



Australian Government

Department of Defence

Defence Aviation Safety Program

Aircraft Airworthiness & Sustainment Conference

Implementing the Defence Aviation Safety Regulations

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DGTA-ADF DDAAFS ACPA

What?

- The Australian Defence Force is implementing a new set of Aviation Safety Regulation to be known as **Defence Aviation Safety Regulation (DASR)**
- DASR will be provisionally promulgated on 30 Sep 16
 - Formal release Jan 17

Scope

- Current state
- Ideal State i.e. key principles of future regulatory framework
- Options
- DASR structure
- Major Concepts / Changes with introduction of new Aviation Safety Regulation
- So What?
- Challenges
- Summary
- Questions?

Current state

Current State - Summary

- ADF Aviation Safety Regulation current state:
 - “Safe”
 - ‘Good Practice’ – perhaps not ‘better practice’
 - Does not **positively** promote efficiencies and harmonisation with other aviation (military and civil) frameworks around the world

Current ADF Aviation Safety Regulation

- Difficult to defend against 'better practice'
- Prescriptive nature promotes over regulation
- Are poorly structured
- Inconsistent interpretation
- Cause inefficient implementation
- Limit interoperability
- Prevent global supply chains
- Impose burdensome certification / compliance



Ideal state

Contemporising regulation

Key principles of future Defence aviation regulatory framework

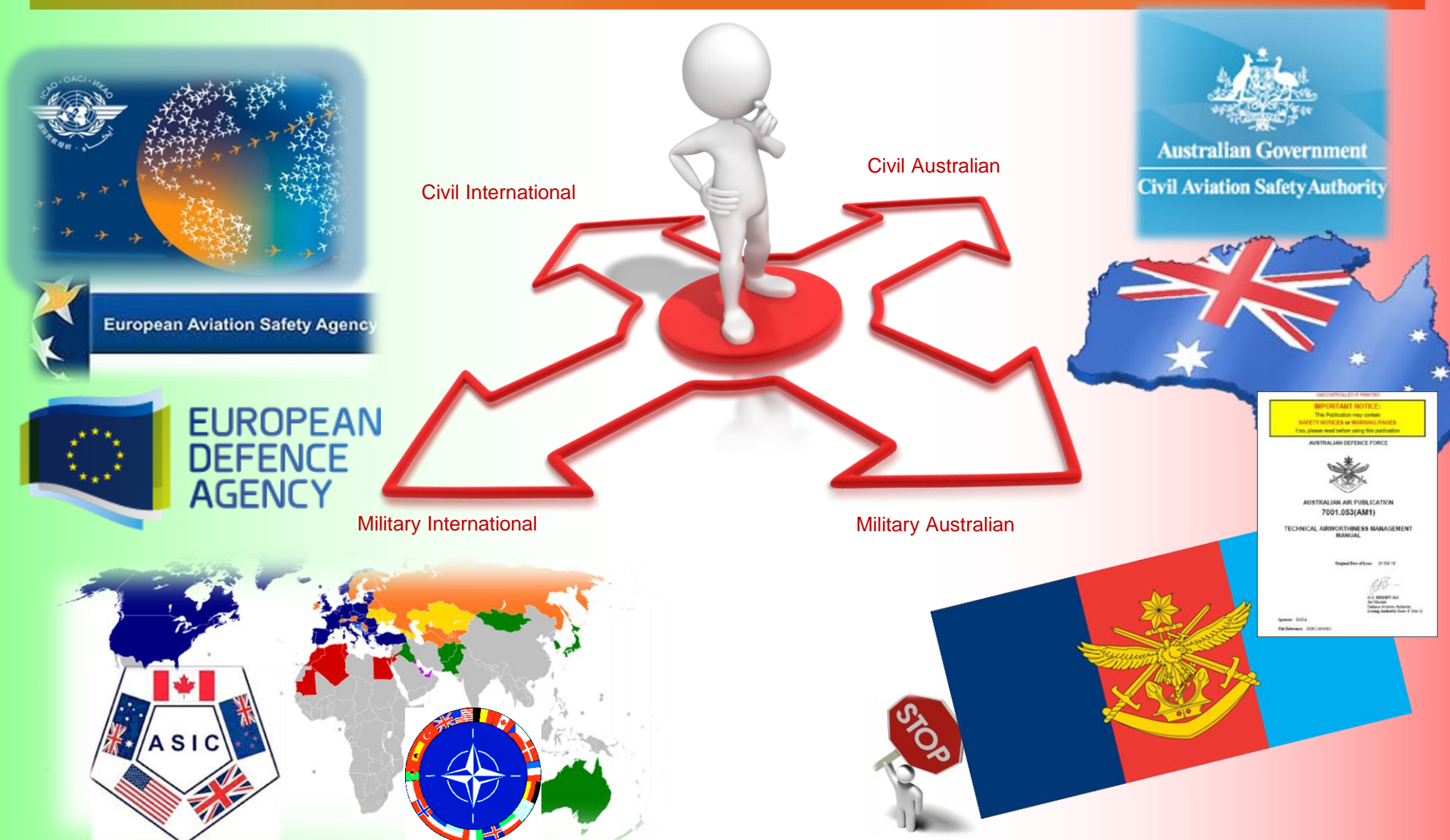
- Flexible for Commanders: outcome based
- Easy to understand and use
- Highest levels of safety assurance
- Cost efficient
- Interoperability

Silver Bullet



Options

Contemporary / International



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Contemporary / International

- Contemporary International is EASA
- EASA Airworthiness regulations militarised by European Defence Agency (EDA)
 - called European Military Airworthiness Requirements (EMAR)
- ADF Solution – combines the two:

EASA Framework + EMAR = 'new ADF Regulations'

Australian Civil Aviation Safety Authority (CASA) is also aligning to EASA

Alignment between CASA and ADF

Defence Aviation Safety Regulation (DASR)

DASR structure & key concepts

Defence Aviation Safety Regulation (DASR)

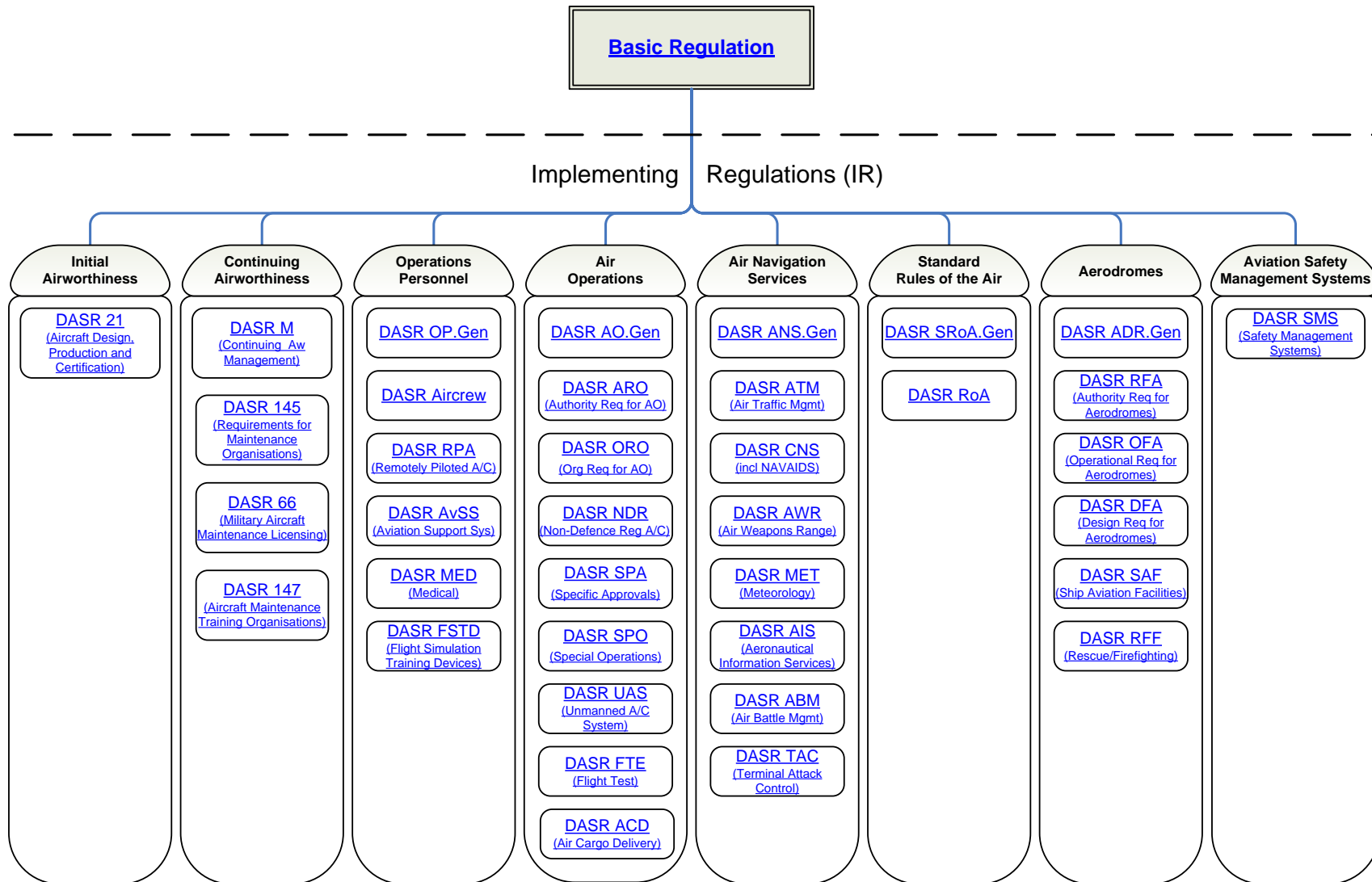
DASR on internet at: <http://www.defence.gov.au/dasp/DASR-Regulations/>

Or google "DASR" {top hit}



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Defence Aviation Safety Regulation (DASR) Structure



DASR Concepts - Lexicon

Key to effective application of the DASR is to understand the meaning of the '**Lexicon**' used:

- Alignment with Civil aviation lexicon
- 'Plain' Language application

Concepts / Changes

proposed with DASR introduction

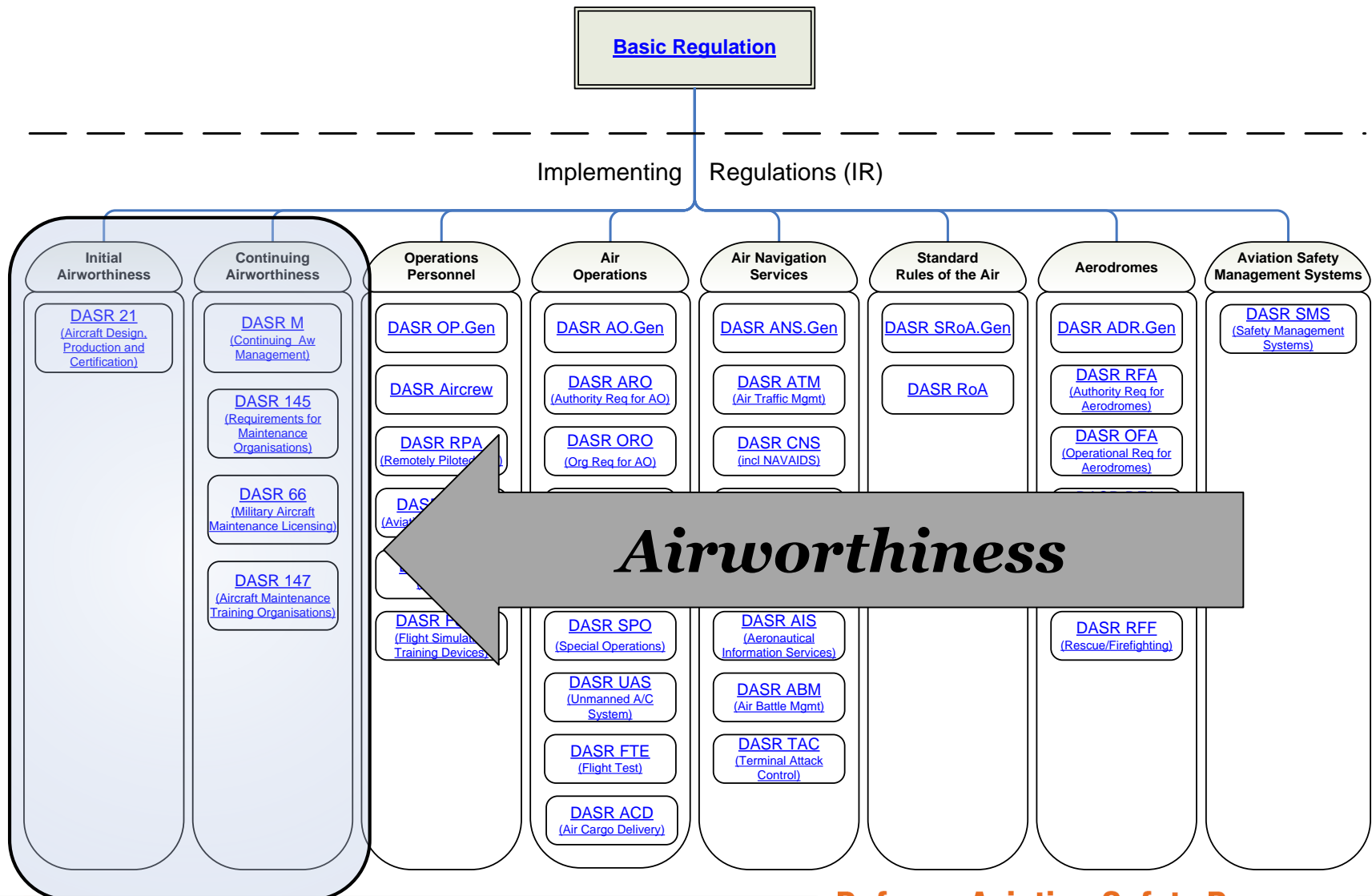
Lexicon – The Harmonisation Corner Stone?

- This is the: Aircraft Airworthiness & Sustainment Conference
- The **current** ADF definition of Airworthiness is unique to the ADF and assimilates more closely with 'Aviation Safety'
- The DASR definition of Airworthiness similar to ICAO / EASA (using Airworthy), US Military, etc.
 - **DASR Airworthiness definition = EMAR Definition**
 - aligned with approx 27 European Nations

Airworthiness Definition






- DASR definition of airworthiness
 - *The ability of an aircraft, or other airborne equipment or system, to operate in flight and on ground without significant hazard to aircrew, ground-crew, passengers (where relevant) or to other third parties.*
- Consistent with EASA use of this term and ICAO definition of “Airworthy”
 - *The status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation*

“Focus on the Air Vehicle”



Key Changes with DASR implementation

- ADF Lexicon changes
- DASR consider all Defence aircraft as **Large/Complex**
 - Similar to CASR* Large/Complex aircraft
 - CASA moving toward European Aviation Safety Agency regulation
 - Particularly in Airworthiness domain i.e. 21, 42/M, 145, 66** & 147**
- ADF Organisational changes

– AEO		DASR 21J or G / DASR M or neither	
– AMO		DASR 145	
– Nil presently		DSAR M (CAMO)	  CASA equivalent is “CASR Part 42”
- * CASRs apply to both **Small** and Large/Complex aircraft
- ** Maybe implemented at a later stage: ‘National Equivalence’ in place from 30 Sep 16

So What will/could DASR change for you?

- Civilian (Large/Complex Aircraft) Environment
 - Defence will recognise CASA certifications
 - Only have to meet 'one' regulation set (CASA) instead of two
- Defence Environment
 - Organisational changes (as per previous slide)
 - Alignment with European Nations
 - EASA and EMAR recognition
 - Interoperability flexibilities increased e.g. US Military flexibilities
 - Efficiency improvements and financial savings (30% cheaper?)
 - Easier to assimilate to civil sector

* Not yet in place – planned recognition activity

Challenges

- The ADF is implementing an **entire Aviation Safety Framework**
 - No other nation is known to be doing this
- Australia (Australian Defence Force) is leading the world in EMAR (called 'Airworthiness DASR') implementation
 - Infancy issues
- Cultural Change
 - 'old' Regulations have been in place for approx 20 years
 - natural resistance to leap into the 'unknown'
- Resource Limitations



Summary

- The Australian Defence Force is implementing a new set of Aviation Safety Regulation to be known as **Defence Aviation Safety Regulation (DASR)**
- DASR will be provisionally promulgated on 30 Sep 16
 - Formal release Jan 17
- DASR are aligned to contemporary better practice i.e. EASA
 - CASA is moving toward EASA as well
- Increased Interoperability
 - Military and Civil alike
 - Including US Military
- Improved efficiency
- Cost savings
- Further Information: DASP Internet Site at <http://www.defence.gov.au/dasp/>

Questions

International Military Airworthiness Regulation Conference Melbourne, Australia. 14-15 November 2016

Presentations from Key Airworthiness Authorities and Industry on the benefits offered by an emerging global

convention on military airworthiness regulation.



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