



Ministry of Defence



EU MAA Recognition Challenges and Benefits in the MMF Program



Military Aviation Authority NLD

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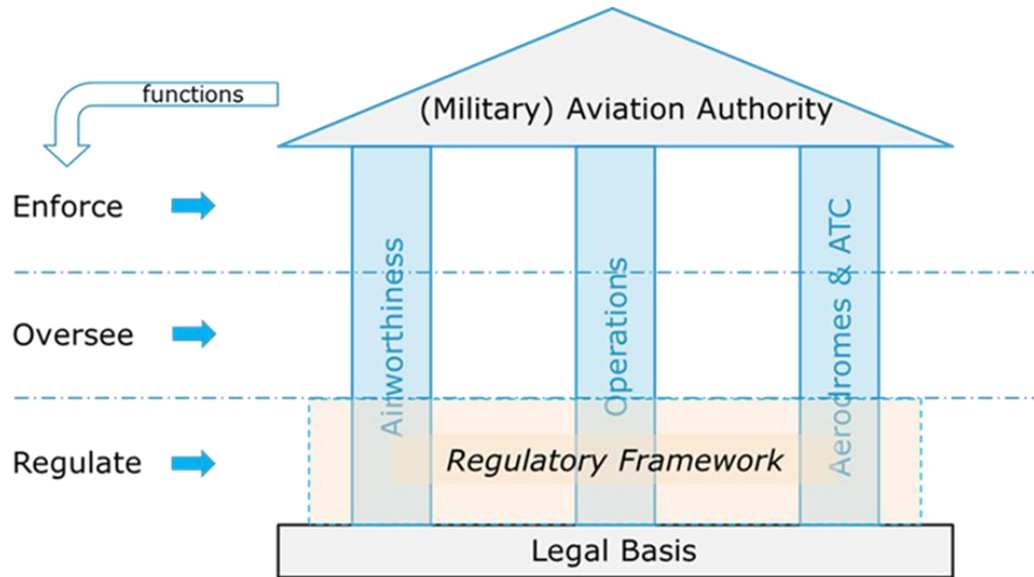


Overview

- Intro MAA-NLD
- The MMF program
- MMF related recognition
- Challenges & benefits
- Summary / question time



NL approach: Military Aviation System (MAS)



Legal basis:	aviation act (responsibilities for MinDef on mil air ops)
Ministrial decree:	MAS = framework for mil aviation safety
MinDef:	operator + regulator + surveyor
MAA-NLD:	independent surveyor for safety in MAS



MAA-NLD

- authority for military aviation
 - Initial & continuing airworthiness
 - Aerospace safety (Ops, ATM, support services)
- responsibilities
 - MTC / CoA for all mil A/C
 - Oversight MAS
 - Exemptions (DG, airfield/airspace use, regulations)
 - Regulations (NLD-MAR-....)

42₍₊₁₀₎ FTE (↑)



EMAR vs MAA-NLD regulations

"old" NL regulation*	EMAR req't	pub. date	NL regulation	pub. date
MLE-145	EMAR 145 1.2	Oct 2016	NLD-MAR 145 1.0	Mar 2019
MLE-21	EMAR 21 1.3	Feb 2018	<i>NLD-MAR 21 1.0</i>	<i>Dec 2021</i>
MLE-66	EMAR 66 1.0	Sep 2014	NLD-MAR 66 1.0	Dec 2019
MLE-147	EMAR 147 1.1	Sep 2014	NLD-MAR 147 1.0	Dec 2019
MAR-OPS, subpart M	EMAR M 1.0	Oct 2015	NLD-MAR M 1.0	Jan 2019

* compliant with EASA parts



The MMF* program (1 of 5)

The Airbus A330 MRTT provides to the MMF Nations (simultaneously):

1. Transport of passengers and cargo

- ✓ Transport of up to 267 troops
- ✓ Cargo payload up to 45 tons
- ✓ VIP ferries

2. Air-to-air refuelling (AAR)

- ✓ No need for additional fuel tanks
- ✓ Boom & Drogue air-to-air refuelling systems.
- ✓ 111 tons for air-to-air refuelling missions

3. Aeromedical evacuations (MEDEVAC)

- ✓ 6 Intensive Care Units (ICUs)
- ✓ 16 stretchers

4. Self-protection

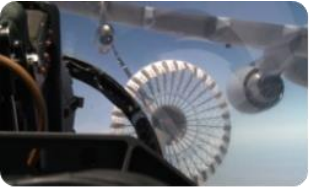
- ✓ DIRCM system (J-Music by Elbit)
- ✓ Integrated solution

5. Growth Potential

*MMF = Multinational MRTT Fleet
MRTT = Multi Role Tanker Transport*



The MMF* program (2 of 5)



Aircraft Quantity: 9 A330 MRTTs
Options: 2 additional aircraft FFP



Indicative dates:

- Aircraft #1 Delivery: July 2020 (MMF05 31 AUG 2021)
- Aircraft #7 Delivery: Aug 2022 (Aircraft #8/9 end 24)



Operational aspects:

- Two bases: Eindhoven NLD (MOB) and Cologne DEU (FOB+)
- Operational Tasking by EATC (OPCON)



Fleet support (ISS/ILS):

- Initial Airbus DS contract covers 2 first years. FOS under definition
- MMF Nations responsible for ML1; ADS for ML2 & ML3



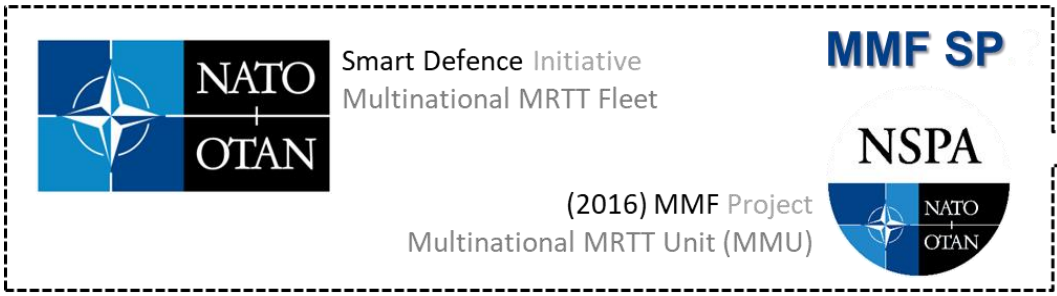
Engine Support:

- Support solutions being contracted.



The MMF* program (3 of 5)

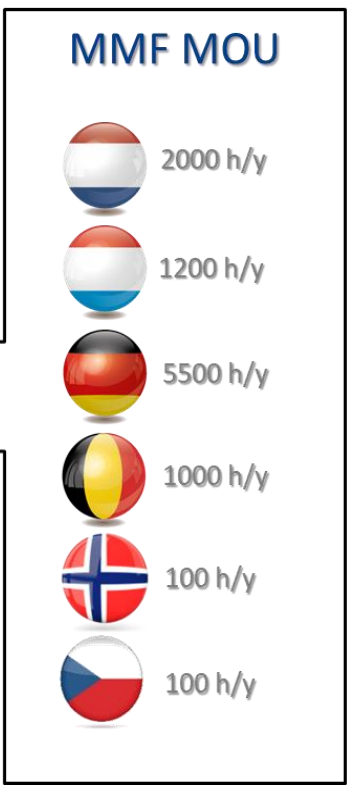
(2012) Pooling & Sharing Initiative
Air-to-Air Refuelling (AAR) Pillar
Increase European Air to Air Refuelling Capability



(2016) Delegated MMF (ADS) Contract Manager
Acquisition of Aircraft
+ 2-year initial in-service support

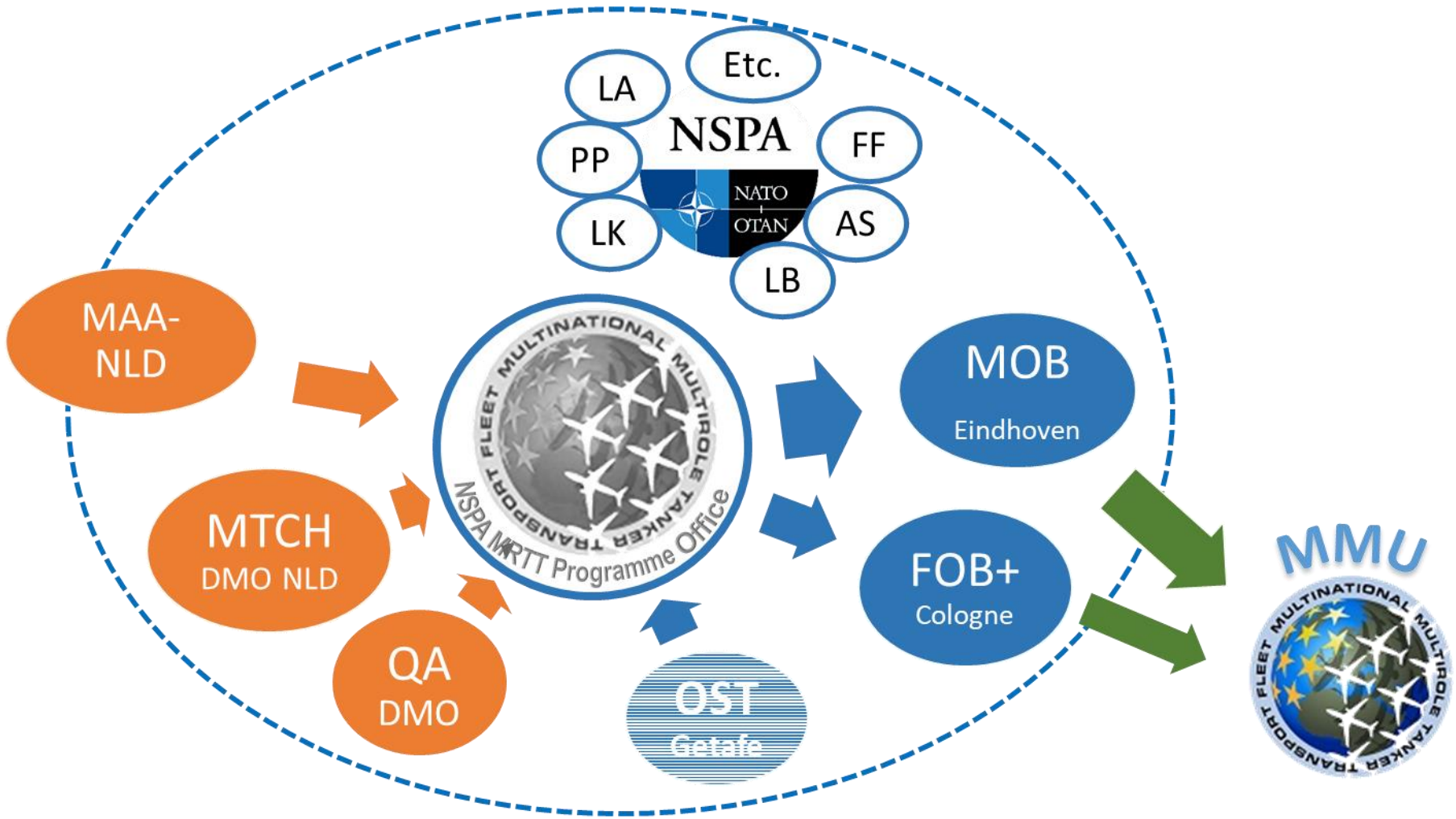


A330 MRTT + 2 years of Initial ISS
Sole source acquisition



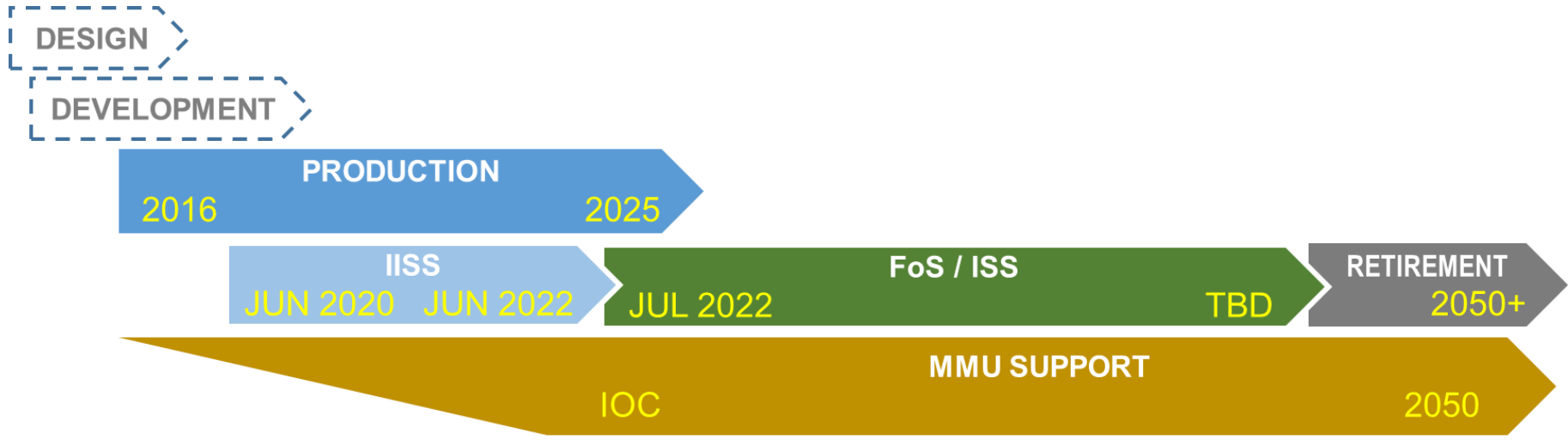


The MMF* program (4 of 5)





The MMF* program (5 of 5)





MMF related recognition (1 of 3)

- **MoU1** : “... Registrating Nation (RN) will assume all responsibilities associated with registration ...”
- **MoU2**: “.. oversight of operations, training, continuing airworthiness, AAR certification and licensing”
- **MoU3**: “... participants will recognize NMAA of RN ... and task for oversight ... ”

Note: remaining recognitions for CZE and NO in progress



MMF related recognition (2 of 3)

- ADS oversight:
 - Recognition certificate by D-DiGAM & D-MAA-NLD on 19/9/2019
 - Certificate mentions technical bodies: DGAM & INTA
 - ID with DGAM for 145, 147 & 66
 - ID with INTA for 21G & J
- Process with DGAM
 - DGAM audits & recommends to MAA-NLD
 - MAA-NLD accredits ADS as MPO, MMO and MMTO
- Process with INTA
 - INTA audits & recommends to MAA-NLD
 - MAA-NLD accredits ADS as MDO & MPO



MMF related recognition (3 of 3)

- Oversight for operator (MMU):
 - NLD-MAR M for continuing airworthiness
 - NLD-MAR 145 for maintenance
 - MAR-OPS 1 for transport aircraft
 - MAR-FCL 1 & 3 for (medical) flight crew
- Spin off
 - Step 2 recognition with GE (use of MRTT&NH90 artefacts)



Challenges and benefits

- **Challenges:**
 - Effort for recognition process (i.e. making the ID's)
 - Decision process MMF
 - Certification with 2 bodies (MAA & MTCHO)
- **Benefits**
 - All nations "enjoy" MAA and MTCHO effort by one nation
 - "Free" Total Aviation Approach
 - Real benefits yet to come



Summary

- MAA-NLD
 - Total Aviation System approach
 - Regulation AW EMAR-based; rest ICAO/EASA
 - Too small
- MMF program gives very capable aircraft for AAR & AE simultaneously, with pax
- Despite MAA recognitions, complete coverage of oversight remains challenging but worth the effort



Key message

Bilateral NMAA recognition at program level with implementation agreements is challenging but the MMF program is an example that shows that it is worth the effort.

