Sight Unmanned Aircraft Systems operations for shore-to-ship parcel deliveries



# Aerospace – Outlook for 2H2020

- Redeliver A321P2F prototype and pursue new P2F contracts
- Ramp up component MRO operations
- Develop solutions to enhance cabin hygiene and safety
- Accelerate implementation of smart solutions to enhance productivity and cost efficiency
- Continue to market UAV solutions and advance commercial applications of these solutions

# Electronics

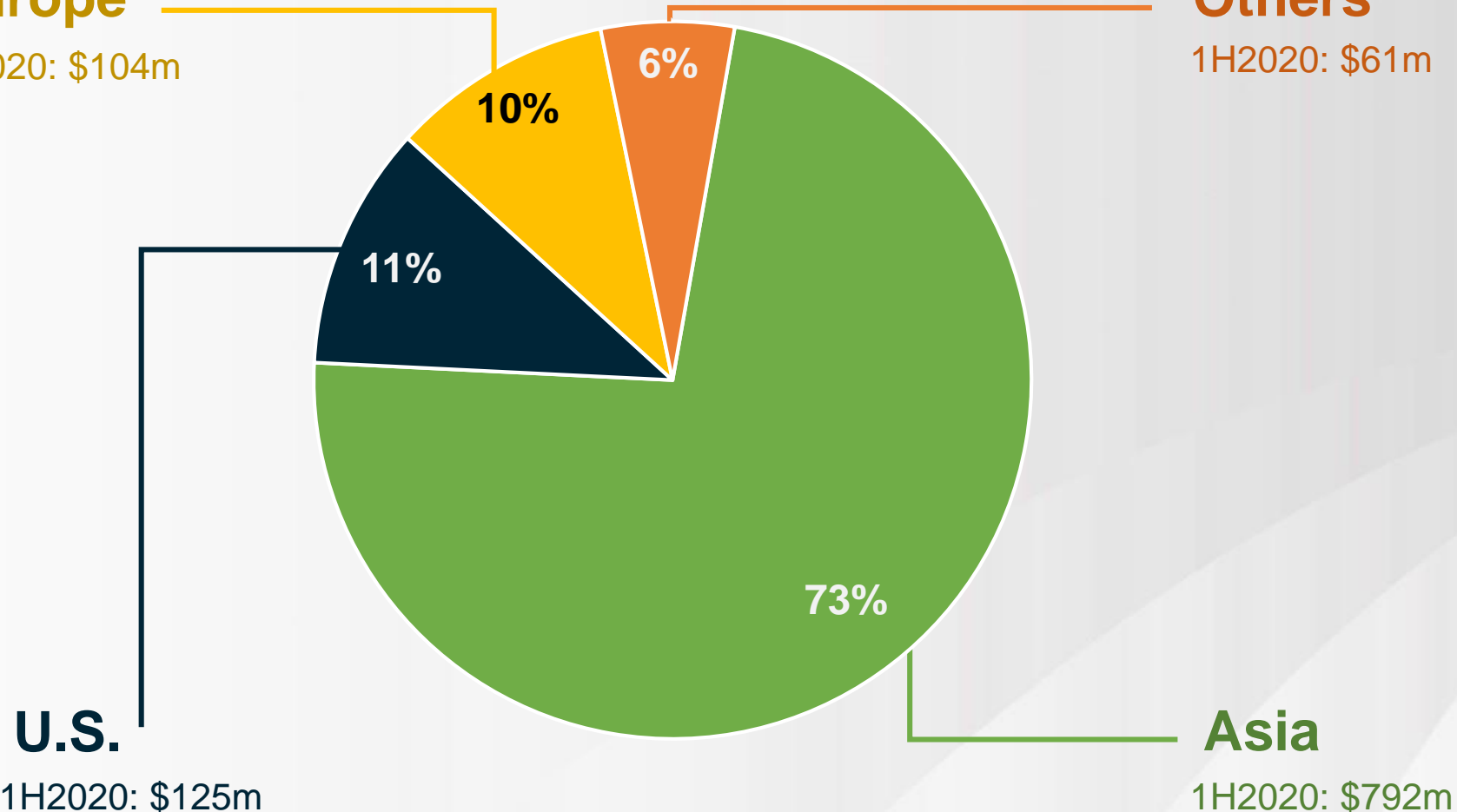
# Electronics Revenue by geography (by location of customers)

**Europe**

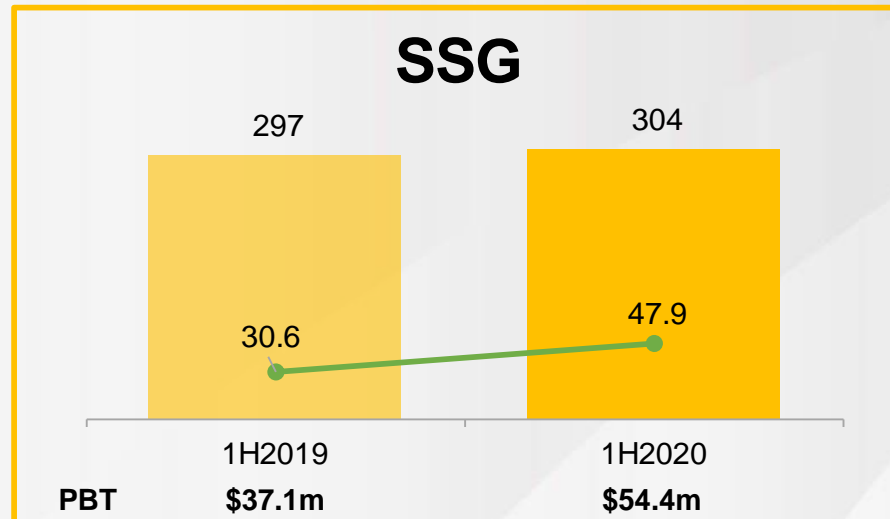
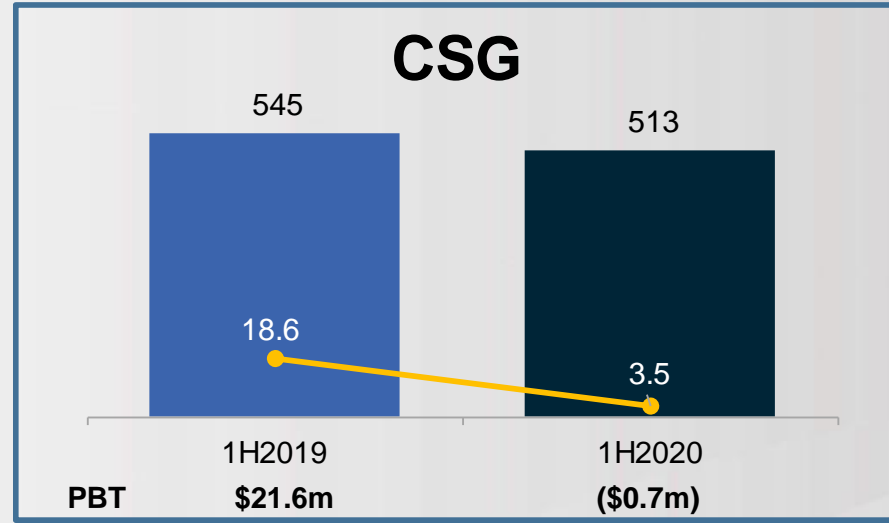
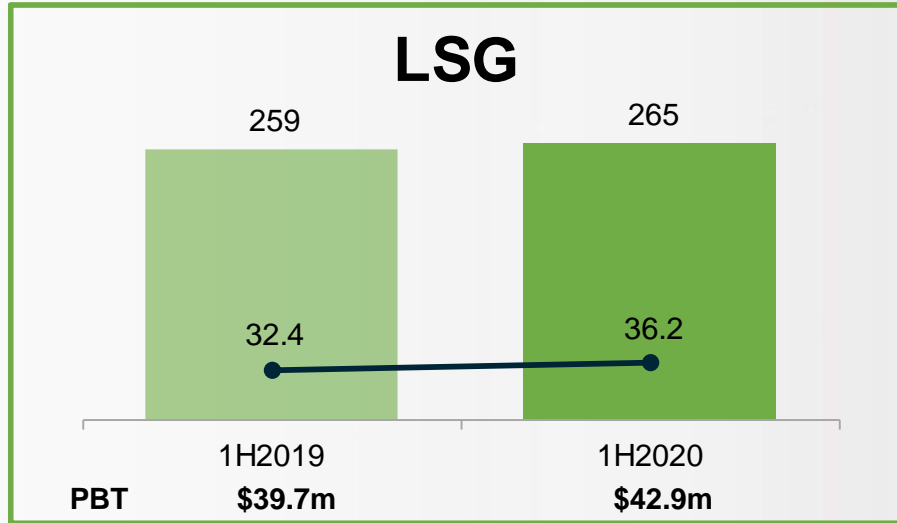
1H2020: \$104m

**Others**

1H2020: \$61m



# Electronics Revenue, PBT and Net Profit by business group



Legend:  
 Bar: Revenue (\$m)  
 Line: Net Profit (\$m)  
 Note: Revenue includes inter-segment sales

# Electronics

1H2020 vs 1H2019

<b>Revenue</b>	<b>\$1,069m</b>	<b>▼ \$19m or 2%</b>	<ul style="list-style-type: none"><li>• Lower revenue from CSG business group, impacted by COVID-19</li></ul> Partially offset by <ul style="list-style-type: none"><li>• Higher revenue from LSG and SSG business groups</li></ul>
<b>PBT</b>	<b>\$96.6m</b>	<b>▼ \$1.8m or 2%</b>	<ul style="list-style-type: none"><li>• In line with lower revenue</li><li>• Unfavourable sales mix</li></ul> Partially offset by <ul style="list-style-type: none"><li>• Government support</li></ul>
<b>Net Profit</b>	<b>\$87.6m</b>	<b>▲ \$6.0m or 7%</b>	<ul style="list-style-type: none"><li>• Lower tax expense</li></ul>

# Electronics – 1H2020 in Review

- Secured over \$1.3b worth of new contracts, including:
  - Rail electronics projects in China, India and Thailand
  - Public safety and security projects
    - Next-generation Perimeter Intrusion Detection System in a U.S. airport
    - Provision of Security Operations Centres and cybersecurity related services
    - Support for customers in government, defence, critical infrastructure and enterprise sectors
  - First-of-its-kind Container Lashing Warning System on three shipping vessels to enable remote on-condition monitoring of cargo securing
  - Development of an aviation management and maintenance system for a leading airport authority's Southeast Asian operations
  - Enhancement and maintenance of Singapore's National Water Agency, PUB's Intelligent Water Management System
  - Several training and simulation solutions to support experiential learning needs

# Electronics – 1H2020 in Review

- Deployed integrated command, control and communications (C3) systems, integrated surveillance systems, contact tracing solutions to support Singapore's COVID-19 efforts
- Enhanced Smart City offerings
  - Smart lighting provided to Singapore's Housing & Development Board was the winner of the *Smart Buildings/Smart Tech Parks* category at the IDC Smart City Asia Pacific Awards 2020
  - Launched GEOEARTH, a cloud-based geospatial analytics platform to drive higher efficiencies and enable better business decisions
  - Launched BIOS-SHIELD™, Asia's first cloud, firmware endpoint security solution with Janus Technologies
  - Entered into collaboration agreement with National University of Singapore to use quantum technology to develop network encryption solutions
  - Signed an agreement to collaborate with Singapore's Urban Redevelopment Authority to develop and commercialise digitalisation tools to aid city planning and management

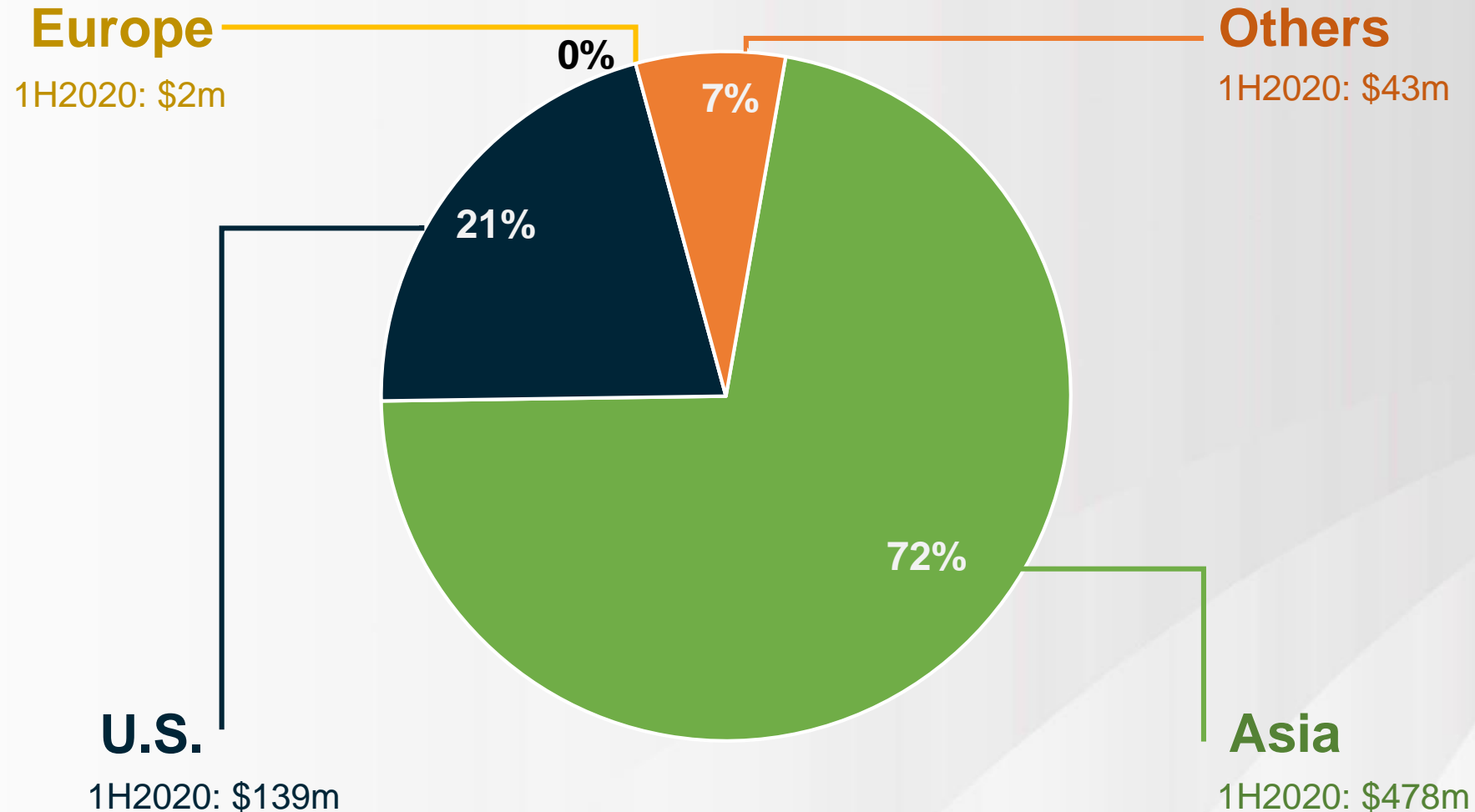
# Electronics – Outlook for 2H2020

- Explore business opportunities arisen from new demand trends, e.g. safe access control management, data centres, cybersecurity and secured digital solutions
- Deliver smart mobility, satellite communications and software system related contracts on schedule
- Focus on integration of iDirect Europe (formerly known as Newtec) and Glowlink Communications
- Pursue Smart City related contracts in and outside of Singapore

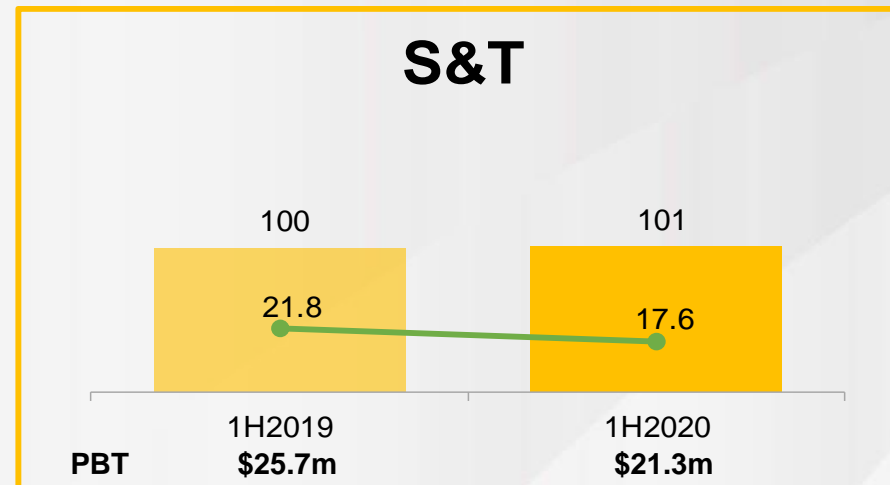
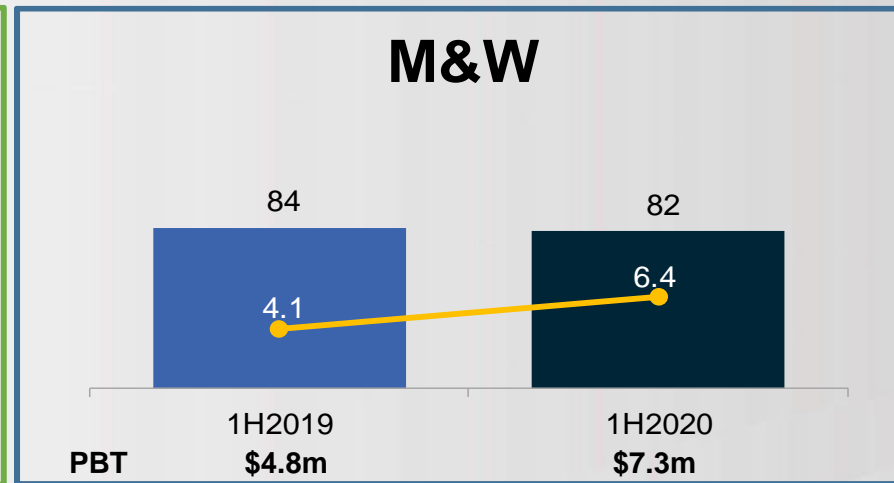
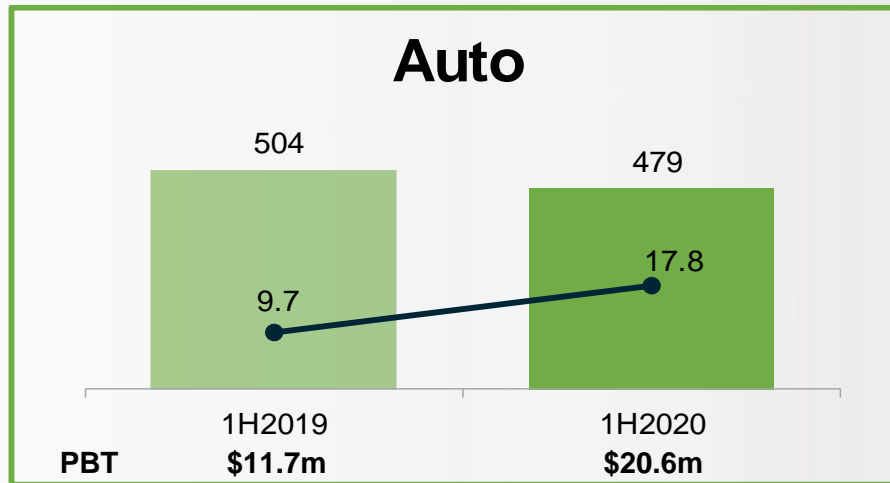


# Land Systems

# Land Systems Revenue by geography (by location of customers)



# Land Systems Revenue, PBT and Net Profit by business group



Legend:  
 Bar: Revenue (\$m)  
 Line: Net Profit (\$m)  
 Note: Revenue includes inter-segment sales

# Land Systems

1H2020 vs 1H2019

<b>Revenue</b>	<b>\$644m</b>	<b>▼ \$29m or 4%</b>	<ul style="list-style-type: none"><li>• Lower revenue from Auto business group, with lower US specialty vehicles and MAN bus sales</li></ul> Partially offset by <ul style="list-style-type: none"><li>• Stronger defence revenue</li></ul>
<b>PBT</b>	<b>\$49.2m</b>	<b>▲ \$7.0m or 17%</b>	<ul style="list-style-type: none"><li>• Government support</li><li>• Lower operating expenses</li></ul> Partially offset by <ul style="list-style-type: none"><li>• Unfavourable sales mix</li><li>• Impairments and weaker performance from associates</li></ul>
<b>Net Profit</b>	<b>\$41.8m</b>	<b>▲ \$6.2m or 17%</b>	<ul style="list-style-type: none"><li>• In line with higher PBT</li></ul>

# Land Systems – 1H2020 in Review

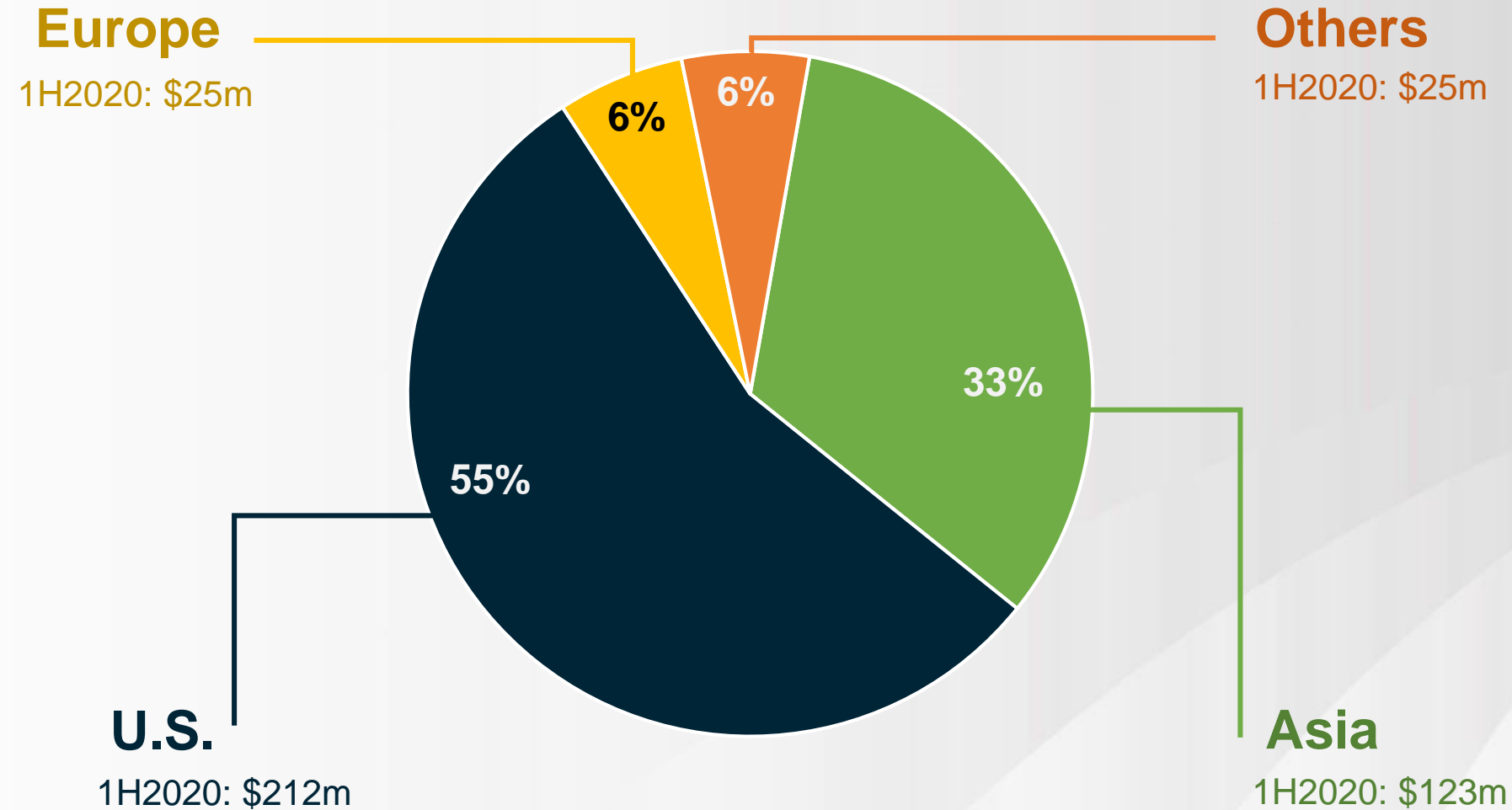
- Secured new contracts, including:
  - Phase 2 contract for Hunter Armoured Fighting Vehicle from Singapore Ministry of Defence
  - Weapons & munitions from customers in South America, North Africa and Middle East
  - Road construction equipment and specialty vehicles from customers in North America
- On-demand autonomous buses provided to Singapore's Ministry of Transport and Sentosa Development Corporation was the winner of *Transportation* category at IDC Smart City Asia Pacific Awards 2020
- Deployed mobile swab stations, TUG autonomous mobile robots as well as security and disinfecting robots to support Singapore's COVID-19 efforts

# Land Systems – Outlook for 2H2020

- Focus on execution and delivery of ongoing defence programmes, as well as ongoing autonomous vehicle trials
- Pursue and secure key defence and commercial programmes locally and overseas
- Develop and strengthen capabilities to be a leading contributor of the AV ecosystem in Singapore, supporting the nation's Land Transport Master Plan

# Marine

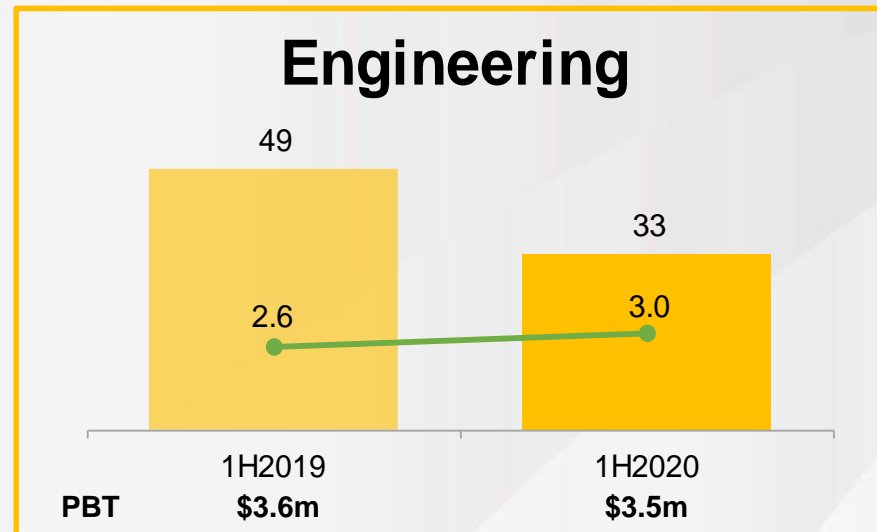
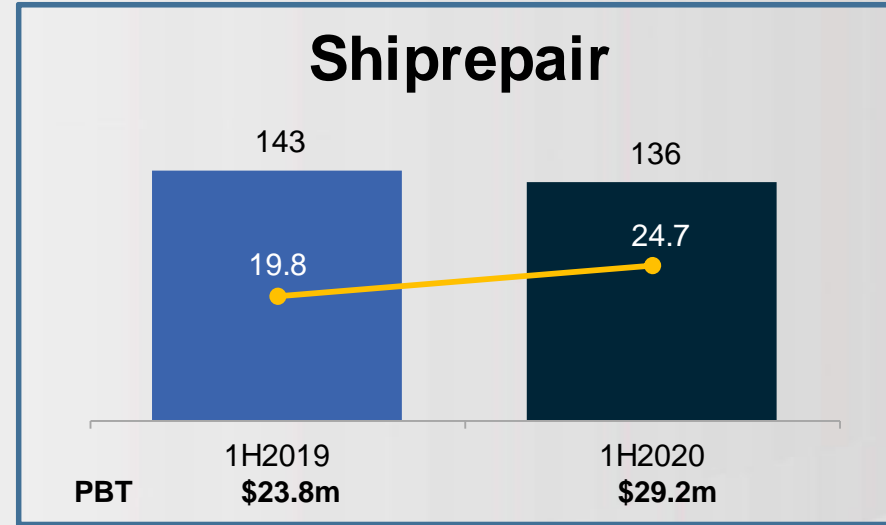
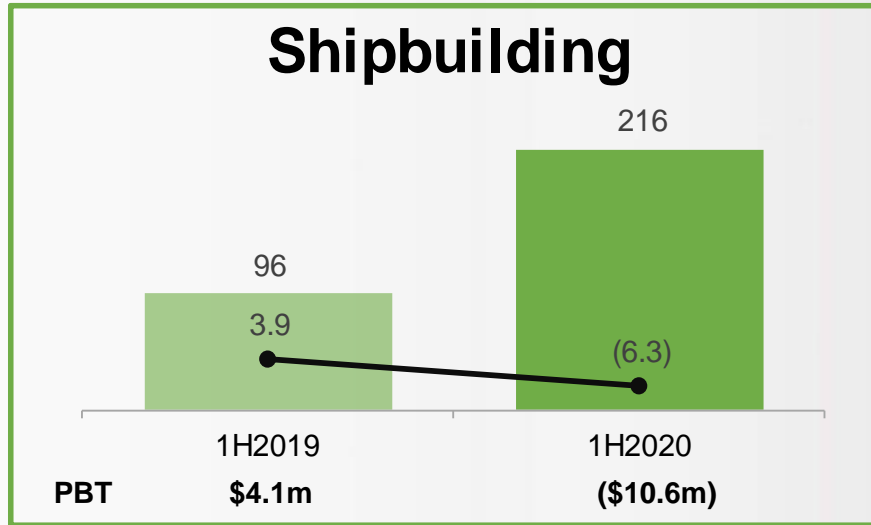
# Marine Revenue by geography (by location of customers)



Note: Revenue includes inter-segment sales



# Marine Revenue, PBT and Net Profit by business group



Legend:  
 Bar: Revenue (\$m)  
 Line: Net Profit (\$m)  
 Note: Revenue includes inter-segment sales

# Marine

1H2020 vs 1H2019

<b>Revenue</b>	<b>\$385m</b>	<b>▲ \$97m or 34%</b>	<ul style="list-style-type: none"><li>• Higher revenue from Shipbuilding business group</li></ul> Partially offset by <ul style="list-style-type: none"><li>• Lower revenue from Shiprepair and Engineering business groups</li></ul>
<b>PBT</b>	<b>\$22.1m</b>	<b>▼ \$9.4m or 30%</b>	<ul style="list-style-type: none"><li>• Weaker U.S. shipbuilding performance</li></ul> Partially offset by <ul style="list-style-type: none"><li>• Government support</li></ul>
<b>Net Profit</b>	<b>\$21.4m</b>	<b>▼ \$4.9m or 19%</b>	<ul style="list-style-type: none"><li>• In line with lower PBT</li></ul> Partially offset by <ul style="list-style-type: none"><li>• Lower tax expenses</li></ul>

# Marine – 1H2020 in Review

- Secured new contracts, including:
  - Firm order for one Auxiliary Personnel Lighter-Small (APL(S)) 67 Class berthing barge for the U.S. Navy, bringing total orders to four units
  - Engineering, Procurement and Construction contract with consortium partners, Keppel Seghers and China Harbour, for a Waste-to-Energy facility and a Materials Recovery at the new Tuas Nexus IWMF in Singapore
- Completed numerous shiprepair projects, rig repair and related fabrication works
- U.S. yard was among the recipients of the prestigious 2019 Safety Award from the America Equity Underwriters

# Marine – Outlook for 2H2020

- R&D plan including design performance specifications for Polar Security Cutter
- Deliver first two units of APL(S) berthing barge to U.S. Navy
- Progressive launches/deliveries of 5GPT to Singapore Police Coast Guard
- Pursue and secure defence and commercial newbuild programmes in and outside Singapore

# **Aerospace Business Updates**

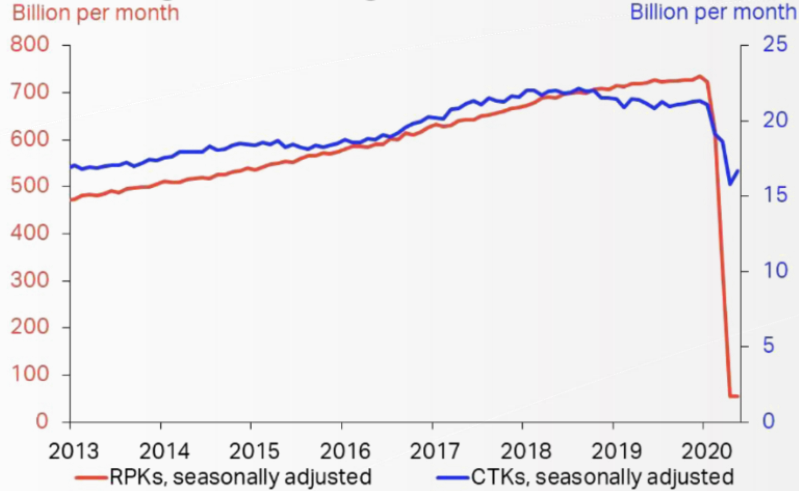
## **COVID-19's Impact and Opportunities**

# Y2020 - An Unprecedented Year for Aviation

## Aviation Traffic Plunge Precipitates Major Aviation Market Crisis

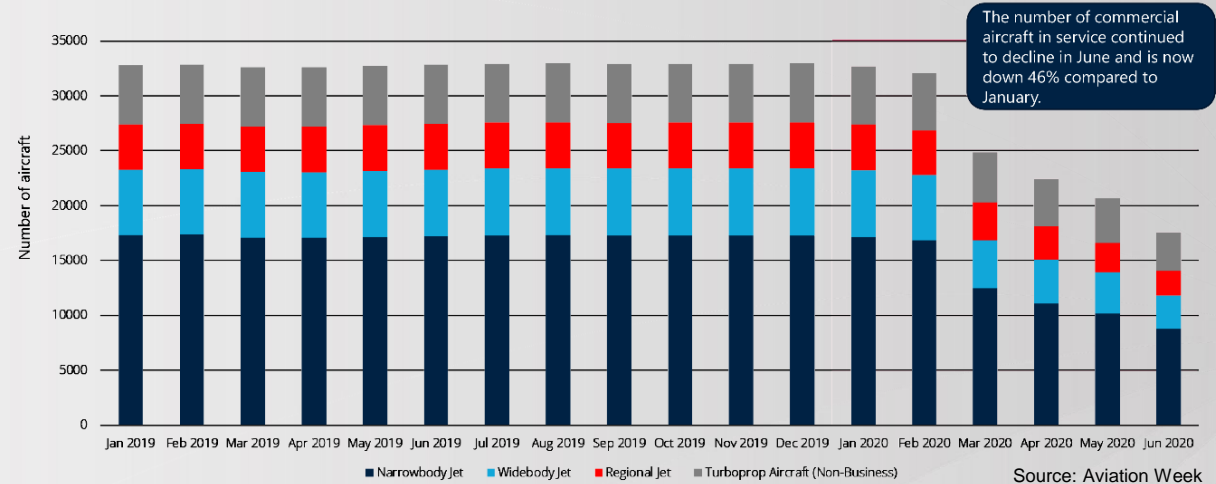
### 1 Air travel hits a record low in April 2020

**Air Passenger and Air Cargo Volumes**



### 2 Airlines rationalise fleets, global in-service aircraft reduced

**Commercial jets and turboprop aircraft in service, by month**



### 3 OEMs reduced aircraft production rates and adjust workforce

- Airbus: 15,000 job cuts by summer 2021
- Boeing: ~ 16,000 job cuts, 10% of workforce

**Aircraft Production Rate Reductions (aircraft per month)**

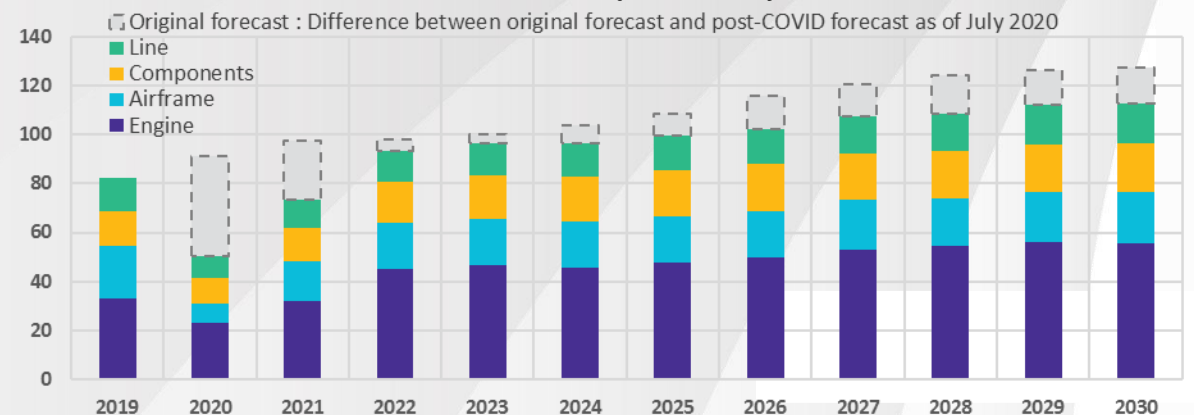
	Aircraft Type	Previous Target	Revised Rate
<b>BOEING</b>	B787	14	10 in Y2020 (-29%), 6 by Y2021 (-57%)
	B777/777X	5	2 in Y2021 (-60%)
	B747	0.5	Ceasing production in Y2022
<b>AIRBUS</b>	A320	60	40 (-33%)
	A330	3.25	2 (-38%)
	A350	10	5 (-50%)

### 4 Reduced in-service fleet restricts MRO spend

- Y2020 MRO spend to reduce by 45% to US\$50.3b

**MRO Demand (US\$ billions)**

Source: Oliver Wyman



# Longer-Term & Strategic Priorities

Strengthen Fundamentals and Capitalise on COVID-19's Opportunities

## Improve Cost Structure & Operations

- Align supply & demand
- Accelerate digitisation and automation

## Rationalisation

- Exit businesses that see permanent adverse impact from COVID-19

## Position for Growth

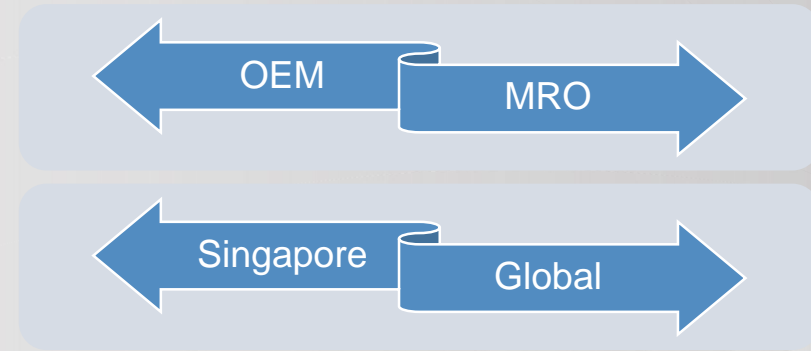
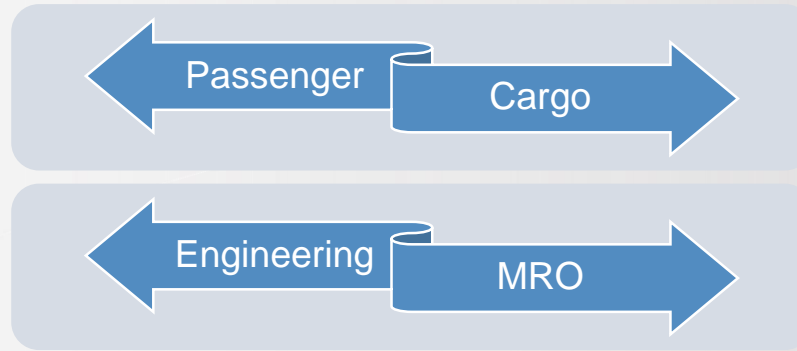
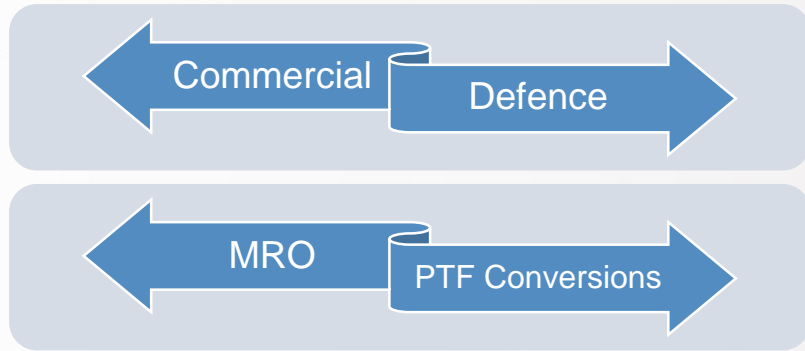
- Strategic partnerships
- M&A investments
- Sustainability focus
- Engage China options

## Freighter Business

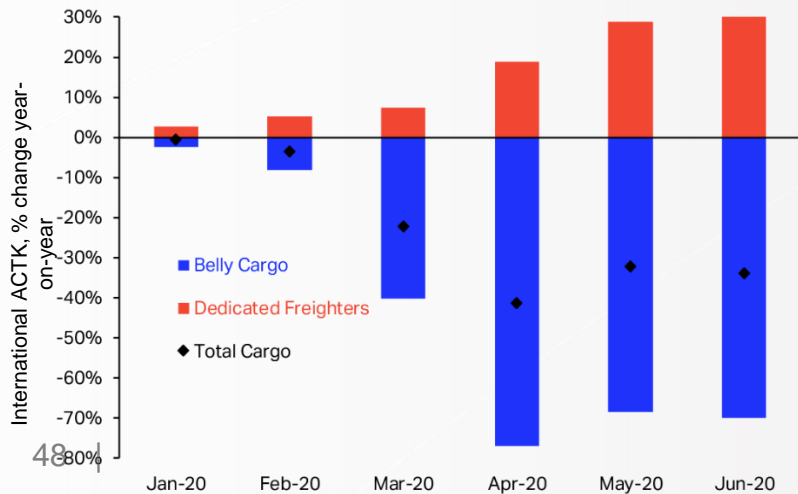
- Grow PTF opportunities
- Strengthen supply chain
- Offer integrated leasing and MRO options

# Diverse Portfolio Across Business Segments & Markets

Broad Business Exposure & Diverse Portfolio Reduce Single Segment Risks



## 1 Increased demand for cargo aircraft



ACTK: Available cargo tonne-kilometers

Source: IATA

## 2 PTF feedstock at lower cost

Model	HLCMV - 3Y	HLCMV - 6Y	HLCMV - 12Y	Typical Value Change
A319-100	\$ 25.33 m	\$ 20.23 m	\$ 11.93 m	-5% to -22%
A320-200	\$ 32.18 m	\$ 25.49 m	\$ 15.63 m	-10% to -16%
A321-200	\$ 34.97 m	\$ 28.11 m	\$ 18.83 m	-9% to -17%
737-700	\$ 26.69 m	\$ 21.31 m	\$ 12.51 m	-9% to -26%
737-800	\$ 34.24 m	\$ 27.39 m	\$ 18.12 m	-9% to -16%
737-900ER	\$ 34.66 m	\$ 27.29 m	\$ 17.65 m	-5% to -16%

Model	HLCMV - 3Y	HLCMV - 6Y	HLCMV - 12Y	Typical Value Change
A330-200	\$ 53.26 m	\$ 39.37 m	\$ 23.25 m	-7% to -26%
A330-300	\$ 58.68 m	\$ 43.21 m	\$ 25.16 m	-7% to -24%
A380-800	\$ 125.44 m	\$ 85.43 m	\$ 39.43 m	-13% to -34%
777-300ER	\$ 108.42 m	\$ 81.85 m	\$ 42.97 m	-8% to -19%
777-200LR	-	\$ 31.48 m	\$ 24.07 m	-33% to -51%

Source: IBA

## 3 Demand for automation & safer travel

### Clean Cabin Solutions



UVC Cabin System



ECS Bipolar Ionisation System



Seat Partitions for Passenger Separation





# Intensifying Innovation Efforts

## Accelerate Innovation and Capitalise on COVID-19's Opportunities



### Strengthen Engineering and MRO | Leverage on Smart Technology

#### Creating value through:

- Workforce Efficiency
- Customer-Focused Solution
- Enhancing Quality & Improving Turn time

### Shore-to Ship Delivery System

- Key areas of development:
  - long range non "Line of Sight" datalink, autonomous precision landing in metallic environment, delivery authentication system
- Benefits:
  - Improve efficiency of Singapore anchorages operations
  - Reduce carbon emissions



### Lightning Strike General Visual Inspection System for Line Operations Environment

- Key areas of development:
  - real-time detection of lightning strike marks using smart analytics, automated scanning of aircraft exteriors
- Benefits:
  - Improve inspector productivity & safety
  - Reduce aircraft downtime



### New Cabin Solutions

To reduce COVID-19 Risks

#### New Cabin Products

- **Antimicrobial Coating** (Qualification for aircraft use in Sep2020)
- **Continuous Cabin Air Cleansing** (EASA STC in Oct/Nov2020)

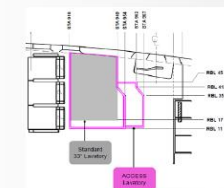


Ground-breaking 3-in-1 coating, based on world's first Fusion Resonance Technology, together with Titanium Dioxide & Nano-silver.

- **Safe Seating** Solution (Prototypes for airlines to try in Aug 2020; minor- mod certification in Sep 2020)



### Expandable PRM Lavatory



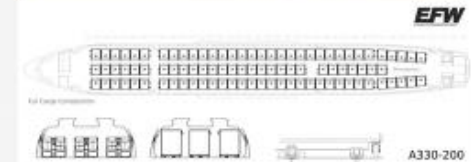
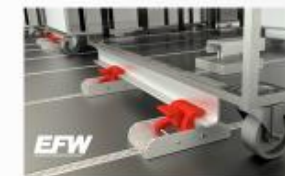
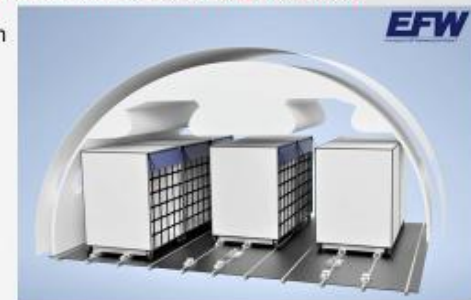
**40% More SPACE**  
No Compromise to Seat Pitch

Expanded Space

### EFW Cabin Cargo Box

Reversible & flexible storage to boost main cabin cargo capacity

- Efficient loading / unloading with wheels of up to 200kg per box, adding nearly 19t of cargo capacity for an A330-200
- Universal compatibility with all narrow / widebody aircraft through PAX door loading
- Safe and quick installation with designed latches



# Thank You