



# Investor Conference

**Accountability • Innovation • Dedication • Customer Orientation**

**Aerospace Industrial Development Corporation**

**April 13, 2017**



- I. Opportunity of Global Aerospace Industry**
- II. Global Challenges**
- III. Business Status**
- IV. Financial Review**
- V. Achievements & Prospects**



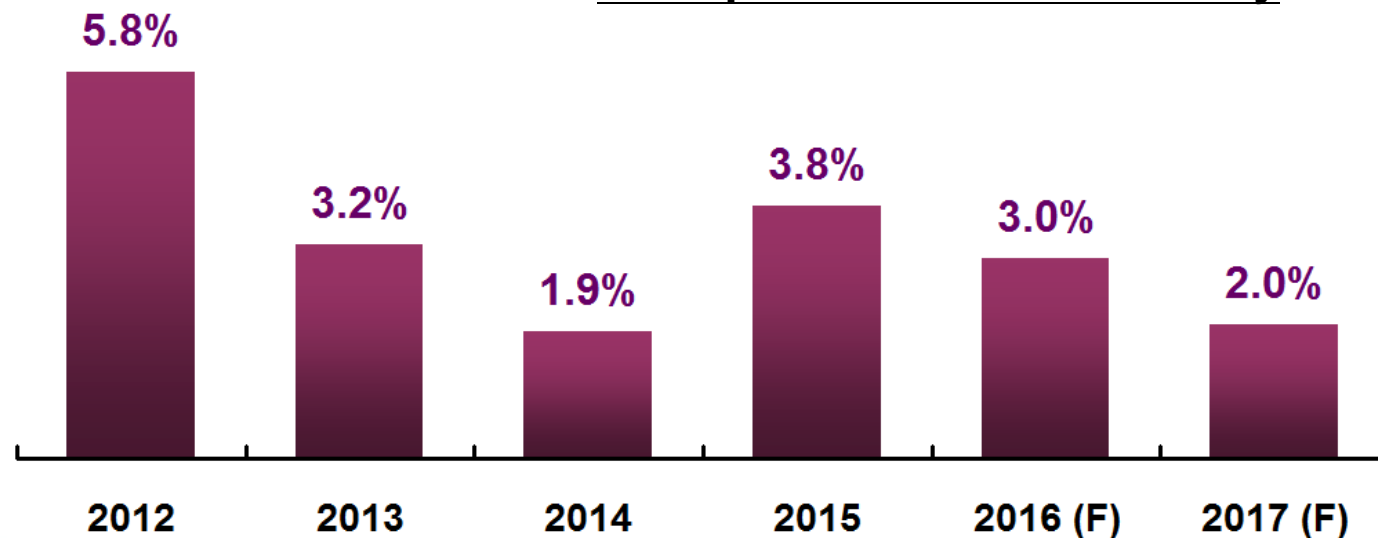
# I. Opportunity of Global Aerospace Industry

2634

Per “2017 Global Aerospace and Defense Sector Outlook” released by Deloitte, the global aerospace and defense (A&D) industry is likely to experience continued growth in 2017, however affected by slow economic recovery the growth rate is estimated at 2%.

**Deloitte.**

Annual revenue growth rate of the global aerospace & defense industry



Sources: Global aerospace and defense sector outlook (Deloitte; 2016, 2017) ;  
Global aerospace and defense sector financial performance study (Deloitte; 2015, 2016)



# I. Opportunity of Global Aerospace Industry (cont'd)

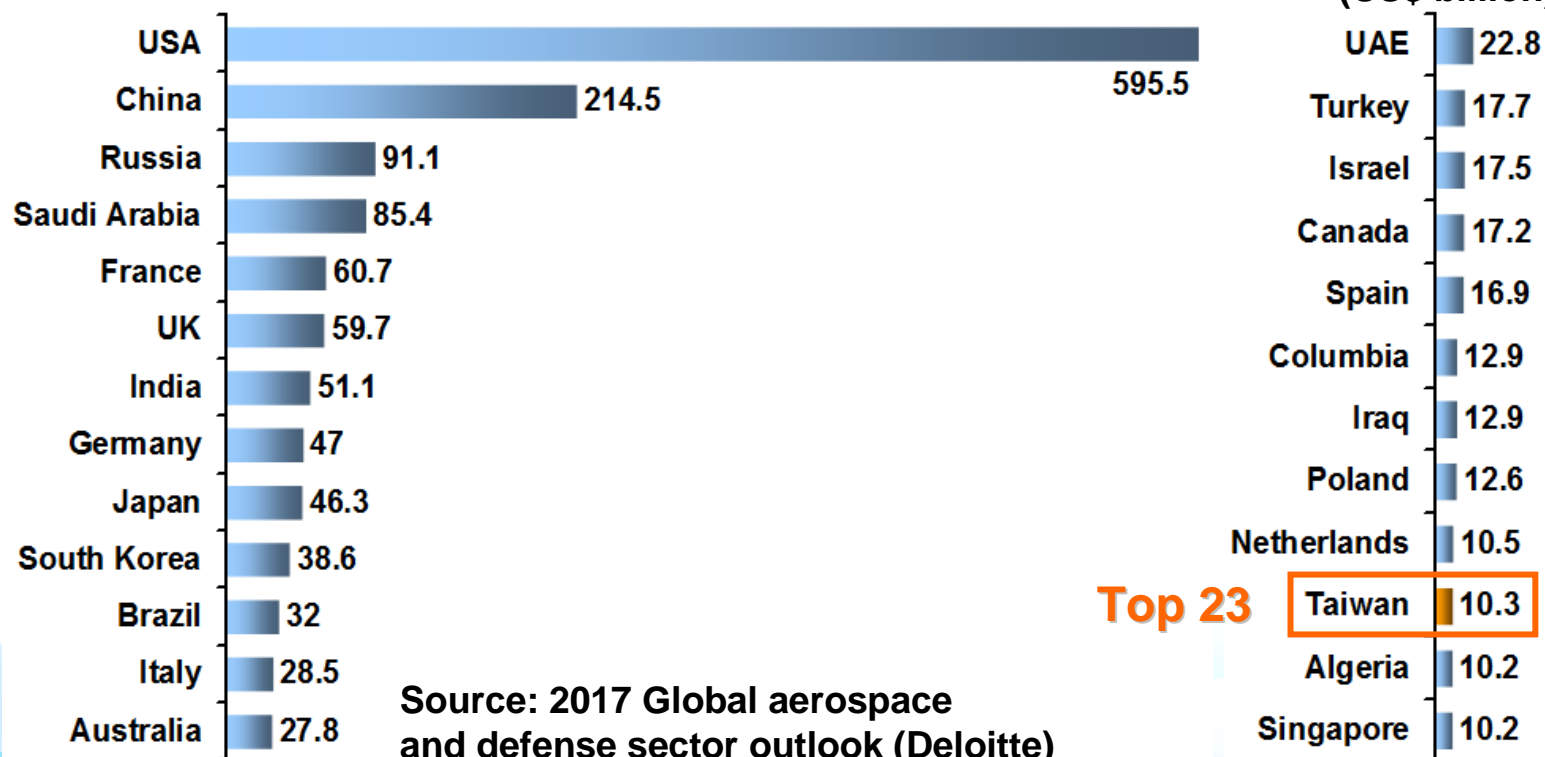
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## 1. Defense Industry

Defense industry benefits from increase of military budget due to regional tensions. As one of five Taiwan's innovative industries defense industry is expected to bring investment momentum to related industries while upgrading defense industry development.

### Top 25 military spenders in 2015

(US\$ billion)



Source: 2017 Global aerospace and defense sector outlook (Deloitte)

Top 23



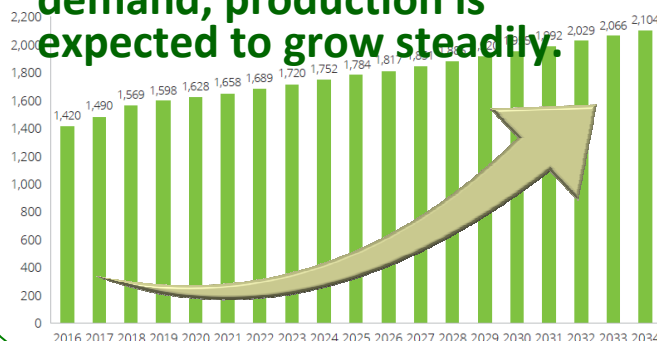


# I. Opportunity of Global Aerospace Industry (cont'd) 2634

## 2. Commercial Aviation Industry

### Commercial Aircraft

New aircraft in continuous demand, production is expected to grow steadily.



### Business Aviation

Forecast for the next 10 years (2016-2025):

**Honeywell**

**BOMBARDIER**

8,600 A/C

8,300 A/C

\$255 Billion

\$250 Billion

New Airplanes

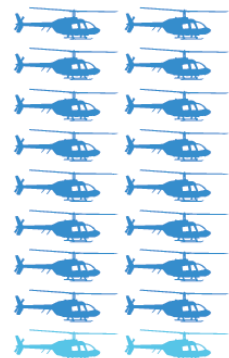
Market Value(US\$)

New Airplanes

Market Value(US\$)

### Helicopter

2016-2020



4,300-4,800

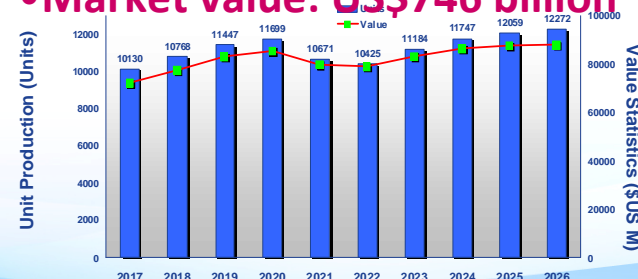
**Honeywell**

Forecast for the next 5 years (2016-2020) :  
Due to plunge of oil price, less 450 units than 2015 forecast.

### Commercial Engines

Forecast for the next 10 years (2017-2026)

- Deliveries: 112 thousand units
- Market value: US\$746 billion



### 1. Challenges from Advanced Countries

Trade Protectionism

America First Policy



Brexit



Intelligentize

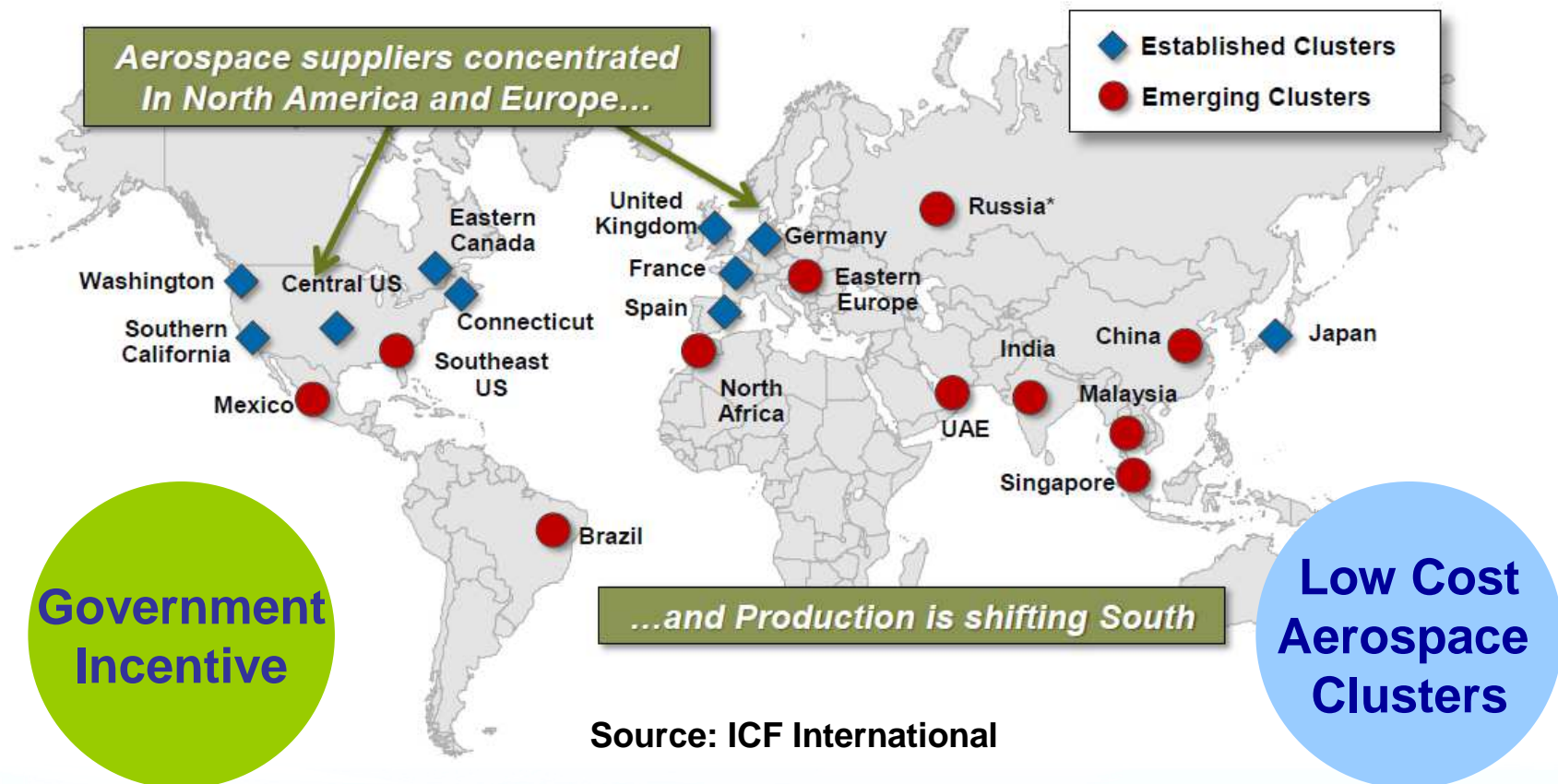


Automated



Industry 4.0  
Intelligent Machinery

## 2. Competition from Emerging Countries





### 3. Cost Improvement Pressure

Major international companies demand for cost reduction, e.g. Boeing's Partnering for Success strategy calls for innovation of suppliers to reduce production cost.

#### Boeing 2017 Supplier Summit

#### Partnering for Success 2.0

- Category strategies
- Vertical integration
- Industry standards
- Transparency expectations
- Should-cost
- Continuing One Boeing journey
- Reframed targets



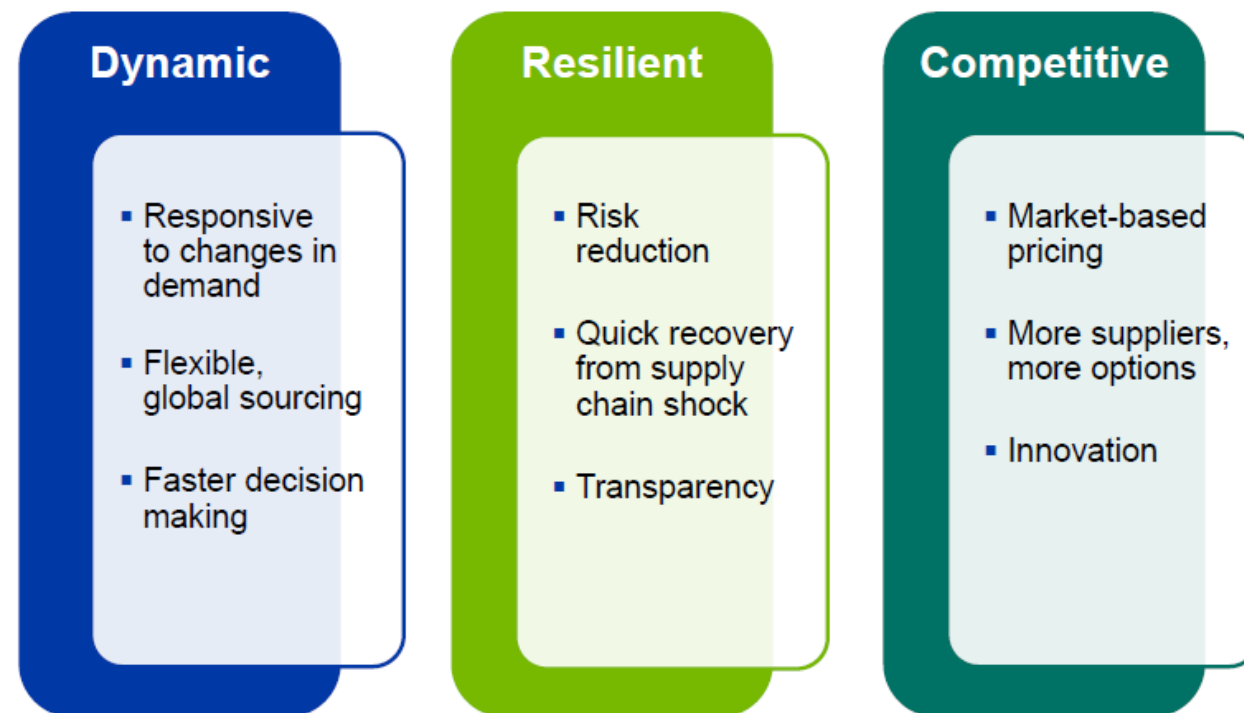


## II. Global Challenges (cont'd)

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In addition to cost, quality and delivery, to be dynamic, resilient and competitive are the strategic principles of Boeing supply chain.

### Boeing Supply Chain strategy principles



Source: Boeing 2017 Supplier Summit

## 1. Defense Business Updates (on major projects)

### ◆IDF 、 F-16A/B Upgrade

IDF Upgrade



F-16A/B Upgrade



### ◆Military Aircraft MRO

UH-1H Helicopter



2nd AFLC GOCO



Air Force Academy A/C  
Maintenance GOCO



### 1. Defense Business Updates (on major projects)

#### ◆ Advanced Jet Trainer—In Pursuit

- To replace the aging F-5 and AT-3, a budget plan of NT\$68.64 billion has been drawn up in 2017 and shall be executed between 2017-2028.
- On Feb. 7th, 2017, Taiwan president Tsai Ing-wen witnessed MND and NCSIST to sign the AJT manufacturing agreement while NCSIST and AIDC signed cooperation MOU.

#### ◆ Military Engines

TFE-1042



Applied on the IDF

F124



Applied on M346 Advanced Trainer  
by Leonardo-Finmeccanica (Italy)



# III. Business Status (cont'd)

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## 2. Commercial Aviation Programs (on major projects)

### ◆ Popular A/C & Engines



Airbus Single-Aisle A320  
Aft Belly Fairing Composite Panels



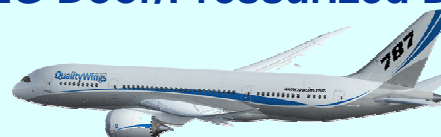
Airbus Giant A380  
HTP Tip



Sikorsky S-92 Cockpit



Boeing Single-Aisle B737  
MLG Door/Pressurized Door



Boeing Dreamliner B787  
HT Leading Edge

GE Aviation  
Top 2 Supplier in Asia



CFM56



GE90

Rolls-Royce  
Long-Term Supply  
Chain Partner



TRENT 800



V2500

### ◆ NextGen A/C & Engines



A320neo



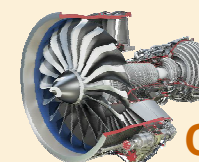
B737MAX



MRJ



C-Series



CFM LEAP-X



Trent XWB



GE9X





### III. Business Status (cont'd)

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- ◆ The oil price plunged since 2014 impacted AIDC helicopter programs the most, followed by business aircraft programs.
- ◆ AIDC was awarded contracts for supplying parts for Boeing 737MAX elevator composite parts; and Airbus A320 family aft belly fairing composite parts which TACC-19 is dedicated to produce.
- ◆ The above single aisle jets shall yield profit after passing process certification and FAI.



**AIRBUS**

Backlog to end of 2016 (s/s)



**BOEING**



Single aisle (A320 family)

5,645



Twin aisle  
(A330 & A350 & A380)

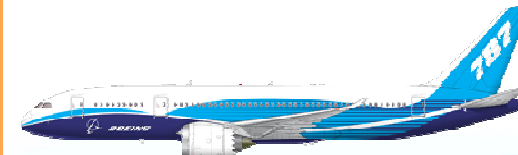
1,229

Total  
6,874



Single aisle (737 family)

4,452



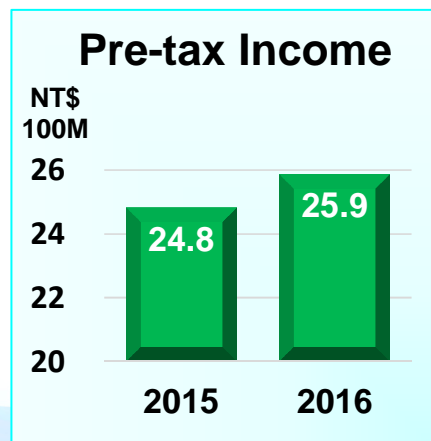
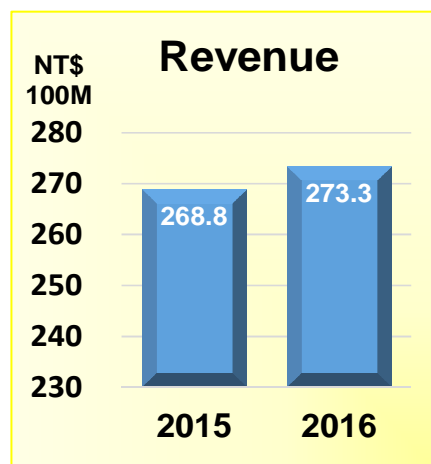
Twin aisle  
(767 & 787 & 777 & 747-8)

1,263

Total  
5,715

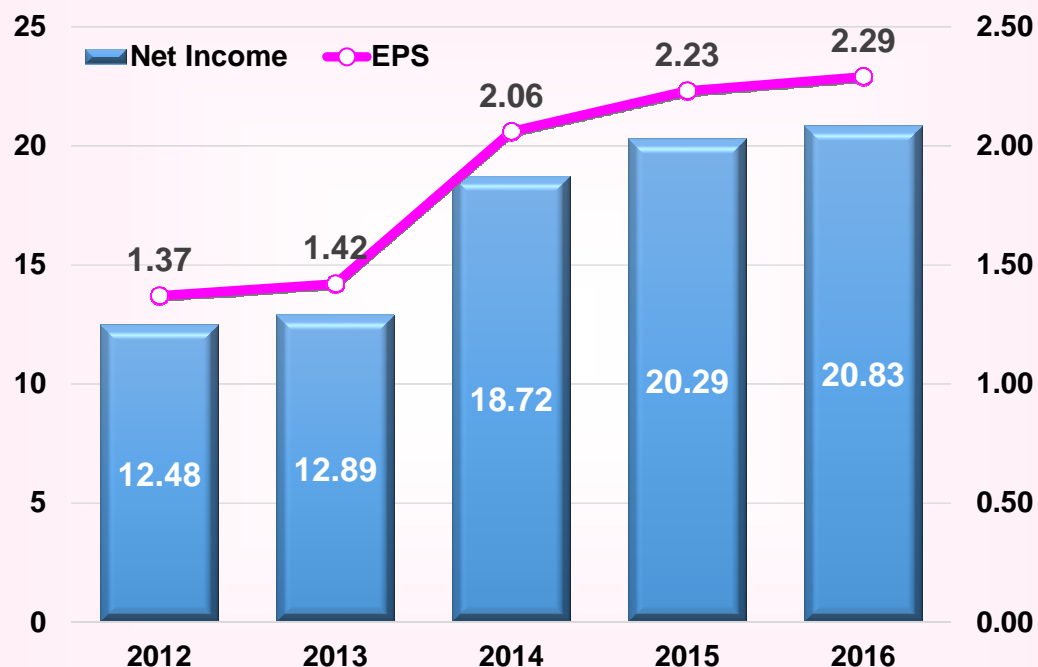
## 1. 2016 Income

Revenue, pre-tax income, net income, and EPS all hit record high.



Net Income in NT\$ 100M

EPS in NT\$/share



Note : 2012 ROC GAAP were observed; the IFRS was adopted since 2013.

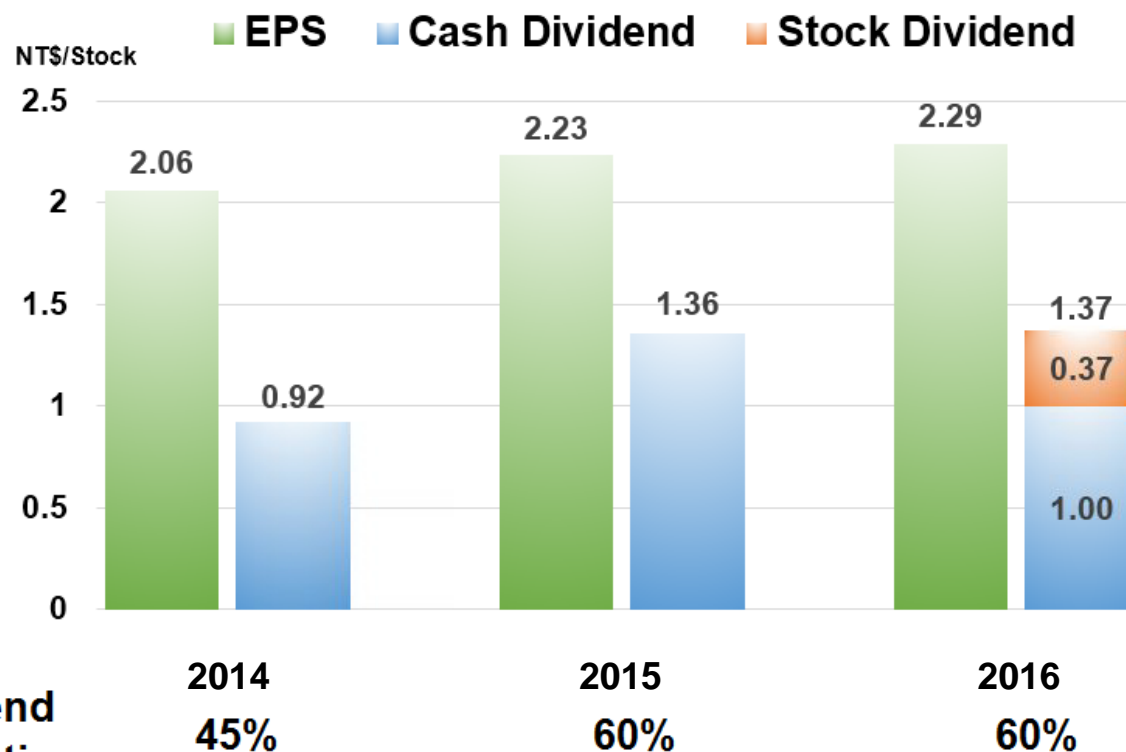


## IV. Financial Review (cont'd)

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### 2. 2016 Dividend

After considering cash demand for operation, except setting 10% of Retained Earnings for Legal Reserve and 30% for Special Reserve, to distribute NT\$1/share for cash dividend and NT\$0.37/share for share dividend is proposed. Pending resolution of the Shareholders' Meeting.



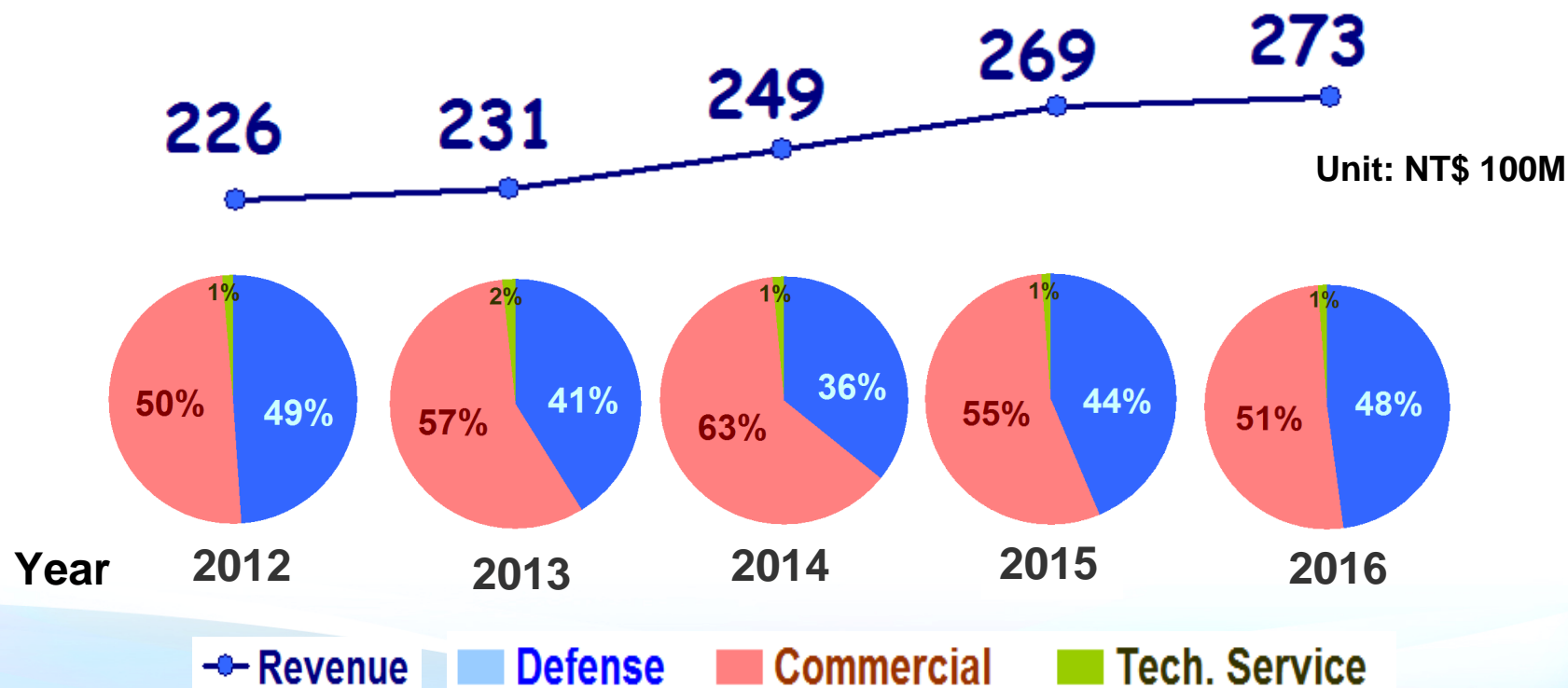


## IV. Financial Review (cont'd)

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### 3. Revenue Composition of Recent Years

AIDC maintains military and commercial businesses in parallel development. Focus of commercial business in recent years was on supplying composite parts and components for Boeing and Airbus passenger airplanes.





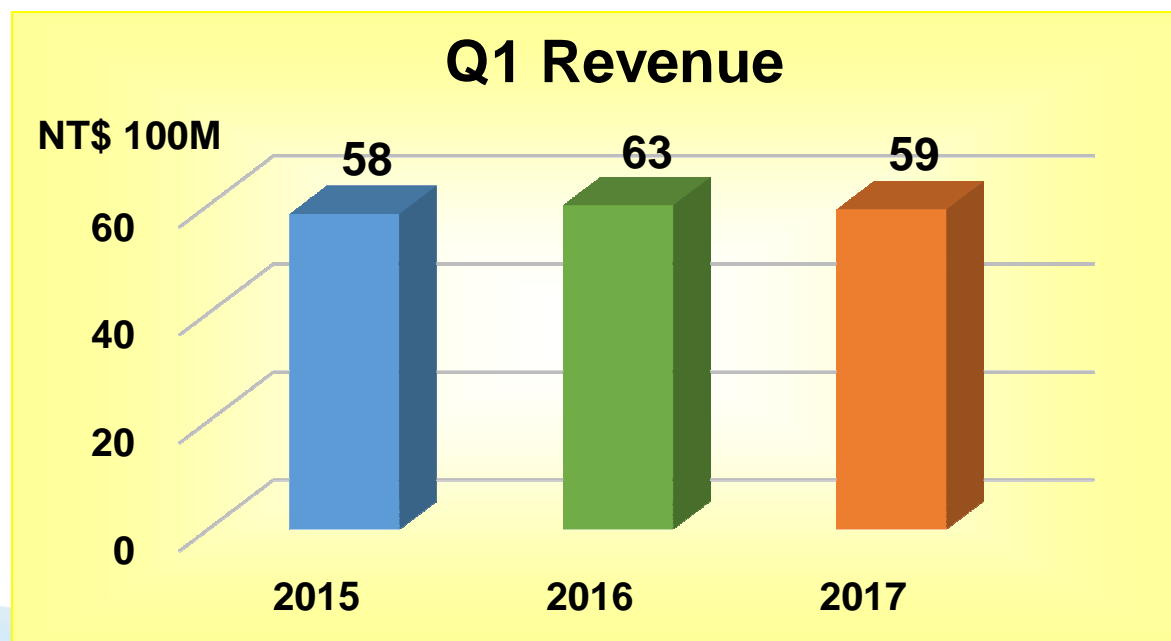


## IV. Financial Review (cont'd)

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### 4. Revenue for 1Q17 & 1Q16

Revenue for 1Q17 is lower than 1Q16. The main reason is that helicopters and business jets are affected by the markets, and CFM56 engine is being replaced by LEAP engine, therefore it will cause CFM56's deliveries to decrease. Further revenue from LEAP engines will increase after certifications of LEAP's new products and new processes.





# V. Achievements & Prospects

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## 1. Opening of 3 Major Facilities

(1) ECMC: inaugurated on April 14, 2016



(2) TACC-19 Composite Plant : inaugurated on July 1, 2016



(3) F-16A/B Upgrade & Maintenance Building: inaugurated on Feb. 21, 2017







# V. Achievements & Prospects (cont'd)<sup>2634</sup>

## 2. Intelligent Manufacturing of Aerospace Industry

### AIDC Industry 4.0

#### Intelligent Manufacturing / Intelligent Management



Demonstration Site :  
#8 Machining Shop



Demonstration Site :  
Engine Case  
Manufacturing Center

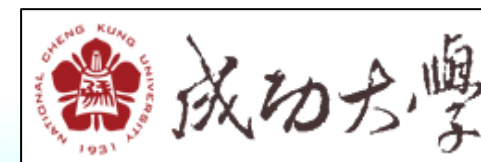
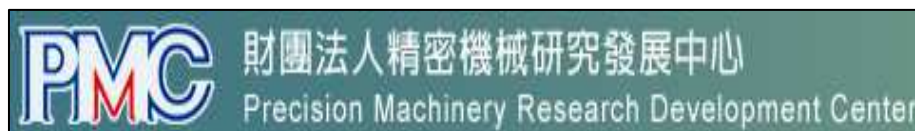


Demonstration Site :  
Taiwan Advanced  
Composite Center



# V. Achievements & Prospects (cont'd) <sup>2634</sup>

## 3. Cooperation with Academia and Research Institutes







# V. Achievements & Prospects (cont'd) <sup>2634</sup>

## 4. A-Team Efficiency



AIDC has signed MOA for "Aerospace Intelligent Machinery / Intelligent Manufacturing" with *NARLabs* and *Siemens Co., Ltd.*

AIDC has signed MOU with 6 raw material suppliers, among which, supplier *CSC*, *CSAC*, and *Ye Fong Aluminum* have been qualified in the initial trial production of AJT raw material.

AIDC has signed MOU with 14 machinery companies for R&D on 3 categories of aerospace machinery and equipment.



## V. Achievements & Prospects (cont'd) <sup>2634</sup>

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### 5. Prospects

- ◆ As of the end of March 2017, AIDC's accumulated revenue was NT\$5.9 billion. It is expected the A-Team 4.0 Alliance to benefit Taiwan's aerospace industry in terms of enhancing overall industrial capabilities and the ability of acquiring international orders, sustaining human resource cultivation.
- ◆ For 2017 business prospects, besides AJT program, in the wake of the opening of 3 facilities, the composite parts on commercial business, Leap engine business and F-16A/B upgrade business are expected to grow.
- ◆ AIDC will keep promoting Taiwan aerospace industry to upgrade and boosting national security.

—Thank You—