

Saint-Cloud  
March 8<sup>th</sup>, 2018

# PRESS CONFERENCE



# ***HIGHLIGHTS 2017***

# Highlights : Rafale Qatar

Signature, on December 7<sup>th</sup>, 2017, for the exercise of the option for 12 additional Rafale and for an agreement on a future cooperation (option for another 36 Rafale)



# Highlights : end of the Falcon 5X and launch of the Falcon 6X

Last October, Safran encountered new problems with the high-pressure compressor and announced they were unable to meet the commitment they took in 2016 (even though the engine was already four years behind contract schedule).

Dassault Aviation initiated, in December 2017, the termination process of the Silvercrest contract leading to the end of the Falcon 5X program and launched negotiations with Safran.

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Given the remaining need of customers for a long range and large cabin aircraft, Dassault Aviation launched the Falcon 6X, powered by Pratt & Whitney Canada engines (PW812), featuring the same cross section as the Falcon 5X, with a range of 5,500 NM and an entry into service scheduled in 2022.



# Highlights 2018 : CUGE

## (Universal Electronic Warfare Capability)

Announcement, on February 28<sup>th</sup>, 2018, by the French Ministry of the Armed Forces of their decision to chose the Falcon Epicure to be the signals intelligence aircraft of the French Forces, in partnership with Thales.



# ***ACTIVITIES & PROGRAMS 2017***

# 2017 and early 2018 context

- in geopolitical terms
  - ✓ Brexit
  - ✓ Tensions between United-States and Russia
  - ✓ Middle East conflicts
  - ✓ Will to relaunch a European defense policy
  - ✓ New government coalition in Germany
  - ✓ French Military Procurement Law for 2019 - 2025
- in economical terms
  - ✓ Good health of US economy
  - ✓ Decrease of the dollar
  - ✓ Instability of oil prices



In 2017 :

- Delivery of 1 Rafale, bringing up to 149 the number of aircraft delivered, out of the 180 ordered
- Delivery of the 8<sup>th</sup> Navy Rafale retrofitted to F3 standard
- Final validation firing of the Meteor missile in the frame of the development on the F3-R standard
- Notification of the contract for the preliminary works for the future F4 standard



## French Military Procurement Law in effect :

3 Rafale to be delivered in 2018, 0 Rafale in 2019 and 2020, then restart of deliveries from 2021



## 2019-2025 French Military Procurement Law :

- ✓ **28 Rafale to be delivered from 2022**, part of the 180 ordered → resumption of deliveries 1 year later than previously scheduled in the effective military procurement law
- ✓ Announcement of a batch of 30 additional Rafale in 2023
- ✓ F4 Standard (order to be notified in 2018)
- ✓ Confirmation of the upgrade of the airborne component

# Rafale Egypt and Qatar

- **Egypt**

- ✓ Delivery of 8 Rafale to Egypt in 2017, bringing up to 14 the total delivered out of the 24 ordered in 2015
- ✓ Support of the fleet (technical assistance, parts, training, etc.)



- **Qatar**

- ✓ Ongoing execution of the contract for the 24 Rafale ordered in 2015
- ✓ Exercise of the option for 12 Rafale (the coming into force will occur upon receipt of the 1<sup>st</sup> down-payment) and of an agreement on a future cooperation (option for another 36 Rafale)



- Ongoing execution of the contract for 36 Rafale ordered
- Significant needs in India for fighters :
  - ✓ Additional batch for the Air forces
  - ✓ Answer to the « Request For Information » for the supply of 57 Navy Rafale for the Indian Navy
- Make in India / Offsets :  
Incorporation of Dassault Reliance Aerospace Ltd (production of civil and military parts and subassemblies)



# Dassault Reliance Aerospace Limited

- February 10<sup>th</sup>, 2017 : incorporation of the JV DRAL, located in Nagpur, capital 51% Reliance - 49% Dassault Aviation
- Hiring of the management team: Chief Executive Officer, Chief Financial Officer and Director of Human Resources of Indian nationality, along with an Industrial Director of French nationality coming from Dassault Aviation
- Recruitment and training of managerial and production personnel in France and in India
- October 27<sup>th</sup>, 2017 : lay on the corner stone, with the attendance of the French Minister of the Armed Forces

**First parts produced in 2018**

**Ramp-up of the production over 5 years**



# Mirage 2000



## France

- Continued renovation works on the French Mirage 2000D (55 aircraft to be retrofitted as per the French Military Procurement Law)
- Renewal of the contract « Mirage Care »

## India

Continuation of support to Hindustan Aeronautics Ltd. (HAL) for the upgrade of aircraft in India

## United Arab Emirates (UAE)

Announce by the United Arab Emirates armed forces of their intention to add new capabilities to their Mirage 2000-9

**Main Checks in the UAE and in Qatar, and support of all Mirage 2000 fleets**



# Training : FOMEDEC

## «Supply of Modernized Training Resources and Differentiated Training of Fighter Crews »



- On January 5<sup>th</sup>, 2017, Babcock France and Dassault Aviation signed a partnership agreement to establish a joint venture under the leadership of Babcock France (10% of the capital held by Dassault Aviation) to perform the FOMEDEC contract signed between Babcock France and the French Defense Procurement Agency (DGA) for 11 years
  - This contract falls within the context of the outsourcing of training resources for fighter pilots of the French Air Force in Cognac
  - It includes the financing of infrastructures in particular the purchase of Pilatus PC21 and of flight simulators as well as their maintenance under the responsibility of Dassault Aviation
- 
- Project on hold pending for the contract assignment by DGA to the joint venture
  - **Dassault Aviation's ambition : remain involved in fighter pilot training in France**



# Maritime Surveillance and Maritime Patrol

## Japan

Notification by the Japan Coast Guards of the purchase of a 4<sup>th</sup> Maritime Surveillance FALCON 2000



## France

- Continuation of works on additional capacity for dropping chains on four FALCON 50 Maritime Surveillance
- Continuation of development works to upgrade the combat system on the Atlantique 2, particularly system integration tests and flight tests
- French Military Procurement Law for 2019-2025 :
  - ✓ renewal of overseas Falcon
  - ✓ 3 additional upgrade on the ATL2 fleet (15 to 18)



- New stealth measures for the nEUROn unmanned fighter aircraft in the Solange anechoic chamber of the French Defense Procurement Agency (DGA)
- New flight test campaign to demonstrate stealth capabilities during the 2<sup>nd</sup> half 2017
- Contract notification expected for 2018 for additional stealth works and 2018-2020 flight test campaigns



Florence Parly, French Minister of the Armed Forces, and Joël Barre, Head of DGA with Éric Trappier in Istres, on September 4<sup>th</sup> 2017, during a nEUROn flight test campaign

# FRANCO-BRITISH PROGRAM / FCAS

## *FCAS (Future Combat Air System)*



- Feasibility phase, close to completion, in order to prepare a UCAS demonstration program
- Political and budget uncertainties in the United Kingdom that threaten the launch of the program
- Decision by the British and French Defense Ministries now delayed

# MALE RPAS

*(Medium Altitude Long Endurance Remotely Piloted Aircraft System)*



- Airbus Defense & Space, Leonardo and Dassault Aviation carry on the definition study in order to develop a MALE drone
- This 2-year study was notified in 2016 by the OCCAR (Organization for Joint Armament Cooperation), in conjunction with the French, German, Italian, and Spanish Ministries of Defense
- On January 29<sup>th</sup>, 2018, validation of the “System Requirements Review” milestone that allows construction of the project, on the basis of the twin-engine formula selected at the French German council meeting of July 13<sup>th</sup>, 2017
- A proposal will be written to launch a program by the end of 2018

# Combat aviation : preparation of the future

Launch in 2018 of technico-operationnal studies to define the roadmap for the combat aviation,

- Time target : entry into service ~ 2040
- Program in cooperation (Franco-German)
- Begining of talks between Dassault Aviation and Airbus
- **Dassault Aviation's ambition : To lead and be the architect of the future aircraft combat system**



- New business jet market : signs of recovery in North America at the end of 2017
- Persistence of the pressure of competitors
- Pre-owned market : significant rebound of sales but at weak prices
- End of the Falcon 5X and launch of the Falcon 6X
- Engineering studies for the future Falcon



# Falcon 6X – Market Segment

Falcon 5X had been warmly welcomed by customers and the market.

Its main strengths are being kept:

- ✓ cabin comfort
- ✓ technological headway

as well as Falcon traditional advantages:

- ✓ Safety (flight controls, fuel tanks)
- ✓ Flexibility (steep approach)
- ✓ Efficiency



Last October, Safran encountered new problems with the high-pressure compressor and announced they were unable to meet the commitment they took in 2016 (even though the engine was already four years behind contract schedule)

The Falcon 6X, equipped with 2 Pratt & Whitney PWC 812D engines (the closest to Silvercrest), is optimized for these more powerful new engines

The range is increased by 300 NM (5 500 NM)

The cabin size is increased by 50 cm (+2,2 m<sup>3</sup>) : cross section 2,7 m ; volume 52,2 m<sup>3</sup>

# Falcon 6X - Performances

Maximum range of 5 500 NM at M.80 allowing the following city-pairs :

- ✓ London > Los Angeles
- ✓ São Paulo > London
- ✓ Beijing > San Francisco

Fast aircraft : maximum speed M.90

Range of 5 100 NM at M.85 allowing the following city-pairs :

- ✓ Moscow > New York
- ✓ Paris > Beijing
- ✓ Shanghai > Melbourne

Avionics : EASy III

Milestones:

- ✓ maiden flight : beginning of 2021
- ✓ entry into service : 2022



- Market study and operating specifications
- Validation of building blocks
- Starting of development works
- Launch of necessary investments

## Appreciated by customers for its cabin comfort and silence

- Mature aircraft from its entry into service
- Certification London City Airport : February 2017
- long range demonstration :
  - ✓ Singapour - London
  - ✓ Flight duration : 14 hours
- certification of the FalconEye pilot assistance system
- High speed Satcom certification (for all Falcon family)





# Falcon Family



# Delivery of the 2 500<sup>th</sup> Falcon

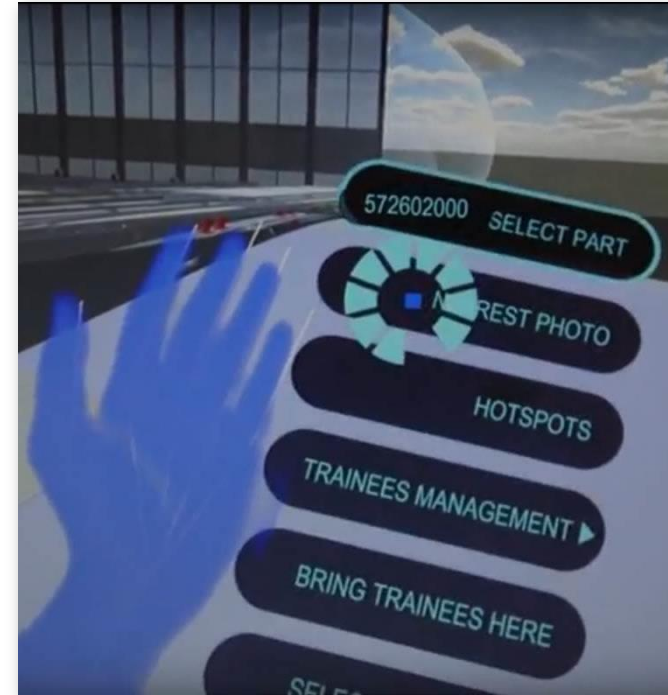


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# Falcon customer support

- Falcon support network expansion : approval of 3 new service centers (in Malaysia, Canada and Austria) bringing the network up to 52 service centers
- Products and services improvement :
  - ✓ extension of maintenance frequency
  - ✓ FalconSphere II (flight preparation assistance)
  - ✓ Falcon Immersive Training, training for mechanics via virtual reality
- Award of the 1<sup>st</sup> prize for spare parts prices and availability in yearly customer satisfaction survey by Aviation International News (AIN)



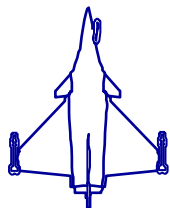
# ***2017 RESULTS***

## ***DASSAULT AVIATION GROUP***

# Order intake, deliveries and backlog *in units*



FALCON



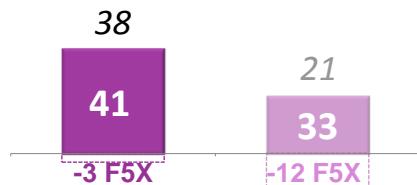
RAFALE Export

RAFALE France

## ORDER INTAKE

2017

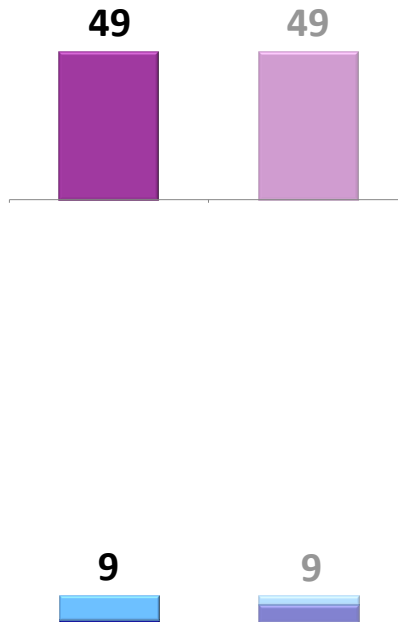
2016



## DELIVERIES

2017

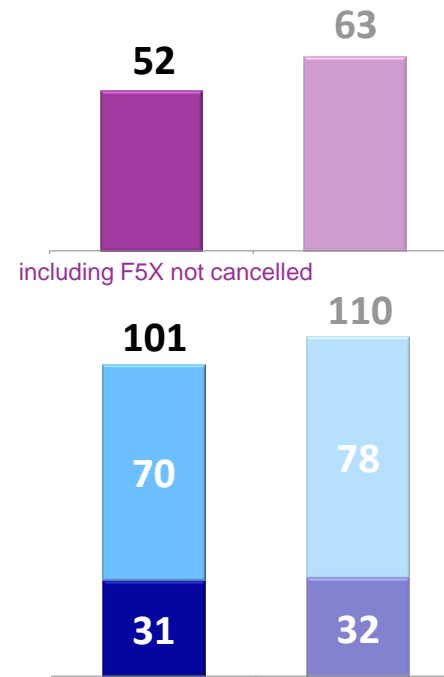
2016



## BACKLOG

12.31.2017

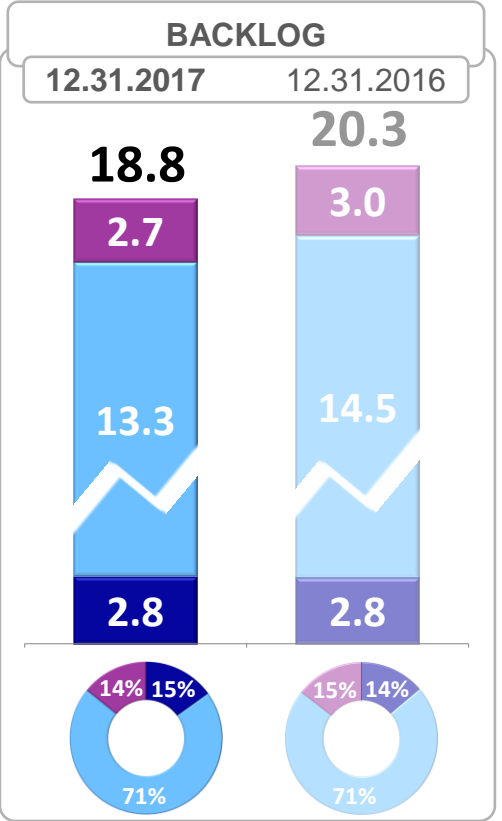
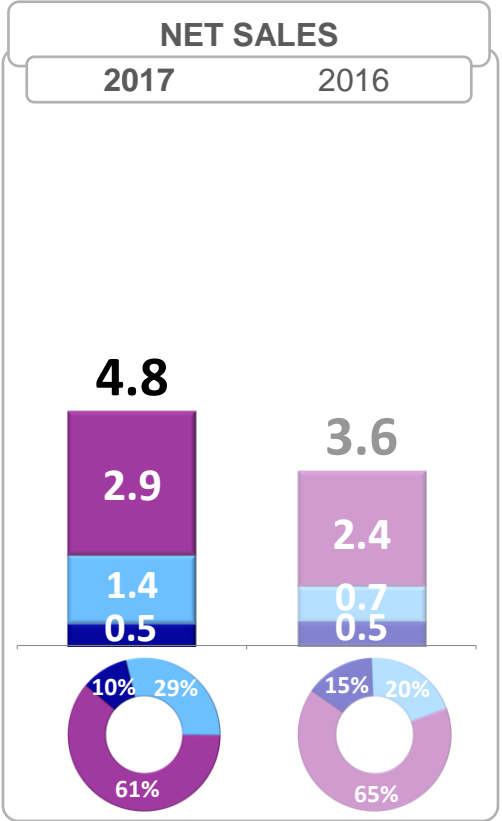
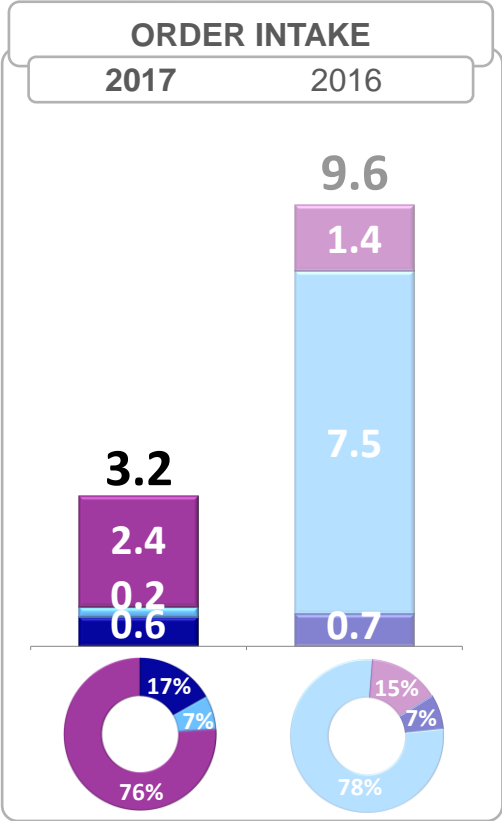
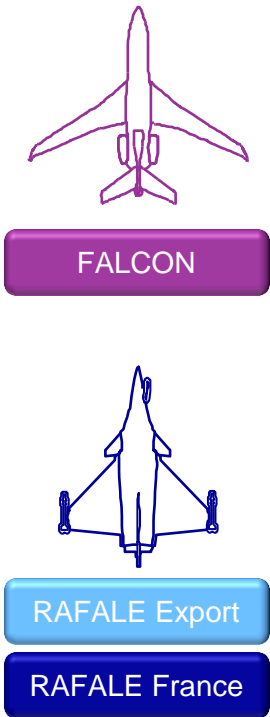
12.31.2016



# Order intake, net sales and backlog

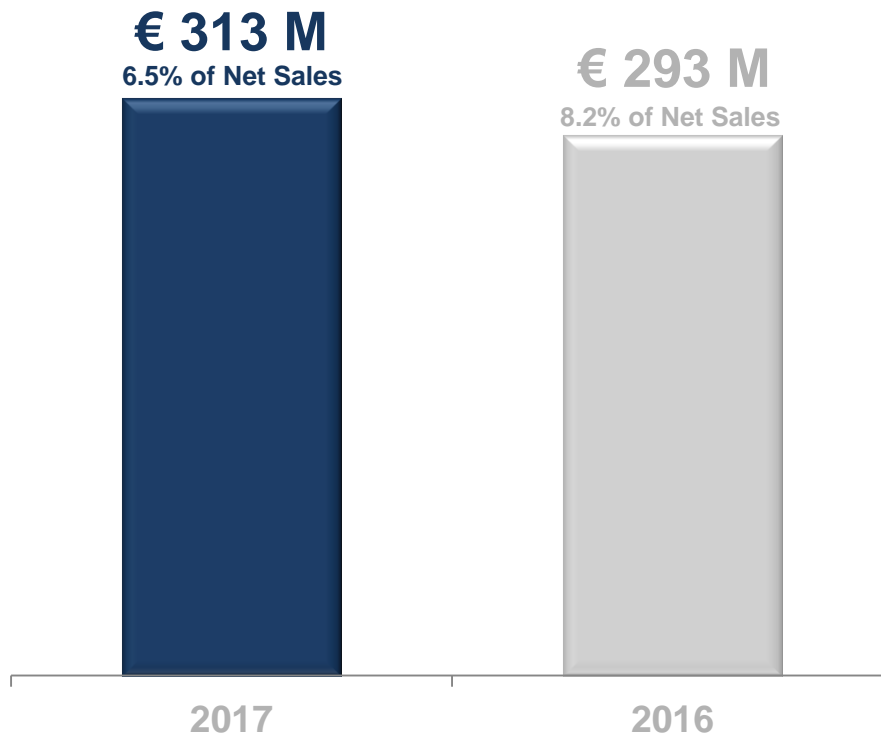
in € Bn

N.B.: Dassault Aviation recognizes the Rafale Export contracts in their entirety (i.e. including the Thales and Safran parts), whereas for France, only the Dassault Aviation part is recognized.



# Self-funded R&D

*in € million*



- Dassault Aviation has been a shareholder of Thales since 2009 and as a leading industrial shareholder Dassault Aviation has entered into a shareholders' agreement with the French State
- The change in adjusted net income since 2009 is as follows :

<i>in € million</i>	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Adjusted Net Result</b>	-128	-45	517	570	642	562	809	897	<b>982</b>
<i>Adjusted Net Margin</i>	-1.0%	-0.3%	4.0%	4.0%	5.1%	4.3%	5.8%	6.0%	<b>6.2%</b>

- On December 17<sup>th</sup>, 2017, Thales announced an agreement for the acquisition of Gemalto, in order to create a worldwide leader in digital security. The takeover bid should take place in 2018

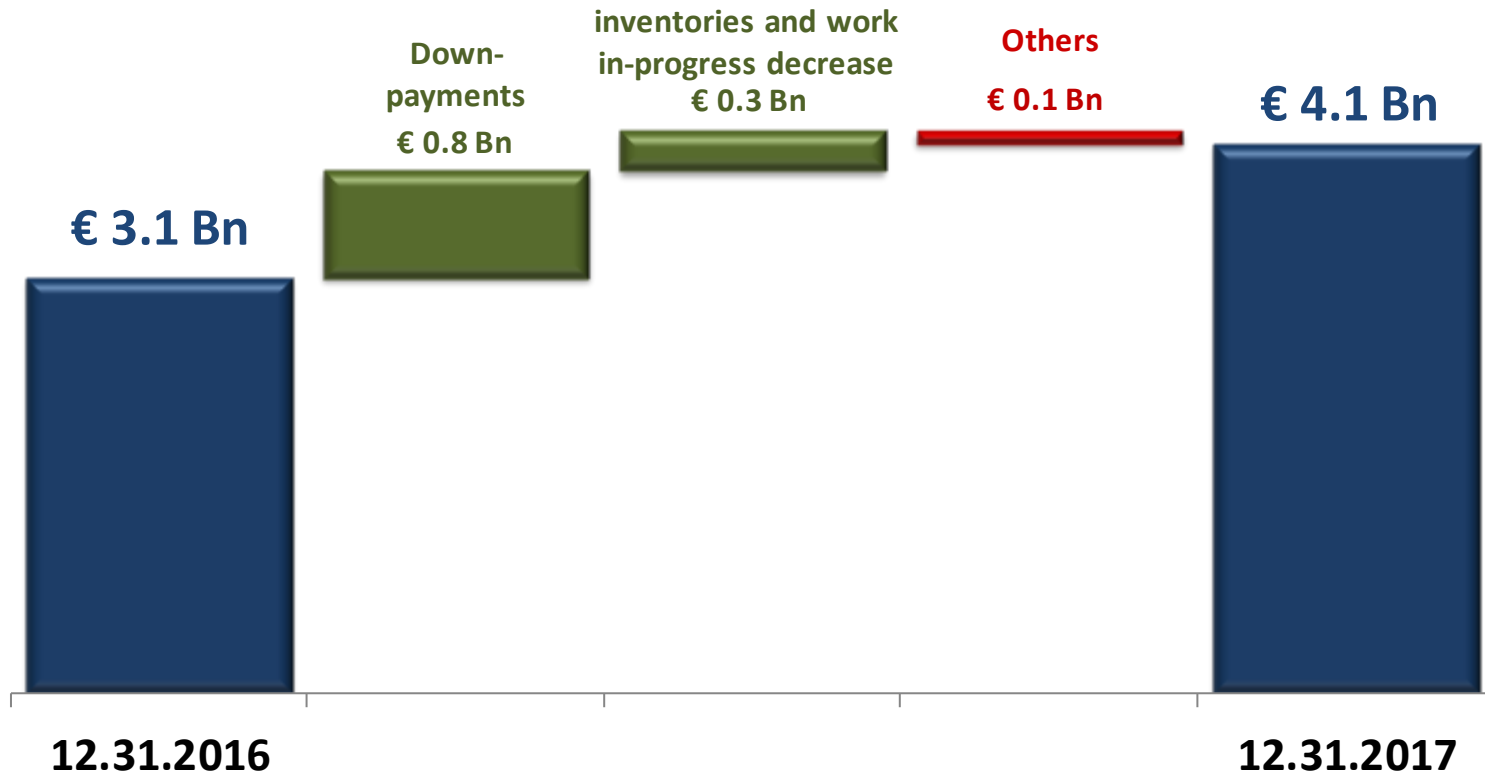


# Group adjusted income statement

<i>in € million</i>	2017	2016
<b>NET SALES</b>	<b>4,808</b>	<b>3,586</b>
<b>OPERATIONNAL RESULT <sup>(*)</sup></b>	<b>348</b>	<b>218</b>
<i>Operationnal margin</i>	7.2%	6.1%
<b>FINANCIAL RESULT <sup>(*)</sup></b>	<b>11</b>	<b>11</b>
THALES and other equity affiliates	245	223
TAXES	-115	-68
<b>NET RESULT</b>	<b>489</b>	<b>384</b>
<b><i>Net result margin</i></b>	<b>10.2%</b>	<b>10.7%</b>
<i>Net result per share</i>	€ 59.3	€ 45.5

(\*) The adjusted operating income excludes the expense related to the commercial dispute with Republic of China (€ 134 M).  
The adjusted financial result excludes also capital gains made on marketable securities to offset that expense.

# Available cash in € Bn



**Dividend's proposal € 15.3 per share  
to be submitted to the Annual General Meeting on May 24<sup>th</sup>, 2018**

	2017	2016
Adjusted Net Result (Group)	<b>489 M€</b>	384 M€
<i>Dividends</i>	<b>127 M€</b>	100 M€
<i>Payout</i>	<b>26%</b>	26%
<i>Dividends per share</i>	<b>15.3 €</b>	12.1 €

NB : in terms of earnings distribution policy, Group employees will receive, under profit-sharing and incentives schemes, **€ 99 million** (whereas the legal formula would have led to an amount of € 2 million)

First effective actions of the transformation plan launched in 2016 :

- initiating the move to bring teams closer to the aircraft in-production
- use the digital as a leverage : unification project of Production and Purchases management (APRISO / SAP), worldwide information system for Falcon spare parts, 3DExperience platform demonstration project, definition of a Big Data roadmap and the launch of a first application on the Falcon health records
- launch of studies and 1<sup>st</sup> investments for the production line and the optimization of our site including :
  - ✓ Argenteuil : exploring studies on the “future Argenteuil” production plant
  - ✓ Argonay : additive manufacturing line
  - ✓ Biarritz : exploring studies on a building for a composite line
  - ✓ Martignas : studies on the transfer of pyrotechnic activities from Argenteuil and Poitiers
  - ✓ Merignac : exploring studies on the Merignac 2020 building
  - ✓ Seclin : machined titanium parts and machined aluminum parts lines
- implementation of the quality approach for design and industrialization (Advanced Product Quality Planning) with the ongoing deployment in the new programs

# 2018 Outlook and Strategy

- obtain qualification of the F3-R standard
- conclude a contract for the Rafale F4 standard
- sign with France the CUGE order for the Epicure mission Falcon
- contribute in the definition of the proposal for a contract to launch the MALE program by the end of 2018
- pursue nEUROn development and tests (additional batch of works)
- launch technico-operationnal studies to define the roadmap for the airborne warfare of the future
- conclude with United Arab Emirates the upgrade of their Mirage 2000-9
- continue promotion and sale of our Falcon and Rafale
- perform the Falcon and Rafale contracts in terms of quality, time and cost objectives
- pursue our efforts in fleet support, key to customers' loyalty
- develop the Falcon 6X
- design and engineer the future Falcon
- make the start of the "Make in India" industrial line successful, from the production of the very first parts
- ensure good execution of the Transformation Plan

## 2018 Guidance :

- **40 Falcon** deliveries, the Company having reacted to the past years' market weakness with a conservative management leading to a production rate ramp-down,
- **12 Rafale** deliveries (9 Export and 3 France)
- **2018 Net Sales close to 2017's**



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