



Australian Government
Department of Defence
Defence Aviation Safety Program

DEFENCE AVIATION SAFETY REGULATION

Recognition – What it can do for you and the myth behind ‘equivalents’ and ‘alternates’

Continuing Airworthiness conference

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DGTA-ADF DDAAFS ACPA

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Recognition

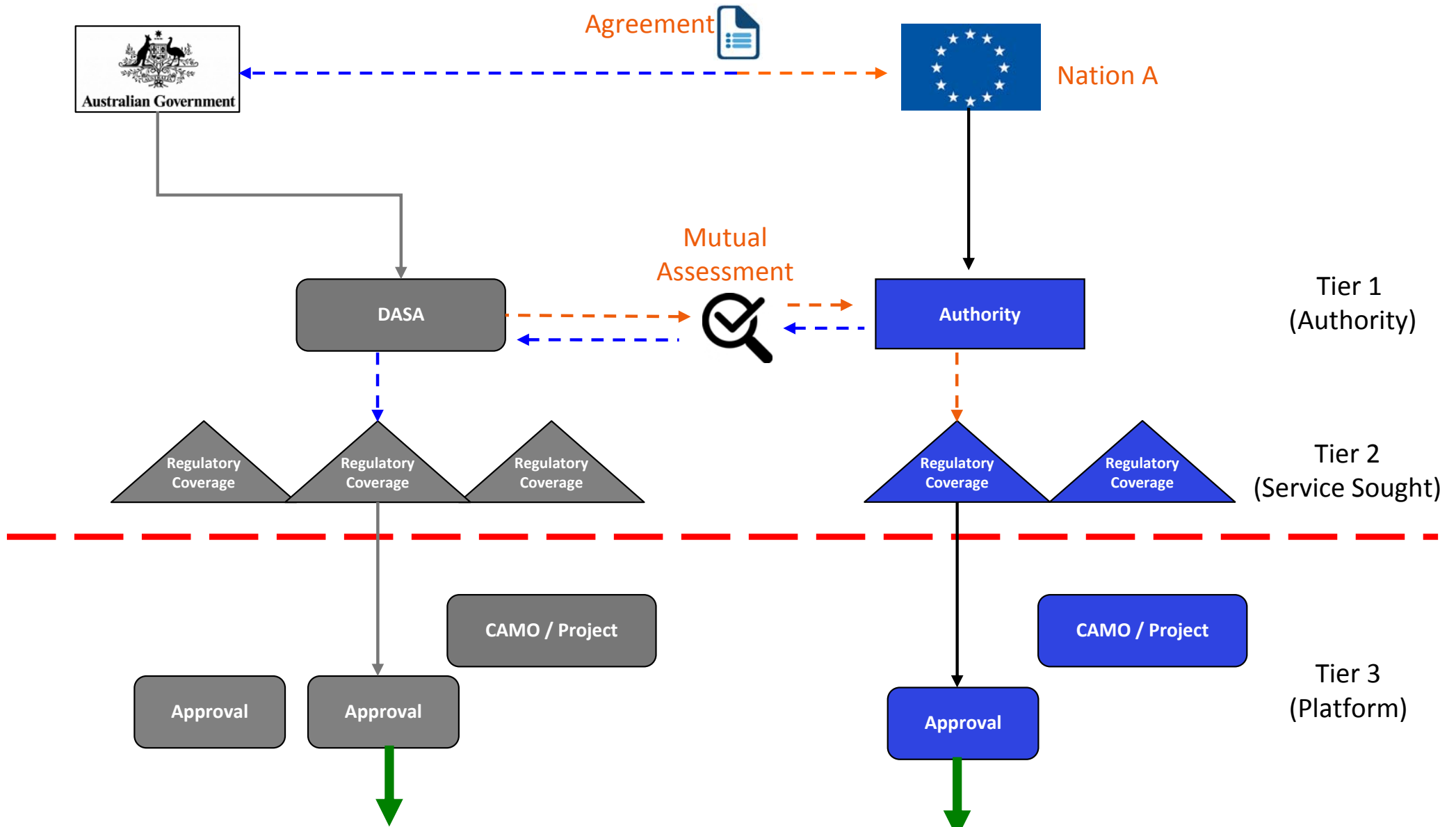
Mutual recognition?

'Equivalent' and 'Alternate' ??

Who can I use ????????????



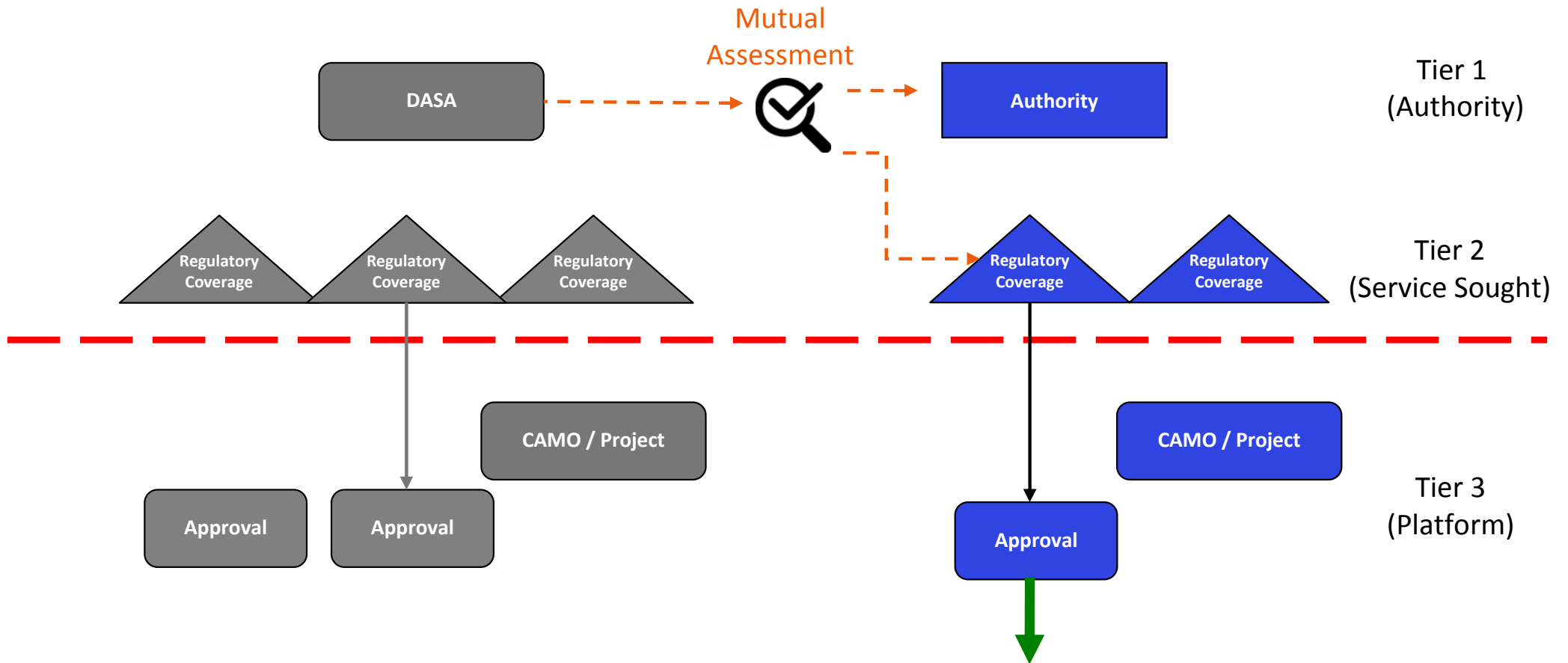
Mutual Recognition and Tiers



The output of the Approved Organisation is the benefit of recognition

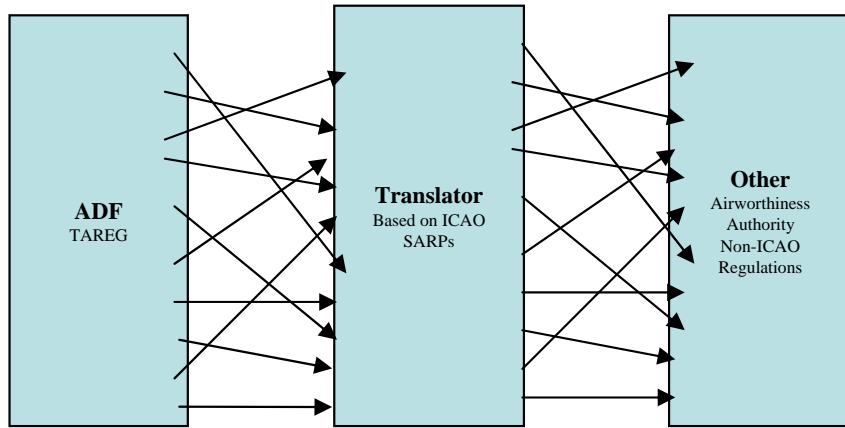


Uni-Lateral Recognition and Tiers



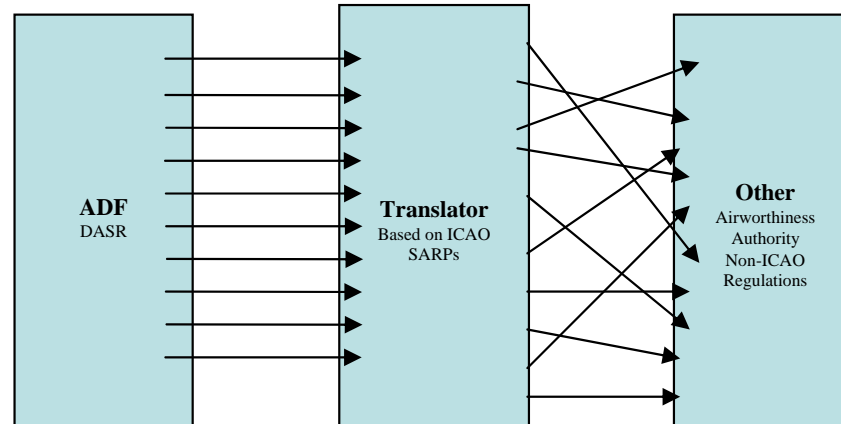
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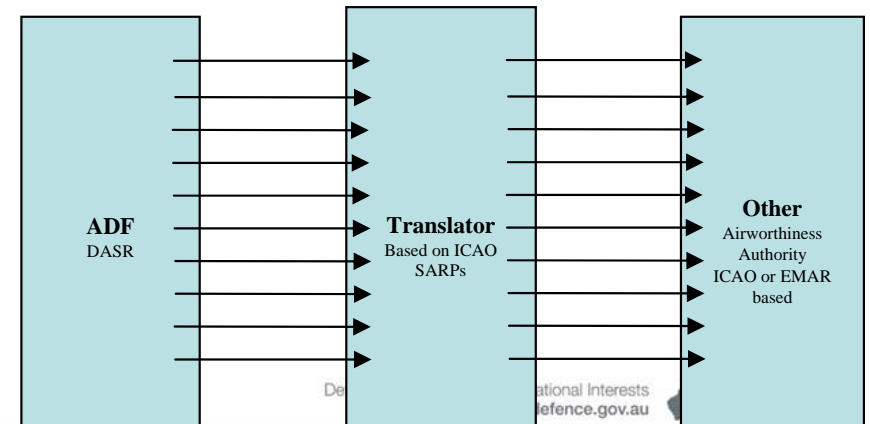


Interactions between Airworthiness Authorities

Interactions between Airworthiness Authorities



Interactions between Airworthiness Authorities using EMAR/DASR



Organizational
Goals
Layer

Sub Sect A
Airworthiness Authority
Always Invoked

Assurance
Goals
Layer

Sub Sect B
Airworthiness Inspection

Sub Sect C
Production Oversight

Sub Sect D
Aircraft Certification



EMAD R - RECOGNITION

MARQ Sub-Section A - Airworthiness Authority					Completing RP			Reviewing RP
Unique Identifying Reference	Goal Level	Airworthiness Safety Goal	Status of Goal	Cross Reference to Guidance Material	How Does The RP Meet This Goal? <i>Provide a Statement, Including How the Air Safety Goal is Met by the RP.</i>	Key Reference	Significant Changes Since Last	Comments (Steps 12 & 13) and Actions
		still achievable.			<i>Complete All Boxes and is not in the</i>			
1.1.5.4	3	The Authority has an effective record keeping system to keep track of key airworthiness correspondence to/from the public, industry and certificate holders.	New	1.1.5.4.a 1.1.5.4.b				
Critical Element Number 6 (CE 6) - Licensing, Certification, Authorisation and Approval Obligations								
1.1.6	2	An airworthiness assurance system has been established, according to the level and scope of aviation activity.	In MARQ Ed 1					
1.1.6.1	3	The Authority conducts type certification (See MARQ sub-set D for further details).	In MARQ Ed 1					
1.1.6.2	3	The Authority oversees production (See MARQ sub-set C further details).	In MARQ Ed 1					
1.1.6.3	3	The Authority	In					
Edition Number : 2.0			Edition Date : 08 Sep 2015					

EMAD R - RECOGNITION

MARQ SUB-SECTION A - AIRWORTHINESS AUTHORITY - GUIDANCE MATERIAL

Unique Identifying Reference	Guidance Material	Cross-Reference to Goals
Critical Element Number 1 (CE 1) - Primary Aviation Legislation		
1.1.1.5a	Primary legislation should stipulate the need for the Authority to perform surveillance of its regulated community.	1.1.1.5
Critical Element Number 2 (CE 2) - Specific Operating Regulations		
1.1.2a	The airworthiness regulations developed, adopted or accepted by the Authority should include provisions for mandatory registration of all aircraft.	1.1.2
1.1.2b	The airworthiness regulations developed, adopted or accepted by the Authority should include provisions for all aircraft on the Authority's aircraft register to meet relevant airworthiness criteria approved or adopted by the Authority.	1.1.2
1.1.2c	The airworthiness regulations developed, adopted or accepted by the Authority should include provisions for the issuance, validation or acceptance of the type certificate for aircraft intended to be entered on the Authority's aircraft register.	1.1.2
1.1.2d	The Authority should ensure the development and promulgation of national regulations regarding the design of aeronautical products.	1.1.2
1.1.2e	The Authority should ensure, if applicable, development and promulgation of national regulations for validation of type certificates for which the State of Registry is not the State of Design.	1.1.2
1.1.2f	The airworthiness regulations developed, adopted or accepted by the Authority should include provisions for the issuance of production certificates or approvals of manufacture organizations when applicable.	1.1.2
1.1.2g	The Authority should ensure the development and promulgation of national regulations regarding the manufacture of aeronautical products.	1.1.2
1.1.2h	The airworthiness regulations developed, adopted or accepted by the Authority should include provisions for the issuance, renewal, validation or acceptance of aircraft certificates of airworthiness.	1.1.2

Maintenance Equivalent

- M.A.201 (g)..... Maintenance of military aircraft, and components thereof shall be carried out by a DASR 145 AMO, or equivalent 145 AMO.
 - The NMAA considers an "equivalent 145 AMO" to be one of the following maintenance organisations:
 - a. A commercial 145 maintenance organisation under an ICAO based 145 maintenance approval (such as a CASR 145, FAA 145 Repair Station or EASA 145 Approved Maintenance Organisation)
 - b. A military or commercial maintenance organisation under an EMAR 145 regulatory framework.

CAMOs intending to utilise “equivalent 145 AMOs” should identify the organisation in the CAME for approval by the NMAA.



Maintenance Alternate by Derogation

- M.A.201 (1)..... the NMAA may agree to an **alternative approach** for a maintenance organisation to demonstrate its capability
 - NMAA may consider the following maintenance organisations to be “acceptable alternates to DASR 145”
 - a. A commercial maintenance organisation operating under a NAA construct that is not using ICAO based 145.
 - b. A military maintenance organisation operating under a NMAA construct that is not based on an EMAR 145 AMO (such as a USAF/USN maintenance squadron for specific aircraft types).
 - A commercial maintenance organisation performing specialised maintenance activities may be approved by the NMAA for use by the CAMO where it is not feasible for a maintenance organisation to become a DASR 145 maintenance organisation and the CAMO can demonstrate that the niche maintenance organisation is unable to conduct maintenance under an existing DASR 145 organisation approval



Design Equivalent and Alternate

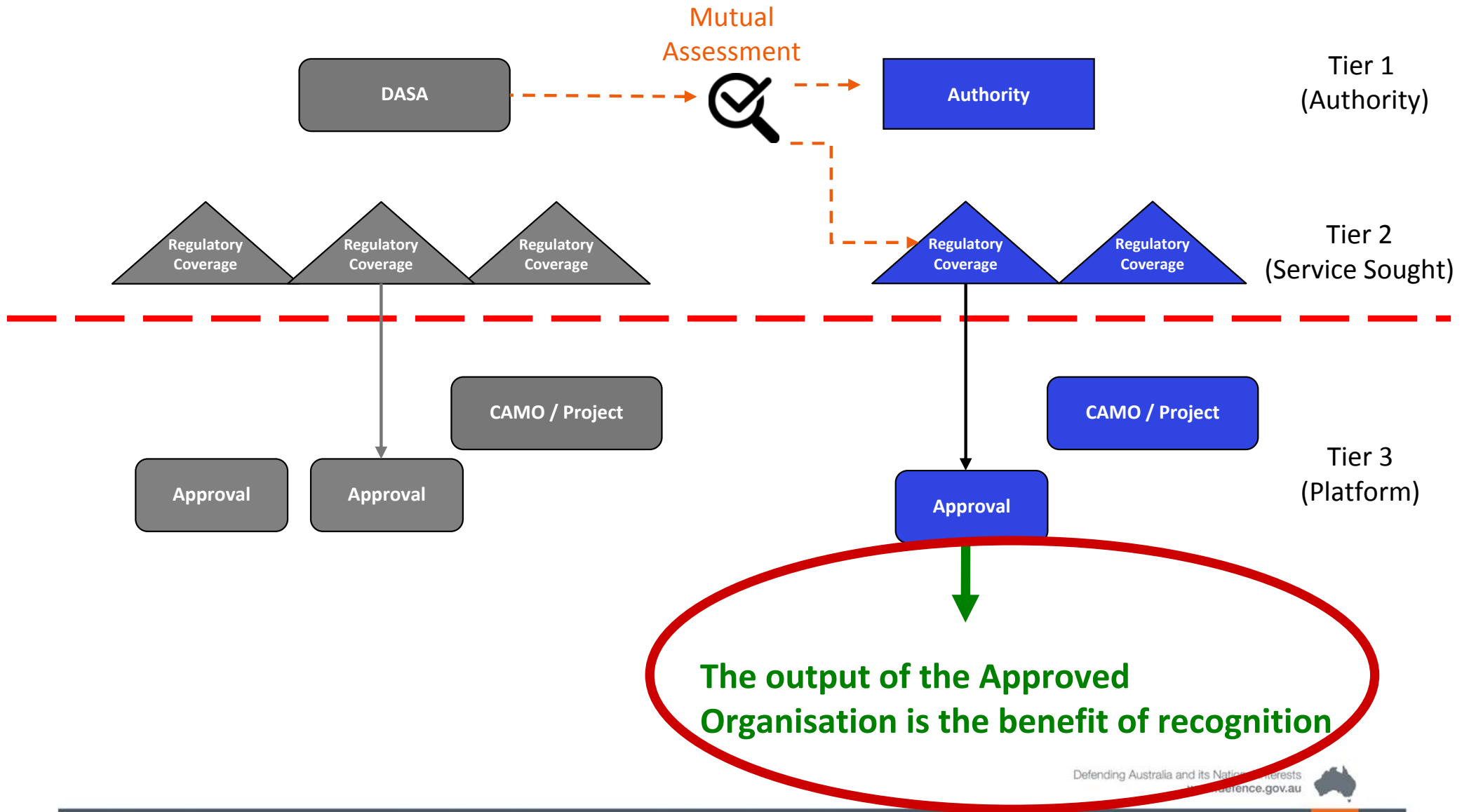
- M.A.304 (d) Damage shall be assessed and modifications and repairs carried out using as appropriate data produced by an organisation as accepted by the NMAA


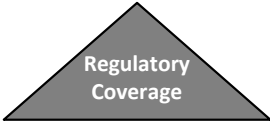











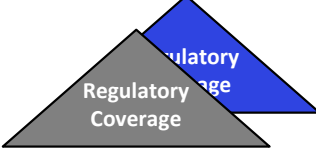

An organisation accepted by the NMAA is either:

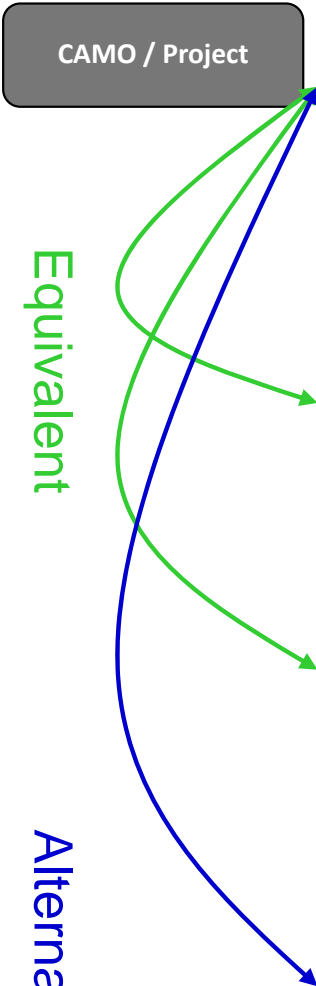
- a) An organisation accepted by the NMAA through recognition of the applicable aviation authority [equivalent and alternate]; or
- b) An organisation accepted by the NMAA through approval of the CAME.



Uni-Lateral Recognition and Tiers



	What you want to use	DASA Assessment effort	Based on Tier 2 and Tier 1 recognition
Equivalent	CAMO / Project  DASA Approved Org	Medium – High Initial and On-going	  Not applicable
	Org covered by a NAA  E.g. 145 or 21J equivalent	Extremely Low – Very Low	  NAA's ICAO Level of effective implementation at above XX%
	Org covered by a NMAA using EMARs  E.g. 145 or 21J equivalent	Very Low - low Adopt - Adapt	  MARQ
Alternate	Org covered by a NMAA not using EMARs 	Medium	  MARQ
Other	Providing DASR authorisation in another system 	Task dependant System structure supports to risk assessment controls	  DASR authorisation and risk assessment



Questions

