

# An Industry View on EMAR Implementation

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AeroSpace and Defence Industries  
Association of Europe



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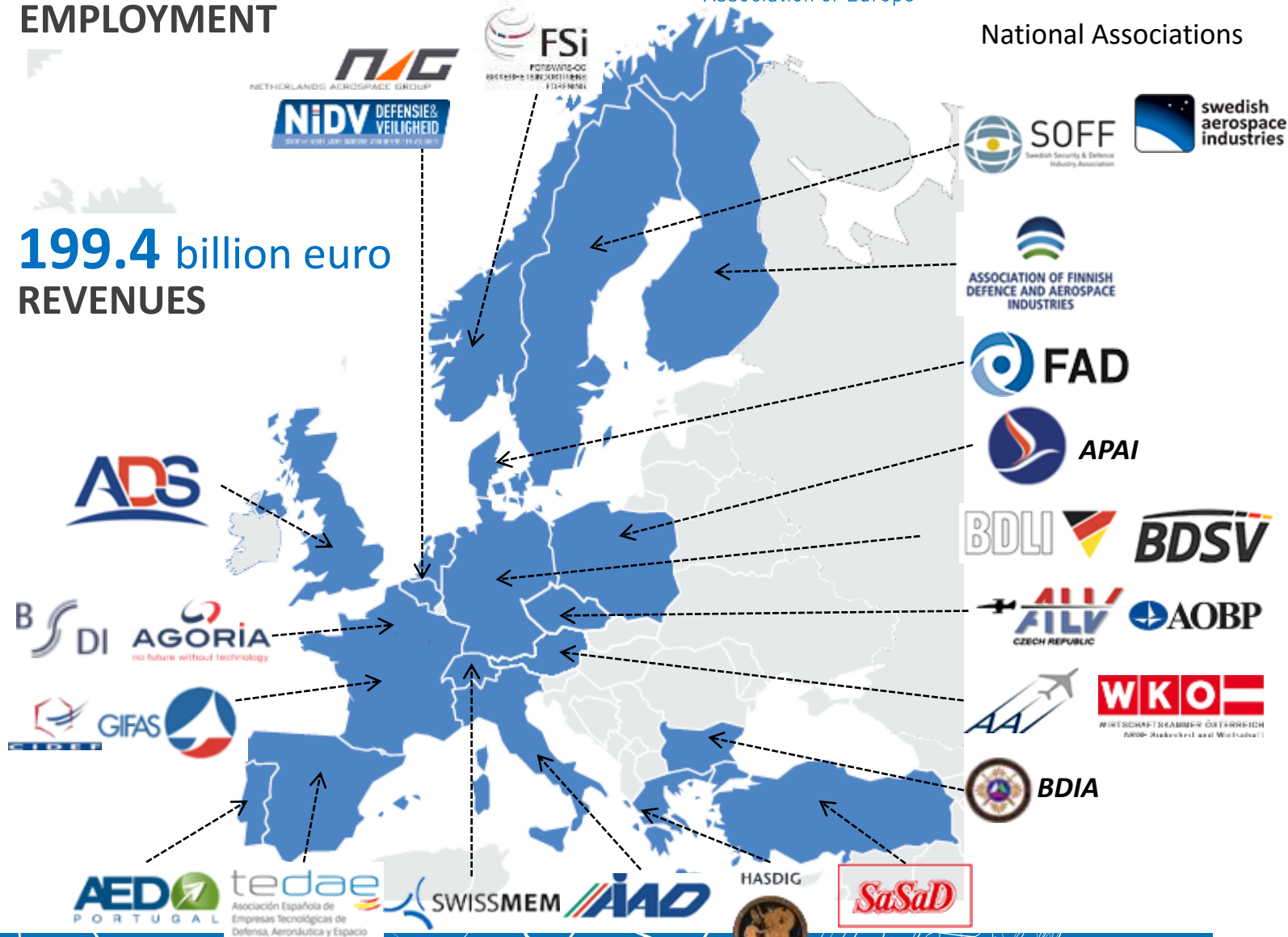
**534,621**  
EMPLOYMENT

**199.4 billion euro**  
REVENUES

Companies



National Associations



# ASD Vision for Military Airworthiness in Europe

## The ASD Vision

A single European Military Airworthiness Organisation (JAA Model) owning a suite of European Military Airworthiness Requirements used by all participating Member States to govern peacetime European Military Airworthiness activities...

...facilitated by Mutual Recognition, consistent implementation and Standard Industry Arrangements including Obligations and Privileges

# Regulatory Implementation

- MAWA initiative under co-ordination of the European Defence Agency (EDA) achieved completion all planned EMARs, now undergoing regular update.
- One of the key challenges to the success of the MAWA initiative is how effectively the EMARS can be integrated within National legislation and regulations.
- Common and consistent implementation of EMARs into national regulation is now the most important issue for the success of the MAWA initiative.
- There needs to be a non-dogmatic approach by Governments, the Authorities and Industry.
- Our preference would be for the EMARs to be 'Adopted' by the participating Member States (pMSs).

# Regulatory Implementation (cont'd)

- Mutual recognition across pMSs deemed critical to success of MAWA Initiative.
- Common Implementation to minimise differences in national regulation allows to uncover full opportunity for mutual recognition.
- Progressive mutual recognition by respective pMSs until such time that a tipping point was achieved that allowed for a single pan pMSs approval to be granted for existing approvals (JAA type model).
- A strategy and plan is required outlining process and timeline for EMAR implementation how to achieve mutual recognition across all pMS, and who should lead implementation of the strategy.

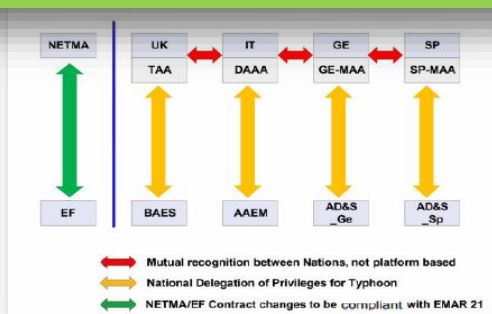
# EMAR 21 for Eurofighter – The Approach

- The approach relied on national regulatory oversight (by the National Aviation Authorities (NAAs)) of each of the Eurofighter Partner Companies (EPCs).
- Each EPC gained Military Design Organisation Approval (MDOA) Privileges in support of the relevant work share.
- In the UK, EMAR21 Privileges (ref. Regulatory Article (RA) 5850(10)) have been granted to BAE Systems as a MDOA by the UK MAA, with Oversight responsibilities residing with the Type Airworthiness Authority (TAA)
- Principles of Classification of Major/Minor Change and Certification of Minor Change are based upon the Change Management arrangements prescribed in the NETMA Production and In-service Contracts.
  - guidance on Classification criteria was created based on the EMAR 21 AMC
- Mutual Recognition between the national regulators (NMAAs) allow these national privileges to be internationally recognised by the core nations.
- Eurojet intend to follow same approach for the engine

# EMAR 21 for Eurofighter – the Program



NETMA Ministerial Task Force – Commitment to Implement elements of EMAR on Typhoon



Jan 2014

Documentation Framework and MDOAs

- Signature of M.R. certificates 12 in total
  - Signature of EF/NETMA Side Letter
  - Industry MDOA certificates for Gamma privileges were available
- AD&S\_SP    BAES    FNM    AD&S\_GE

Dec 2015

EF NETMA Approval



Signing Ceremony for Phase 1

Jan 2016



# EMAR 21 for Eurofighter – the Experience

- **Coordination of the process, together with procedural and contractual updates, required to support the implementation, has proved challenging and difficult**
  - **Numerous Quality Assurance Procedure updates, Contractual Side Letters, Bridging Documents, Programme Directives, etc.**
  - **Not only the production of these documents but the gaining of multiple Stakeholder agreement**
- **The approval status and the function of Eurofighter Jagdflugzeug GmbH as the Coordinating Design Organisation (CDO) has been a point of debate**
  - **Eurofighter are not and will not be approved as a MDOA but will be subject to an International Audit of the CDO function**
- **Mutual Recognition has been achieved between NMAA regulators, but at this stage has not precluded interest in continued ‘participation’ in the decisions and the output of the other partners**

# Discussion and Conclusions

- Strong interest by industry to work in EMAR arrangements releasing significant benefits as regards cost, time and complexity.
- Benefits of successful implementation will rely on NMAAs granting approvals as per EMAR (or National equivalent) and recognition of approvals granted by the other NMAAs without further verification.
- ASD believe that granting of common privileges is essential to operate an efficient and effective pan pMSs organisation approval framework.
- Mutual Recognition activities benefit from harmonised regulatory baseline of EMAR.
- Concentration on common approach as opposed to getting stuck with the recognition of too many national differences.
- There is a need for common best implementation practices.

# Evolution of the MAWA Initiative

- Is there scope for a true single European Military Airworthiness Organisation that co-exists with existing NMAAs?
- What could be its scope and which generic aspects of regulation could be proposed for a central organisation?
- Could the role of EDA include involvement in outlining a strategy leading up to the formation of a European Military Airworthiness Organisation under EDA/MAWA?
- As a first step could a central organisation have its powers enhanced particularly in the areas of facilitating mutual recognition, managing organisation approvals and privileges?
- Could the EDA and MAWA Forum in its proposed new future role work towards consolidation of central tasks into that central organisation?
- Could the proposed EDA Military Coordination Cell (MACC) take the lead in developing common practices for the implementation?

# Summary

- **ASD welcome completion of EMARs as a substantial achievement and confirm full commitment to support MAWA in common implementation of EMARs into national regulation, to allow work in EMAR arrangements.**
- **Remarkable progress evidenced through achievement of Mutual Recognition as fundamental basis for successful implementation of EMAR21 on Eurofighter Typhoon nations.**
- **A strategy and plan is required outlining process and timeline for EMAR implementation how to achieve mutual recognition across all pMSs, and who should lead implementation of the strategy.**
- **Enhanced role of EDA as the lead organisation further integrating key aspects of MAWA initiative could help the European Military Airworthiness Harmonisation to pursue next steps.**
- **ASD are committed to support the MAWA Forum and EDA in proposed future Airworthiness Coordination Configuration to achieve this task.**



# Thank you



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