

MAWA Conference Aix-en-Provence, 25 September 2013





FR DSAÉ and UK MAA Mutual Recognition

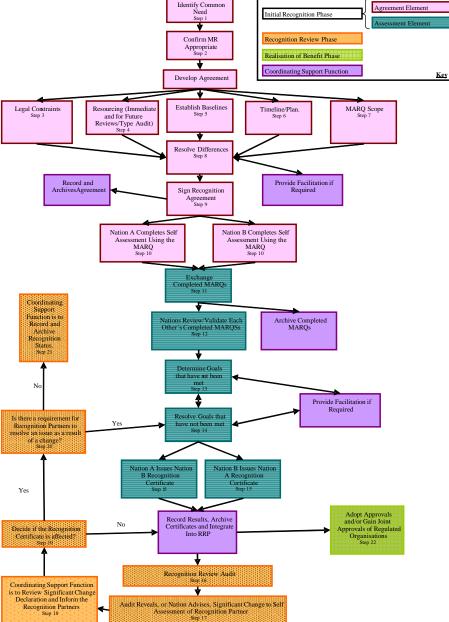
Pathfinder Concept

- 21 Sep 2011, MAWA Exec Level: FR DSAÉ proposed the A400M programme as the pathfinder for the continuing airworthiness of all current and future cooperation programmes
 - Successful implementation of EMAR 145 was necessary
- 25 Jan 2012, TF1: UK MAA and FR DSAÉ decided to enter into a Mutual Recognition Pathfinder project based on A400M and EMAR 145
 - As part of the development programme it was thought that there would be benefit from running a parallel Recognition Pathfinder
 Project to help construct, and eventually validate, the draft EMAD R
 - A400M identified as common need where recognition will provide benefits.





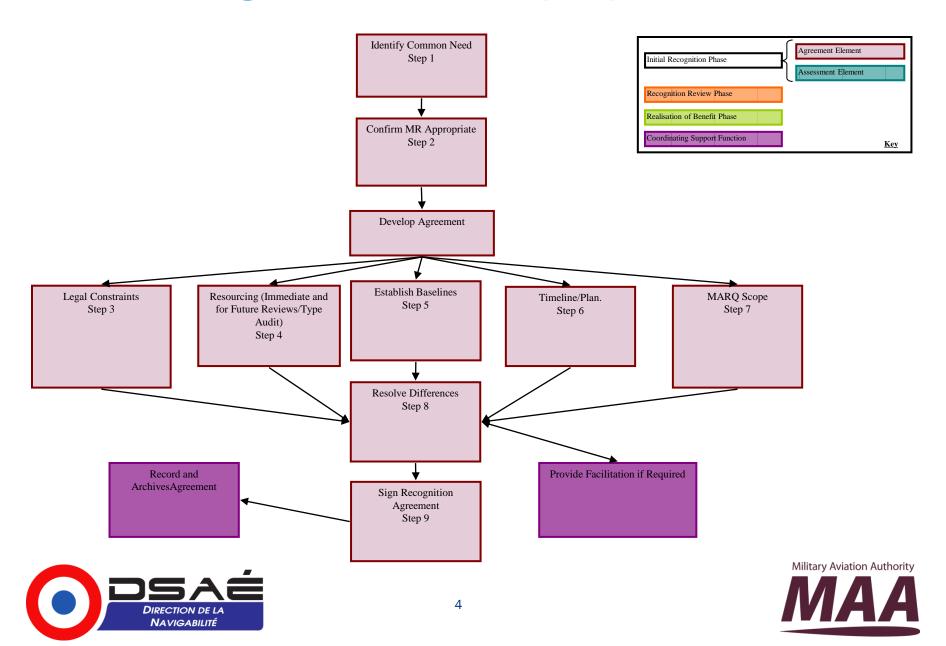
Mutual Recognition Process Map







Initial Recognition Element (IRE)



- UK MAA and FR DSAÉ negotiated a Recognition Agreement as per draft EMAD-R
 - Recognition basis: continuing airworthiness, in particular EMAR 145, for the purpose of a joint UK FR ISS contract for the A400M.
 - Military Authorities' Recognition Question-set (MARQs)

Sub Sect 1.1
Airworthiness Regulator

Always Invoked

Sub Sect 1.2
Airworthiness
Inspection

Sub Sect 1.3
Production Oversight

Sub Sect 1.4
Aircraft Certification

For the scope of continuing airworthiness, filling in the MARQs « Airworthiness Regulator » and « Airworthiness Inspection » is sufficient





Timeline/plan

| Legal Constraint (Including References) | Action |
|---|--|
| For DSAE, French is the official language for legal documents and therefore translated documents may not be available in all cases. | If issues arise then translations may be made with sufficient prior notice. |
| Audit of French Information Systems will encounter language barriers. | DSAE offers assistance to overcome this issue should it arise. |
| UK will retain Mil Part 145 rather than implement EMAR 145. | UK will demonstrate compliance of MRP (Mil Part 145) with EMAR 145 through the EMAR 145 QS. |
| FRA will adopt EMAR 145 as an annex of the FRA 145 regulation, translated in French and applicable to A400 M programme. | FRA to declare that the official translation of EMAR 145 to the French language is an 'adoption' of EMAR 145 into the French regulation. |
| Regulation basis discrepancies. | Joint approval teams will be required to address the regulation basis discrepancies for issuing a joint approval. |





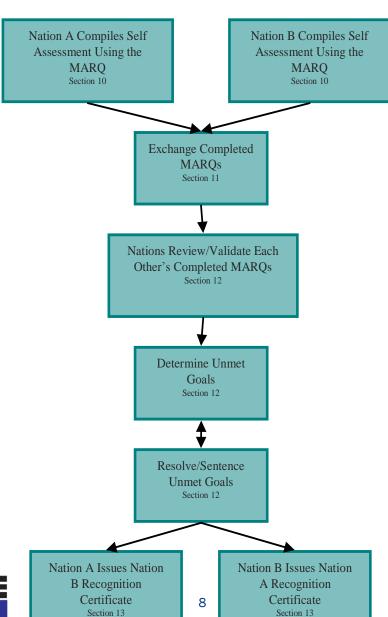
- The Recognition Agreement was signed
 - by MAA Technical Director on 17 Oct 2012
 - by DSAÉ Airworthiness Director on 26 Oct 2012







Initial Recognition Element (IRE)





Assessment Phase



Initial Recognition Element (IRE)

Filling in the MARQs:

- It took several months
- Increased workload for non native English speaking pMS to translate the regulation into English for reference in the MARQs
- Preliminary exchange of the MARQs : need to harmonize the answers
 - > Extracts from the regulation to substantiate how a goal is met
 - Human resources dedicated to meet a goal
- Assessment of the MARQs within 2 weeks

Reciprocal assessment audits

- Duration 1.5 days each
- 3 SQEP auditors





- After internal assessment and staffing, UK MAA and FR DSAÉ signed 2 Recognition Certificates in Mar/Apr 2013
 - Signatories at 1*/2* level
 - UK MAA to recognize EMAR(FR) 145 approvals issued by FR DSAÉ
 - FR DSAÉ to recognize MRP Part 145 approvals issued by UK MAA
 - Audits and surveillance for the approval of MOs may be conducted jointly









Lessons learned: Recognition Agreement

- Vital Step in the Process
- Gains Commitment from Recognition Partners in terms of resource and timescales:
 - for the initial recognition phase
 - for the sustainement phase
- Identify potential constraints to recognition and issues that might hinder completion of the process





Lessons learned: MARQs

- This is not a pass/fail test
- The MARQ enables the Authority to paint a picture of its operating model in terms of organisation, regulation and policy
- The MARQ provides a common template for a recognition partner to determine whether the other is operating in a way that is compatible with its own mandate
- Sufficient detail should be included to understand arrangements in place. There are no right or wrong answers
- Only subsections 1.1 and 1.2 relevant to the scope of recognition were completed
- Subsections 1.1 and 1.2 were exchanged and assessed
- Questions and requests for clarity were sent ahead of validation visits



Lessons learned: assessment audit

- Validation visits (3 SQEP personnel) were conducted and questions answered by local SMEs as necessary.
- MARQs responses were revised accordingly where appropriate.

- Beyond the MARQs, the assessment audit is essential
 - to better understand the regulation, the organisation and the processes
 and thus
 - to consolidate the confidence





FR DSAÉ status

- DSAÉ was created in Sep 2010 as a provisional structure performing its duties, but not entitled to sign its artefacts
- For the Recognition Process the MARQs were filled in iaw the provisional structure and taking the assumption of EMAR adoption asap
- Decision by the Cabinet to officially create DSAÉ on 3 Apr 2013
 - Decree n°2013-366 of 29 Apr 2013 : creation of DSAÉ
 - Decree of 15 May 2013 to appoint Maj-Gen Bruno Clermont as head of DSAÉ
 - Upon proposal of the Minister of Defence and after approval by the Minister of Interior and the Minister of Finance
 - Decree of 15 Jul 2013 to appoint Brig Guy-Daniel Mary as Airworthiness Director
 - Upon proposal of the head of DSAÉ and after approval of the 7 Air Operating Authorities





FR DSAÉ status

- Additionally the airworthiness decree and the ministerial orders were amended
 - Decree n°2013-367 of 29 Apr 2013
 - Ministerial orders of 3 May 2013 :
 - Duties, Conditions, Registration
 - Continuing Airworthiness (new order)
- DSAÉ is now fully empowered
- Signature of EMAR(FR) 145 and 147 by the head of DSAÉ in Jul 2013 pending official publication
- The MARQs concerning DSAÉ were refined to take this major change into account jaw EMAD-R





Benefit for EMAD-R and other pMS

- This UK FR Initial Recognition process validated the EMAD-R
- TF1 considered that no detailed guidance material is necessary to use EMAD-R

- Sor the benefit of all pMS, UK MAA and FR DSAÉ will provide EDA with:
 - The Recognition Agreement
 - The filled in MARQs
 - FR DSAÉ will provide the refined MARQs
 - The filled in EMAR 145 QS
 - The Recognition Certificates





Sustainment

- EDA AW Office has key role in coordination and archive.
- EDA AW Office will be able to provide advice, guidance and resolution.
- EDA AW Office will be able to assist in coordination of sustainment activity to optimise pMS resources.
- Pathfinder
 - EDA AW Office made aware of progress at each stage.
 - RAs, RCs and completed MARQs available for sustainment, lessons learned and future recognition with other authorities.
 - DSAÉ's and UK MAA's commitment to sustainment and information exchange was written into the RA and RCs.





EMAR 145 approvals required for the A400M ISS

| Maintenance organisation | Location | MAA likely to issue the EMAR 145 approval |
|--------------------------|----------|---|
| AM (EADS-CASA) ITP | ES | DGAM |
| SN | FR | DSAÉ |
| MTU RR DE (*) | DE | MAA DE |
| AVIO | IT | DAA |

^{*} EPI to confirm RR MO: RR DE or RR UK

- Options for the approval of Maintenance Organisations iaw EMAR 145.A.75 in order to take full benefit of using the EMARs on the A400M ISS
 - MO(s) to be audited and approved by their NMAA and the approval issued by the NMAA to be recognized by the MAAs of customer nations
 - Single approval issued by one MAA recognized by other MAAs
 - NMAA to audit their MO(s) and issue a recommendation for approval, MAAs of customer nations to issue their own approval
 - Multiple approvals : one per MAA
 - Joint audits and one approval per MAA
 - No benefit in terms of Human Resources
 - Multiple approvals : one per MAA





Recognition of ES DGAM

- Internal recognition of ES DGAM by FR DSAÉ and UK MAA
 - DGAM requesting internal recognition only
 - Mutual recognition needed later (cf. A400M delivery plan)
 - DSAÉ sent a draft Recognition Agreement to DGAM on 24 Apr 2013
 - Scope of recognition: EMAR 145 and 147 approvals for the A400M with possible extensions to MRTT and CN235
 - UK MAA sent a draft Recognition Agreement to DGAM on 12 Jun 2013
 - Scope of recognition: EMAR 145 approvals for the A400M
 - Meeting in Madrid on 8 Aug 2013
 - Recognition Agreements under signature
 - ES adopted the EMAR 145 and 147
 - published as PERAM 145 and 147 in 2012
 - DSAÉ and UK MAA to carry out the assessment audit jointly in Nov 2013
 - Timeline plan: signature of both Recognition Certificates in Dec 2013





Other recognition processes to come

- Meetings, for A400M at least, to explore and consider mutual or internal recognition with:
 - DE: meeting with DSAÉ on 23 Sep 2013
 - IT: to be organised

 UK MAA exploring external recognition with US Army (AMRDEC)







Thank you for your attention! Any questions?