

**DEFENCE AND SPACE** 

Kurt Rossner, Head of Combat Aircraft Systems 05<sup>th</sup> November 2019







#### **Combat Aircraft Systems**

The past: Stabilization

The present: Capability enhancement

The future: New technologies



### TRADE BRIEFING

#### Project "TAKE-OFF" – Project structure

#### **Project** modules



#### **FUTURE BUSINESS: E-SCAN, new built aircraft, LTE\***



P200

Reduction of the **Turn Around Time** 



**Schedule** adherence

Development programs



ILS\*

New performance based contract for repairs



C#3\*

Supply Chain and Planning



Stabilization

The past

The Eurofighter Program set up a holistic improvement project called "TAKE OFF".

<sup>\*</sup> ILS - Integrated logistics support

C#3 – Eurofighter Contract 3

LTE - Long Term Evolution

# TRADE MEDIA BRIEFING

#### The Eurofighter Capability Roadmap



# The present

#### Capability Enhancement

We're focused on delivering our commitments to the **capability evolution** of the Eurofighter.

#### **E-SCAN Radar Mk1 Early Embodiment**

Our mission is to enable the retroembodiment and upgrade of up to:



19 Spanish aircraft sets
Tranche 3 - Start in Q3 2022

- The Retrofit programme paves the way for LTE\* / Export / FCAS\* and EW\* capabilities.
- The E-SCAN Mk1 programme provides Germany & Spain full national radar sovereignty in system & equipment.
- The goal is a contract award by end of 2019 / early 2020.





# The present

#### Capability Enhancement

The E-SCAN Mk1 Early Embodiment forms one of the key elements of the Eurofighter's evolution.



<sup>\*</sup> LTE – Long Term Evolution FCAS – Future Combat Air System Mk1 – Mark 1 EW – Electronic Warfare

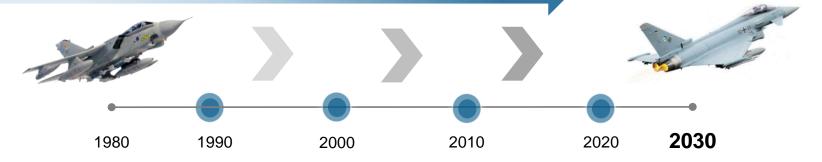
#### Project Quadriga

38 German new production aircraft (7 Twin Seater / 26 Single Seater + 5 Single Seater optional)



- Quadriga will replace the German Tranche 1 Fleet.
- The aircraft standard shall include the E-SCAN Radar including a new Multichannel Receiver.
- Quadriga delivers the necessary capacity for the German Air Force.
- The goal is a contract award early 2020.

#### Opportunity: TORNADO replacement



- Requirement for a **total of 85 aircraft** split in 2 batches:
  - 45 with strategic capabilites.
  - 40 with an Escort Jammer capability included.

The Eurofighter is capable to replace the TORNADO in **all missions**.



# The present

#### Quadriga

The German Ministry of Defence (MoD) has decided to replace the existing Tranche 1 fleet with new built Eurofighter.

## TORNADO replacement

The German MoD seeks to replace its ageing TORNADO fleet by 2030.





### Eurofighter Export Campaign Switzerland



## The Present

#### Eurofighter as the New Swiss Fighter

Airbus proposed up to 40 Eurofighter as replacement for the F/A-18 Hornet and F-5 Tiger.

Type selection by the Federal Council is awaited end of 2020 / early 2021.

**AIRBUS** 

Ideal platform for air policing requirements in challenging Swiss topography and airspace.

Eurofighter offers full autonomy in mission data and technology access for Switzerland.

Identical configuration as German Quadriga and joint Procurement ensures economic benefits for Switzerland.

Airbus and Eurofighter offer reliable projects to satisfy Swiss industrial participation requirements.



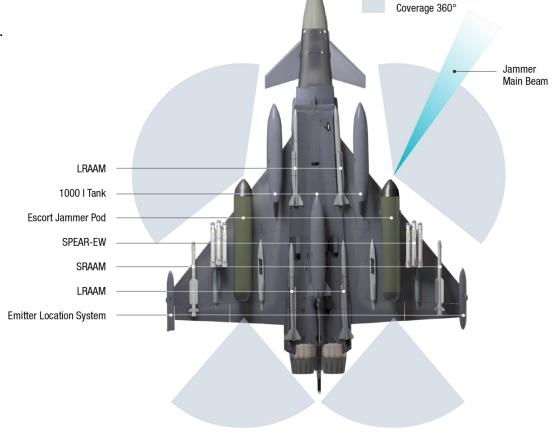
## TRADE MEDIA BRIEFING

#### **Eurofighter ECR SEAD\* capability**

Electronic Attack (EA) mit Stand-in-Jammer

Main Beam Azimuth

- Collaborative German industry approach.
- · Part of the key technology roadmap.
- Possibility to combine Escort and Stand-in Jammer.
- Initial capability through a podded solution and full capability with LTE.\*



### The future

ECR concept based on Eurofighter

With the electromagnetic spectrum gaining further relevance, the ECR is an essential contribution to the future battlefield.



<sup>\*</sup> ECR – Electronic Combat Role SEAD – Suppression of Enemy Air Defences LTE – Long Term Evolution

#### Eurofighter LTE will enable FCAS



#### **SPACE DATA HIGHWAY**

- High-speed data transfer for Low Earth Orbit satellites
- Access to satellite based imagery near-real-time
- New generation of satellites for sensing and secure communications

#### REMOTE CARRIERS

- Autonomous
- Smart & connected
- Manned / unmanned teaming & swarming

#### **NEW FIGHTER**

- Low observable
- Extended range
- C2 on unmanned effectors
- Survivable
- ISR + data fusion and distribution





## The Future

Future Combat Air System (FCAS)

through

Eurofighter Long Term Evolution (LTE)

Eurofighter **LTE** will be the main catalyst to enable **FCAS** before the arrival of the New Generation Fighter (**NGF**).



Thank you!