

# NOTICE OF PROPOSED AMENDMENT DASP 01/2016

## DEFENCE AVIATION SAFETY REGULATIONS – DRAFT RELEASE

### INTRODUCTION

#### Applicability

1. This proposal is applicable to all members of the Defence aviation community, including all regulated organisations and individuals subject to the requirements of Military Aviation Regulations (MILAVREG), Operational Airworthiness Regulations (OAREG) and Technical Airworthiness Regulations (TAREG). This Notice of Proposed Amendment (NPA) is issued by the Directorate General Technical Airworthiness – Australian Defence Force (DGTA-ADF) and the Airworthiness Coordination and Policy Agency (ACPA) on behalf of the Defence Aviation Safety Program (DASP – incorporating ACPA, Directorate of Defence Aviation and Air Force Safety (DDAAFS) and DGTA-ADF), with DGTA-ADF providing administrative support. The term NPA is used by both the European Aviation Safety Authority (EASA) and the European Military Airworthiness Requirements (EMAR) and replaces the previous NPRM.

#### Purpose

2. The purpose of this NPA is to provide an opportunity for readers to comment and familiarise with a first draft of the new Defence Aviation Safety Regulations (DASR). The background to this change is described in the paragraphs below. Feedback from this NPA will be used to assist further additions and refinement activities (including additional NPAs if required), leading to a formal DASR release in Jan 17.

#### Background

3. The new DASR represent an evolution of the current aviation safety regulations, which were progressively introduced from the mid-1990s following a number of fatal accidents. The current design regulations (TAREG 1-3) were introduced first (1995), followed soon thereafter by the maintenance regulations (TAREG 4-5) (2000), and most recently, the operational regulations (OAREG) (2005). In all respects, the current aviation regulations have served Defence well and helped to avoid repeating past aviation accidents and incidents; however, they are not without their weaknesses, particularly in the technical domain:

- a. Excessive prescription in regulation stifles innovation and leads to specific organisational solutions that are neither optimised nor compatible with other regulatory systems, thus inhibiting opportunities for mutual recognition and interoperability.
- b. The hierarchical nature of MILAVREG, OAREG and TAREG is at odds with contemporary systems, and leads to complexity, confusion and overlapping requirements.
- c. As a result of prescription and uniqueness, some regulations are difficult to understand without a significant amount of guidance material, increasing the reading and comprehension burden.
- d. MILAVREG, OAREG and TAREG are published in separate manuals with subtly different styles, hence requiring a reasonable working knowledge of each to use effectively.
- e. The technical regulations in particular have recognised deficiencies in:
  - (1) continuing airworthiness management;
  - (2) ongoing type certification management;
  - (3) production assurance;
  - (4) reporting of unsafe/unairworthy conditions;

- (5) recognition of prior acceptance/certification;
- (6) in-service system safety;
- (7) risk characterisation and escalation;
- (8) WHS compliance; and
- (9) cost effectiveness (~30% more expensive than an ICAO equivalent system).

4. Attempts to evolve the technical regulations over the last decade have been unsuccessful. Amendments have addressed some problems but often introduced others, and a substantial rewrite of the technical regulations is needed to address key weaknesses.

### **Mandate for change**

5. In acknowledgement of these issues, in Nov 13 the Defence Aviation Authority directed DACPA and DGTA to develop a new Defence airworthiness regulatory framework, with a more efficient structure that adopts Best Practice Regulation (BPR) principles that were formed as a result of DGTA-ADF reform activities since 2012 (published in a handbook '10 Ways to Better Aviation Regulation' in 2014). The decision to base the new DASR on the EASA structure comprehensively resolves the deficiencies with the current regulations, while offering:

- a. Commanders additional freedom of action through outcome based regulation;
- b. increased readability/useability of the operational regulations;
- c. increased and defensible safety assurance, commensurate with global practice;
- d. increased interoperability with coalition and regional partner States through a common convention for airworthiness regulation;
- e. opportunity to exploit multi-customer support arrangements (such as global supply chains); and
- f. blended civilian/military sustainment arrangements, and lateral recruitment arrangements with civilian aviation maintainers.

6. The DASR are consistent with Defence's two-decade drive for excellence in aviation safety and are the next natural step in self-determination for future regulation, rather than have a solution imposed following a significant event (such as the UK experience following the Haddon-Cave Review).

### **DASR structure**

7. The basic EASA structure consists of a Basic Regulation supported by a series of Implementing Regulations that are arranged along a number of streams, as shown by the DASR structural diagram at annex A.

8. **Basic Regulation.** This is an administrative regulation defining the DASP and DASR framework, key appointments and accountabilities. In terms of the current Defence airworthiness framework, basic regulation loosely encompasses the intent of MILAVREGs 1 and 4, OAREG 1 and TAREG 1. Basic Regulation is written in such a way that it is not specific to any particular National or Military Airworthiness Authority, and in so doing allows for direct adoption by multiple countries.

9. **Implementing Regulations – technical.** Technical DASR are based on EMAR, which are 95% identical to corresponding EASA regulations, and represent an emerging global convention in technical regulation of military aviation. Technical DASR are organised along the following streams:

- a. Initial airworthiness – Part 21, covering initial type certification, in-service design changes, and production. Due to improvements in the regulation of these areas, DASR Part 21 will adopt EMAR Part 21 to the fullest extent possible.

- b. Continuing airworthiness – Parts 145, M, 66, and 147:
- (1) Part 145 – Approved Maintenance Organisations, analogous to TAREG 4/5 AMOs. Due to the similarity with existing TAREG, DASR Part 145 will adopt EMAR Part 145 to the fullest extent possible.
  - (2) Part M – Continuing Airworthiness Management Organisations, which reside within aircraft operating organisations. Since this is a new area of regulation, DASR Part M will adopt EMAR Part M to the fullest extent possible.
  - (3) Part 66 – Military Aircraft Maintenance Licensing. Since this regulation is substantially different to current practices for authorising maintenance technicians, DASR Part 66 will require adaptation to suit the Australian Defence context prior to its introduction and will be subject to a separate NPA.
  - (4) Part 147 – Aircraft Maintenance Training Organisations. Since this regulation is closely related to Part 66 and has ramifications for extant Defence aviation maintenance training arrangements, DASR Part 147 will require adaptation to suit the Australian Defence context prior to its introduction and will be subject to a separate NPA.

10. **Implementing Regulations – operational.** While Operational DASR adopts the EASA regulatory structure, most new regulation has been formed by re-writing extant MILAVREG and OAREG against the concepts of the handbook '10 Ways to Better Aviation Regulation'. Operational DASR are organised along the following streams:

- a. Air Operations Personnel – personnel requirements for aircrew, Remotely Piloted Aircraft (RPA), Aviation Support Systems (AvSS), aviation medical and Flight Simulation Training Devices (FSTD).
- b. Air Operations – authority and organisational requirements for air operations, non-Defence registered aircraft, specific approvals, special operations, Unmanned Aircraft Systems (UAS), flight test, and air cargo delivery.
- c. Air Navigation Services – Air Traffic Management (ATM), Communications, Navigation and Surveillance (CNS), Air Weapons Ranges (AWR), meteorology services, Aeronautical Information Services (AIS), Air Battle Management (ABM), Terminal Attack Control (TAC), and technical (engineering and maintenance) aspects.
- d. Standard Rules of the Air.
- e. Aerodromes – authority, organisational and design requirements, Ships Aviation Facilities (SAF), rescue and fire fighting.
- f. Aviation Safety Management Systems.

### **Cost of compliance**

11. Despite the degree of change anticipated by this proposal, the cost of compliance is expected to be low due to the savings – both short and long term – realised by the DASR:

- a. Research in 2012 revealed the current TAREG to be approximately 30% more expensive than civilian equivalents. In contrast, DASR is based on the civilian (EASA) framework and will be maintained to align with any future changes. Civil aviation regulators are required to balance the needs and desires of civil aviation operators – across a wide variety of business contexts and configurations – against the accepted level of safety performance. As a result, particularly with respect to technical regulation, civil aviation regulation is driven to more finely balance production (aviation – business outputs) against protection (regulation aiming to manage risks) to ensure a civil aviation enterprise neither exposes the public to unacceptable harm nor goes bankrupt in the pursuit of zero risk. This is clearly more likely to be efficient and cost-conscious than our current Defence regulation.

- b. European aviation regulation was specifically designed to be adopted across all nations of Europe, of varying size and maturity, unlike FAR and CASR which are bound to Nation States. As such, EASA regulation is necessarily flexible and cost efficient by imposing the minimum necessary market barriers on commercial organisations.
- c. EASA regulation is contemporary, internationally recognised and ICAO-compliant. EASA regulation also enables the most seamless interaction with international and regional partners and industry suppliers, enabling sustainment solutions that exploit global supply chains.
- d. Using EASA regulation as a foundation for the future will provide opportunities for greater clarity in organisational responsibilities and the appointment of key accountable persons at the appropriate level. In doing so, future DASR will organisationally re-connect operational and sustainment organisations, ensuring that:
  - (1) efficiencies are a natural outcome, and
  - (2) risks are managed at the lowest appropriate level.
- e. Organisations adopting DASR will not only maintain their competitiveness for additional Defence work (including work for other EMAR nations), but will more easily be able to bid for civil work, both locally and internationally. Civilian workforces will also more easily be transferrable between civil and military contracts, providing further efficiencies. Further, extant civil and military procedures may also be integrated, reducing overheads and indirect costs.
- f. DASR are written in plain English and are outcome-based. Less prescription allows organisations to produce innovative solutions that are more efficient than those possible under prescriptive MILAVREG, OAREG and TAREG, leading to cost savings.

### **Interactive Electronic Regulation Manual**

12. As per this proposal, DASR will be published in a single electronic publication that will be accessible via both the intranet and internet. As per the electronic TAMM, the publication can be downloaded to a portable or mobile device; physical manuals and hard copies will not be provided.

### **Implementation Strategy**

13. Implementation of DASR will require substantial change so that efficiencies and other benefits of harmonisation to an internationally recognised airworthiness framework may be realised. Due to the risk of confusion and uncertainty, potentially leading to gaps or deficiencies in safety assurance, DASR will be implemented via a two-phase strategy as follows:

- a. Phase 1: Organisations will initially migrate to the DASR with minimal impact to existing management, plans, contracts and organisational structures. This phase offers a controlled transition in which the regulated community can be fully educated on DASR, while protecting the arrangements that have assured safety under the current regulations. The scope is limited and well defined, allowing simple deconfliction with other change initiatives across Defence. The pace of transition can be quick and offers certainty; key organisations 'cut over' at the same date to maintain integrity of the new safety assurance framework. The cost of implementation in both human and financial terms is minimised.
- b. Phase 2: Organisations can then exploit the flexibility and efficiencies afforded by the DASR in a manner and rate that is sensible to their unique circumstance. Having preserved the level of current safety offered by existing arrangements, and achieved initial compliance to the new DASR, organisations can explore and exploit the flexibility and efficiencies offered by DASR. Organisations can explore these benefits in combination with other changes occurring across Defence, and develop integrated plans that can be properly resourced by their organisations.

## Transition Plan

14. Implementation of DASR is also influenced by other changes occurring within Defence, such as the Capability Acquisition and Sustainment Group (CASG) 1QMS Program. A provisional (but authoritative) release of DASR will be available by 30 Sep 16 to facilitate the transition of CASG organisations to 1QMS ahead of the full release of authoritative DASR in Jan 17.

15. Operational DASRs will be progressively populated up to 30 Jun 16, with an education and consultation program planned throughout 2016 to assist with transition. Further details concerning transition of DASR Parts 21, M and 145 may be found via the following link:

- a. [DGTA-ADF U6762519 DASR Implementation Strategy 30 Oct 15](#)

16. Even though all regulated organisations will follow the two phase implementation as outlined above, not all organisations will transition to DASR in the same timeframe. As a result, organisations will be required to account for a combination of DASR and extant airworthiness regulations until all relevant organisations have transitioned. DAVREG-DGTA will provide detailed interface guidance prior to the authoritative release of DASR that explains how the products and services of the extant system are to be interpreted in the context of DASR, and vice versa.

17. Finally, some concepts introduced by DASR are novel and new to Defence aviation, and hence will be subject to a gradual implementation, irrespective of an individual organisation's transition to DASR (eg. Military Airworthiness Reviews required under DASR M). Organisations will be supported by DGTA-ADF and ACPA staff to assist with the transition to these new concepts.

## Frequently Asked Questions

18. A number of FAQs have been prepared to assist readers in interpreting and understanding DASR, these may be found via the following links:

<http://www.defence.gov.au/DASP/DASRQuestions/Default.asp>

<http://www.defence.gov.au/DASP/DASR-Regulations/DASRNPA/TAMMRequirement.asp>

## Consultation and engagement

19. DGTA-ADF and ACPA staff have consulted extensively on the intention to transition to DASR at all levels of the Defence organisation, including key industry partners. Each FEG has received introductory training and briefing material on DASR, and specific training on individual regulations has commenced, with further training planned in the future. Release of this NPA is the next step in the overall strategy for transition to DASR.

20. The Regulation Change Process promulgated in AAP 7001.048 *Defence Aviation Safety Policy Manual* requires that the regulated community is consulted prior to changes in regulation. The aim of this NPA is to promulgate background and details of the proposed changes in accordance with Step 9 of that process. Advice on how petitions on this proposal are to be presented to DASP agencies is also provided. Feedback relevant to DASR operational aspects will be onforwarded by DGTA-ADF staff to ACPA for consideration.

## PROPOSAL

21. DASRs can be viewed using the following link to the draft DASR electronic manual:

<http://www.defence.gov.au/DASP/Docs/Manuals/8000-011/DASRWeb/index.htm>

## Deficiencies

22. Users will note that the draft DASR are incomplete. Basic Regulation and remaining operational Implementing Regulations will be made available by 30 Jun 16. Furthermore, while DASR Parts 21, M and 145 are fully incorporated into the electronic manual, Parts 66 and 147 will require adaptation and hence will be progressively introduced over the next few years (including a separate NPA as previously indicated). Further, Implementing Regulations for operational safety currently link to PDF files. Critical

regulation content gaps will be addressed and fully incorporated into the electronic manual with the authoritative DASR release in Jan 17.

23. **Safety Management Systems (SMS).** SMS are commonly used in the aviation domain to systematically manage risks to aviation safety and, in part, discharge obligations under WHS legislation. The requirement for Defence and commercial organisations to operate an SMS is therefore consistent with both expected industry practice and extant WHS obligations. While DASR SMS is included in the draft release, its applicability extends only to DASR 145 Approved Maintenance Organisations and aviation operators (ie. consistent with current practice). Readers should expect that SMS applicability will progressively be extended to include all organisations subject to DASR in subsequent releases.

## HOW TO SUBMIT COMMENTS ON THIS NPA

### Scope

24. Readers should note that, due to the alignment of technical DASR to EMAR, proposals to depart substantially from EMAR (other than required adaptations previously indicated) will not be considered. In contrast, feedback is primarily sought in those areas where additional explanation/interpretation (AMC and GM) is necessary to suit the Australian Defence aviation environment, or otherwise to avoid ambiguity or misinterpretation. Similarly the intent of the operational DASR has not changed substantially, and as such comments should be aimed at continuous improvement of these regulations.

### Format

25. Responses to this NPA are to be recorded on the NPA Response Sheet included at Annex B, and as published on the DASP Internet website.

26. Responses are to be submitted by email to [DGTA-ADF.DASR-NPA@defence.gov.au](mailto:DGTA-ADF.DASR-NPA@defence.gov.au). Hardcopies of the NPA Comment Sheet are not required.

### Timing

27. Comments to NPA DASP 01/2016 are to be received by close of business 31 March 2016.

### Additional Information

28. Due to the scale of change introduced by DASR, many comments are expected to be specific to an organisation's circumstances with a view to preparing for transition. While these comments may lead to the need for additional AMC or GM, in the first instance please use the following points of contact for assistance (ie. rather than submitting a formal NPA response):

- a. DASR Parts 21, M and 145: Please contact your DAVCOMP-DGTA Desk Officer (contact details available via the DGTA-ADF intranet website functional directory).
- b. Other DASRs: Send an email to [ACPA Regulations](#) or contact the appropriate Desk Officer (contact details available via the ACPA intranet website 'Contact Us' page).

**DISPOSITION OF COMMENTS RECEIVED**

29. A Summary of Responses will be prepared and published on the DASP Internet website <http://www.defence.gov.au/dasp/>. DGTA-ADF and ACPA will not individually acknowledge or respond to comments or submissions.

**J. HOOD**

Air Commodore  
Director General Technical Airworthiness

Tel: (03) 9256 3003

29 Jan 16

**D. FLOOD**

Wing Commander  
Acting Director  
Airworthiness Coordination and Policy Agency

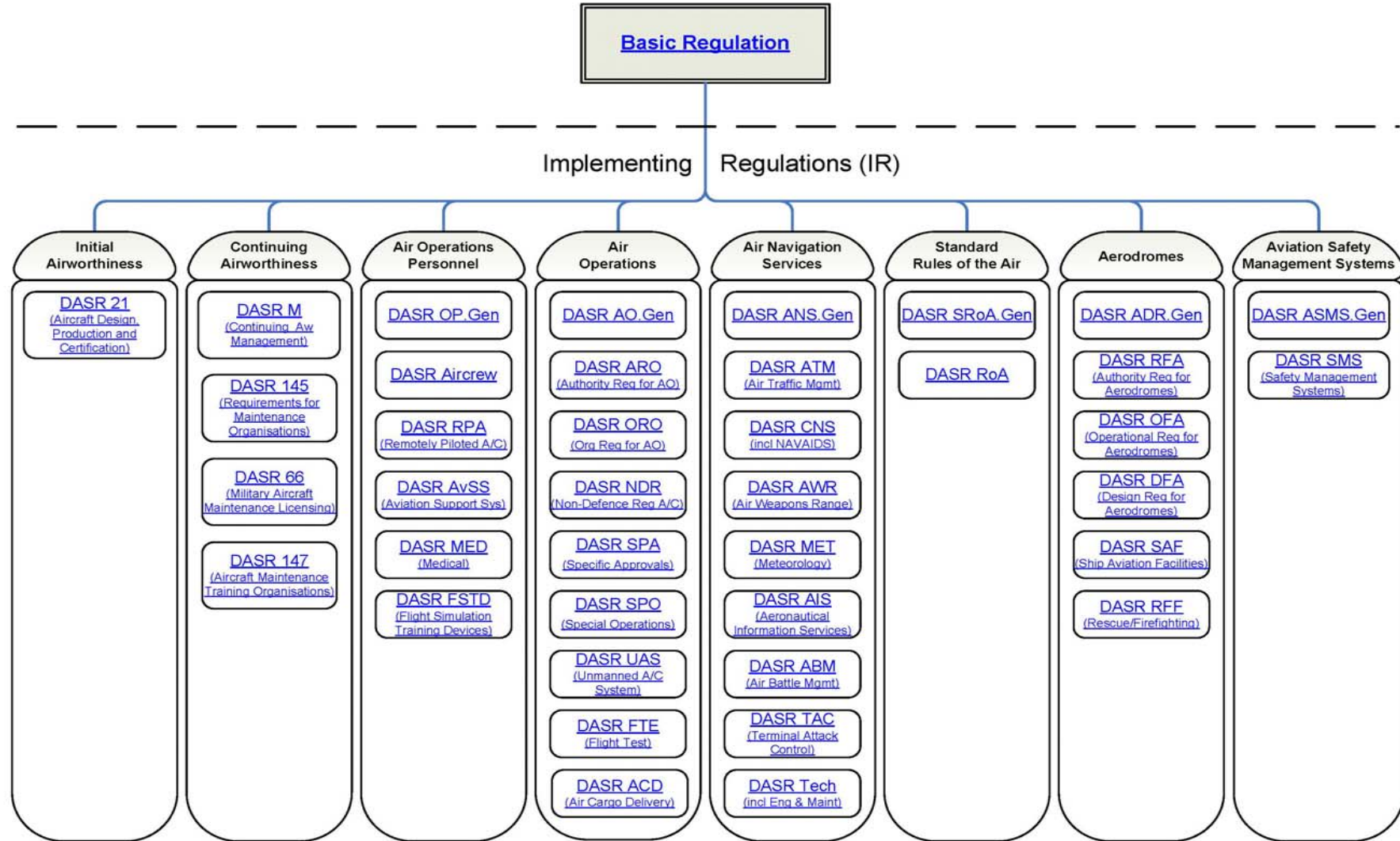
Tel: (02) 6128 7493

29 Jan 16

**Annex:**

- A. DASR structural diagram
- B. NPA DASP 01/2016 - Comment Sheet

# Defence Aviation Safety Regulation (DASR)





## NPA DASP 01/2016 Comment Sheet

### DASR Draft Release

Please return this response sheet by 31 Mar 16, via email attachment to [DGTA-ADF.DASR-NPA@defence.gov.au](mailto:DGTA-ADF.DASR-NPA@defence.gov.au).

Please indicate your acceptance or otherwise of this proposal by ticking the appropriate box below. Additional comments, suggested amendments or alternative action are welcome and may be provided on this response sheet or by separate correspondence.

- The proposal is **acceptable without change**.
- The proposal is **acceptable but would be improved if the following changes were made**:
- The proposal is **not acceptable but would be acceptable if the following changes were made**:

LSN	NPA Reference: (i.e Regulation number, NPA paragraph etc)	Comment or suggested change	Explanation
1			
2			
3			
4			
5			

### RESOURCE IMPLICATIONS

Please provide specific comment on any significant resource implications that this proposal may have for your organisation, for both its implementation and ongoing compliance. Your comments should address both financial and human resource considerations.

Resource implications – Proposal implementation	
Resource implications – Proposal sustainment	

**RESPONDENT DETAILS**

<b>Your name:</b>	
<b>Submission date:</b>	
<b>Your organisation:</b>	
<b>Email address:</b>	
<b>Postal address:</b>	
<b>Phone:</b>	
<b>Whose views are represented in your response?</b>  <b>i.e. Is your response the authoritative response from your organisation?</b>	Responding on behalf of :  Individual [ ]  ADF AEO/AMO [ ]  Commercial AEO/AMO [ ]  Operational HQ (WG/FEG/Command) [ ]  Defence Regulatory, Technical or Logistics policy agency [ ]  Other commercial entity [ ],  Other [ ] Please describe:-