Australian Government
Department of Defence

DEFENCE AVIATION SAFETY AUTHORITY

NOTICE OF PROPOSED AMENDMENT FOR DASR CHANGE PROPOSAL 2023-017 Revision 0

DASR ANSP

AIR NAVIGATION SERVICE PROVIDERS

References:

A. Decision Brief for DG DASA: *Revised DASR ANSP* of 12 Jul 23 (BP33054985)

INTRODUCTION

Applicability

1. This proposal is applicable to Air Navigation Service Providers (ANSP).

Purpose

2. The purpose of this NPA is to enable community input into the development of Defence Aviation Safety Regulation — Air Navigation Service Providers (DASR ANSP), ahead of its formal release in July 2024, to address the principles of Ref A.

Background

3. DASA conducted a review of Defence regulation related to ANSP. The review included benchmarking against Civil Aviation Authority (CAA) and Military Aviation Authority (MAA) regulations, and discussion with the regulated community. The review concluded that Defence needed to provide a more defensible means of addressing aviation safety hazards. At Ref A, DG DASA endorsed the revision of DASR ANSP.

4. This NPA forms part of the stakeholder consultation process.

Scope of proposed changes

5. This NPA proposes the revision of the extant regulation—consistent with best practice as applied by DASA-recognised CAAs and MAAs. The proposal incorporates additional DASR hazard controls by clarifying the responsibilities of an ANSP in relation to:

a. aeronautical data quality assurance

b. threats to cyber and information security

c. provision and content of ANSP OIP

d. system testing

e. personnel competency assurance.

6. The proposal also incorporates comprehensive AMC and GM.

Benefits of proposed changes

7. The benefits of this proposal include:

a. improved aviation safety controls to the hazards arising from Air Navigation Service (ANS) provision

b. alignment to DASA-recognised CAA and MAA ANSP regulation benchmarks

c. improved safety in Defence aviation operations.

Effects of proposed changes

8. The proposed regulation increases regulated community compliance obligations via the implementation of ANSP-specific Part and AMC controls based on the above scope.

Proposed regulation

9. The proposed regulation is in Enc 1.

Implementation strategy

10. DASA will release the proposed regulation in Jul 24. DASA proposes a transition[1] timeframe of 12 months from DASR release.

HOW TO SUBMIT COMMENTS ON THIS NPA

Format

11. Record responses to this NPA on the NPA Response Sheet included in annex A and submit responses by email to DASA. Hardcopies are not required.

Timing

12. Please forward comments on NPA 2023-017 to DASA by close of business 2 Apr 24.

Additional information

13. Additional information on this NPA is available from WGCDR Karen Titmuss, DD ANSP/AD (DAVNOPS-DASA), at karen.titmuss@defence.gov.au or (02) 5108 6821.

[1] During transition DASA will not enforce compliance with the new regulation—allowing organisations time to implement new requirements.

DISPOSITION OF RESPONSES RECEIVED

14. A Comment Response Document will be prepared and published on the DASA Website. DASA will not individually acknowledge or respond to comments or submissions.

Chris.Pouncey

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Date: 2024.03.06 10:07:38 +11'00'

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GPCAPT
DAVNOPS
Defence Aviation Safety Authority
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Mar 24

Annex:

A. NPA 2023-017 Revision 0 – DASR ANSP Response Sheet.

Enclosure:

1. NPA 2023-017 Revision 0 – Proposed DASR ANSP.

NPA FOR DCP 2023-017 Revision 0 Response Sheet
DASR ANSP
AIR NAVIGATION SERVICE PROVIDERS

Please forward this sheet as an email attachment to DASA by 2 Apr 24. Response sheets in MS Excel preferred) and MS Word formats can be found at Obj No: BP34901852 and BO3960659 respectively, or alternatively contact DASA.

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

Your name:	
Submission date:	
Your organisation:	
Email address:	
Postal address:	
Phone:	
Whose views are represented in your response? **i.e. Is your response the authoritative response from your organisation?**	Responding on behalf of : Individual [ ] Regulated Military entity [ ] Regulated Commercial entity [ ] Wing HQ [ ] Group HQ [ ] ADF Regulatory, Technical or Logistics policy agency [ ] Other commercial entity [ ], Other [ ] Please describe:
Do you consent to your name being published as an NPA respondent within the NPA Summary of Responses:	YES [ ] NO [ ]

NPA 2023-017 REVISION 0

PROPOSED DASR ANSP

'AIR NAVIGATION SERVICE PROVIDERS'

Contents

SECTION 1: ADDITIONS TO THE DASP GLOSSARY AND ACRONYMS LIST

1. The following **new** definitions are proposed for the DASP glossary:

Aeronautical Data *(from ICAO Annex 15)*

A representation of fact, concepts or instructions in a formalised manner suitable for communication, interpretation or processing.

Aeronautical Data Originator* *(from AIRCDRE Tindal, BJ7889091)*

An entity responsible for providing source Aeronautical Data and Aeronautical Information to AIS providers for publication in the Integrated Aeronautical Information Package and on aeronautical charts.

Aeronautical Information Service (AIS) *(from ICAO Annex 15)*

A service established within the defined area of coverage responsible for the provision of Aeronautical Data and Aeronautical Information necessary for the safety, regularity and efficiency of air navigation.

Air Traffic Control Service* *(based on ICAO Annex 11 and AIRCDRE Tindal BJ7889091)*

A service provided for the purpose of:

(a) preventing collisions

i. between aircraft, and

ii. on the manoeuvring area, between aircraft and obstructions, and

(b) expediting and maintaining an orderly flow of air traffic.

The Air Traffic Control Service comprises an area control service, approach control service and an aerodrome control service.

Air Traffic Management Network Functions* *(from AIRCDRE Tindal, BJ7889091)*

Provision of the information communications technology network that connects the range of ATM systems.

Communications, Navigation and Surveillance Systems (CNS Services)* (based on AIRCDRE Tindal BJ7889091)

Services to ensure the availability, continuity and effective performance of Communications, Navigation and Surveillance systems which are used, or intended to be used, in the delivery of an ANS.

Data Integrity *(from RTCA DO-200B)*

Assurance that Aeronautical Data and its value has not been lost or altered since the data origination or authorised amendment

Data Services* (*from AIRCDRE Tindal, BJ7889091)*

The provision of aeronautical databases either directly to aircraft operators for loading into air or ground-based mission systems, or to Aeronautical Information Services providers. This Aeronautical Data does not include data not specifically relevant to air navigation such as aircraft weight and balance data.

Flight Procedure Design Services (FPD Services)* *(from AIRCDRE Tindal BJ7889091)*

The design, documentation and validation of flight procedures including their ongoing review and maintenance.

Meteorological Services *(from ICAO Annex 3)*

A service that provides weather information services to support the safety, regularity and efficiency of aviation activities.

Regression Testing* *(based on CENELEC 50128 and IEC62279)*

A test process re-running functional and non-functional tests to ensure that previously developed and tested software still performs as expected after a change. Regression Testing also includes testing software not amended during the latest upgrade to ensure the software change has not affected interface control data.

2. The following **modified** definitions are proposed for the DASP glossary:

Air Navigation Service (ANS)* *(from AIRCDRE Tindal BJ7889091)*

Those services provided to air traffic during all phases of operations (approach, aerodrome and enroute). ANS comprises Air Traffic Management (ATM), communication navigation surveillance services, Meteorological Services for air navigation (MET), Aeronautical Information Services (AIS), Aeronautical Data services (DAT), Flight Procedure Design Services (FPD) and ATM network functions.

Air Traffic Management (ATM)* *(based on ICAO PANS/ATM Doc 4444)*

A generic term encompassing the dynamic, integrated management of air traffic and airspace in a safe, economical and efficient manner through the provision of facilities and seamless services in collaboration with all parties involving airborne and ground-based functions. The three subsets of ATM are Air Traffic Services (ATS), Airspace Management (ASM) and Air Traffic Flow Management (ATFM), although only ATS is regulated under DASR.

Air Traffic Services (ATS) * *(from AIRCDRE Tindal, BJ7889091)*

A term which collectively encompasses the Air Traffic Control Services (area control service, approach control service and aerodrome control service), an air traffic advisory service, an alerting service, a flight information service and battlefield airspace control.

Exposition*

The document or documents that contain the material specifying the scope of work deemed to constitute sufficient evidence to justify organisational approval and showing how the organisation complies with a DASR.

3. The following new or modified acronyms are proposed for the DASP Acronyms List:

ACRONYM	EXPANSION
AIM	Aeronautical Information Management
ANSPC	Air Navigation Service Provider Certificate
ANSPE	Air Navigation Service Provider Exposition
CAA	Civil Aviation Authority
DSP	Data Service Provider
FPD	Flight Procedure Design
IFP	Instrument Flight Procedure
PANS	Procedures for Air Navigation Services (ICAO)

SECTION 2: NEW DASR ANSP PART ONLY

The following replaces the extant DASR ANSP Part **in toto**.

DASR ANSP – Air Navigation Service Providers (ANSP)

ANSP.10 – ORGANISATIONAL APPROVAL (AUS)

(a) Providers of the following Air Navigation Services (ANS) must operate only to the extent approved in the ANSP Certificate (ANSPC) issued by DASA: ▸ GM ▸ AMC1 ▸ AMC2

1. Air Traffic Service (ATS)
2. Communication, Navigation, Surveillance (CNS) Services
3. Aeronautical Information Service (AIS)
4. Flight Procedure Design (FPD) Service.

ANSP.20 – ANSP CERTIFICATE (AUS)

(a) An ANSP must use an ANSP Exposition (ANSPE) to apply to DASA for: ▸ GM ▸ AMC

1. issue of an ANSPC, or attached Service Provision Conditions (SPC)
2. variation to an ANSPC, or attached SPC.

ANSP.30 – ORGANISATIONAL STRUCTURE (AUS)

(a) A certified ANSP must define its organisational structure to include: ▸ GM ▸ AMC

1. the authority, duties and responsibilities of all positions performing ANSP functions, including the management positions responsible for safety and quality management functions
2. the relationship and reporting lines between these positions and other parts of the organisation
3. formal relationships with external contributors to the service provision that may directly influence the safety of their services.

ANSP.40 – SAFETY MANAGEMENT SYSTEM (AUS)

(a) A certified ANSP must utilise a Safety Management System (SMS) in accordance with DASR SMS. ▸ GM

ANSP.50 – QUALITY MANAGEMENT SYSTEM (QMS) (AUS)

(a) A certified ANSP must utilise a quality management system (QMS) to achieve consistency, continuity and compliance of safe service provision—through quality planning, quality assurance, quality control and quality improvement. ▸ GM ▸ AMC1 ▸ AMC2

ANSP.60 – OPERATIONS ORDERS, INSTRUCTIONS AND PUBLICATIONS (OIP) (AUS)

(a) A certified ANSP must utilise authorised OIP that are easily accessible and contain the procedures, instructions and information required for personnel to perform their duties. ▸ GM ▸ AMC

(b) A certified ANSP providing Air Traffic Control (ATC) must utilise OIP that: ▸ GM ▸ AMC

1. define ATS procedures and ATC separation standards
2. are harmonised with International Civil Aviation Organisation (ICAO) and national civil practice
3. detail the coordination of activities and services, including the exchange of relevant information, with:
   i. Aerodrome Operators
   ii. providers of Meteorological Services
   iii. AIS providers
   iv. CNS providers
4. detail contingency arrangements to deal with failures or irregularities in the systems used to provide ATC
5. define ANSP personnel fitness for duty requirements.

(c) A certified ANSP that provides CNS Services must utilise OIP that define how: ▸ GM ▸ AMC

1. the availability, continuity, accuracy and integrity of services are ensured
2. interruptions to provided services are communicated to affected organisations
3. changes to extant systems are managed.

(d) A certified ANSP that provides an AIS must: ▸ GM ▸ AMC

1. utilise OIP that define Aeronautical Information product development and delivery procedures
2. operate IAW the Letter of Authority (LoA) issued by DASA.

(e) A certified ANSP that provides FPD Services must utilise OIP that define how: ▸ GM ▸ AMC

1. Aeronautical Data for the design of flight procedures is either obtained from authoritative sources or verified and validated by the FPD Services provider

2. flight procedures are designed, including how design criteria are determined

3. the integrity of software systems used in the design of flight procedures is assured

4. changes to software systems used in the design of flight procedures are managed to ensure no detriment to Aviation Safety

5. flight procedures are published

6. periodic reviews of published procedures are conducted.

ANSP.70 – EQUIPMENT SYSTEMS AND INSTALLATIONS (AUS)

(a) A certified ANSP must ensure that equipment, systems and installations used or intended for use in the provision of ANS: ▸ GM ▸ AMC1 ▸ AMC2 ▸ AMC3

1. support the safe and effective provision of the service

2. are tested before operational service, to ensure no detriment to Aviation Safety and operational capability

3. which have been modified, are tested before return to operational service to ensure no detriment to Aviation Safety

4. are protected against physical and cyber threats from external and internal sources.

ANSP.80 – PERSONNEL COMPETENCY AND LICENSING (AUS)

(a) A certified ANSP must ensure that personnel are qualified, competent, current and authorised to undertake their assigned duties. ▸ GM ▸ AMC

(b) A certified ANSP must only provide an Air Traffic Control Service utilising licenced Air Traffic Controllers. ▸ GM ▸ AMC

(c) A certified ANSP that provides FPD Services must ensure all personnel who design instrument flight procedures are qualified, competent and current in instrument procedure design. ▸ GM ▸ AMC

ANSP.90 – SERVICES PROVIDED BY NON-CERTIFIED PROVIDERS (AUS)

(a) A certified ANSP which uses data provided by a Data Services Provider (DSP) or another ANSP must ensure contractual arrangements regarding the supply of data in any form or for use by any operational system include requirements on the DSP to: ▸ GM

1. provide services only within the scope of a Service Level Agreement or documents issued by the relevant CAA or MAA

2. comply with the service delivery provisions of the current version of RTCA ‘Standards for Processing Aeronautical Data’

3. advise the ANSP where the DSP has subsequently identified deficiencies or errors in released aeronautical databases

4. advise the ANSP where any CAA or MAA has changed the conditions of approval of the DSP as a source of Aeronautical Data.

(b) A certified ANSP that uses data provided by a DSP must advise all MAOs when released aeronautical databases, or updates to any existing aeronautical databases, are identified to have deficiencies or errors.

SECTION 3: NEW DASR ANSP PART, AMC and GM

The following replaces the extant DASR ANSP Part, AMC and GM **in toto**. AMC in purple text. GM in brown text.

DASR ANSP – Air Navigation Service Providers (ANSP)

ANSP.10 – ORGANISATIONAL APPROVAL (AUS)

(a) Providers of the following Air Navigation Services (ANS) must operate only to the extent approved in the ANSP Certificate (ANSPC) issued by DASA: ▼GM ▼AMC1 ▼AMC2

AMC1 ANSP.10(a) – Organisational approval (AUS)

An ANSP should ensure external contributors to the service, used in support of ANSP activities, operate to equivalent standards.

AMC2 ANSP.10(a) – Organisational approval – Aeronautical Information Services (AUS)

An ANSP that provides Aeronautical Information Service (AIS) must also operate IAW the Letter of Authority issued by DASA.

GM ANSP.10(a) – Organisational approval (AUS)

a. **Purpose**. **(Context)** Defence Air Navigation Services (ANS) support the safe operation of Aircraft in Airspace and on the ground at airports. **(Hazard)** Ineffective ANS provision can compromise Aviation Safety. **(Defence)** This regulation requires ANSP-AM providing ANS to ensure ANS operations are conducted safely by an approved organisation.

b. The issue of an ANSP Certificate (ANSPC) supplies the basis for the judgement of suitability of an ANS that it will be maintained and operated to approved Standards and Limitations, by competent and authorised individuals who are acting as members of an Approved Organisation.

1. Air Traffic Service (ATS)

2. Communication, Navigation. Surveillance (CNS) Services

3. Aeronautical Information Service (AIS)

4. Flight Procedure Design (FPD) Service

ANSP.20 – ANSP CERTIFICATE (AUS)

(a) An ANSP must use an ANSP Exposition (ANSPE) to apply to DASA for: ▼GM ▼AMC

1. issue of an ANSPC, or attached Service Provision Conditions (SPC)

2. variation to an ANSPC, or attached SPC.

AMC ANSP.20(a) – Preparation of an ANSP Exposition (AUS)

a. The ANSP Exposition (ANSPE) should include a compliance matrix and the following information for the ANSP Certificate (ANSPC):

i. **ANSP name.** Force Element Group (FEG) or equivalent

ii. **ANSP location.** Location of the ANSP headquarters

iii. **Declaration.** A statement that operations will be in accordance with the attached Service Provision Conditions (SPC)

b. The ANSPE should include the following information for the ANSPC SPC:

i. Accountable Manager (AM) listed by command or management position, eg 'CDR CSG'

ii. Hazard Tracking Authority (HTA) within the ANSP

iii. safety manager (per GM DASR.SMS.A.25(b)(1)(1.3))

iv. Air Navigation Services (ANS) provided

v. Specific approvals. An ANSP may request a specific approval for a particular service type, or for all services operated by the ANSP (eg procedural ATC services).

c. **Operational limitations.** An ANSP may request an operational limitation for a particular service or for all services conducted, to assure safe operations of a system or sub-system within the ability or maturity of the ANSP. An ANSP may have operational limitations imposed, particularly during introduction to service. Operations, operator experience or training, Synthetic Training Device establishment, or capability trials may limit the role or environment in which the ANSP may safely conduct operations until further review of the SPC. Examples of operational limitations could include non-deployability of tactical equipment, or synthetic training device usage for licence endorsement.

d. The ANSPE should demonstrate how the ANSP will meet these regulations and provide the service safely by reference to relevant Orders, Instructions and Publications (OIP).

e. The ANSPE should contain details of external organisations involved in the provision of ANS by the ANSP. Those details should include:

i. the name and functions of the external organisation

ii. the services provided, the contracted period for the provision of the services and the specific dates or times the services are provided by the external organisation

iii. the periods during which those services are provided

iv. the content of formal agreements eg Service Level Agreements (SLA), or other quality and service continuance assurance arrangements.

f. **Accountable Manager attestations and signature.** The Accountable Manager should make the following attestations and sign the ANSPE:

I am accountable for [insert organisation] compliance with the Defence Aviation Safety Regulation.

This ANSP Exposition for ANSP Certification and Service Provision Conditions is complete and correct.

I am satisfied that appropriate arrangements are in place to meet the Defence Aviation Safety Regulation and support the scope of operations contained in the Service Provision Conditions.

GM ANSP.20(a) – ANSP Certificate (AUS)

a. **Purpose. (Context)** Defence ANS support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** Ineffective ANS provision can compromise Aviation Safety. **(Defence)** This regulation requires the ANSP Accountable Manager (ANSP-AM) to ensure sufficient information for DASA to issue or vary and ANSPC and/or Service Provision Conditions.

b. DASA will issue an ANSPC when satisfied that the applicant organisation can satisfy the requirements of DASR ANSP.20. The ANSPC authorises the provision of the service. The ANSPC will contain:

i. ANSP name

ii. ANSP location

iii. reference to Service Provision Conditions (SPC) including the words ‘operations must be conducted in accordance with the attached Service Provision Conditions’

iv. period of validity.

c. **ANSP SPC**. Each ANSPC has an attached SPC that records the:

i. Accountable Manager

ii. Hazard Tracking Authority appointments

iii. services provided and locations at which those services are provided

iv. operating systems utilised by the service

v. contracts, agreements or other arrangements between the ANSP and supporting third parties

vi. conditions and/or operational limitations (where required, these are prescribed by DASA for a system or sub-system within the ability or maturity of the ANSP, and usually include reference to a plan and timeline to remove the limitation upon DASA review)

vii. signature by The Authority endorsing the SPC.

d. **Initial Issue of an ANSPC and attached SPC**. The applicant organisation must submit to DASA an ANSP Exposition (ANSPE), which includes a compliance matrix. DASA, when satisfied that the applicant organisation has met all the requirements will issue an ANSPC and SPC.

e. **Application for reissue or variation to an ANSPC**. The ANSP-AM should amend the extant ANSPE and compliance matrix, and submit these to DASA, highlighting those ANSP items being varied. DASA, when satisfied, will issue a new ANSPC.

f. **Application for variation of ANSPC SPC**. The ANSP-AM should amend the extant ANSPE and compliance matrix and submit this to DASA, highlighting those SPC items being varied. DASA, when satisfied, will issue an updated SPC for the ANSP. Application for variation to an SPC is required, at a minimum, when there is:

   i. addition, removal of, or change to an ANS

   ii. request to impose or remove specific approvals

   iii. request to impose or remove operational limitations

   iv. a significant change to the systems used to provide the ANS

   v. a significant change to third party arrangements involved in the provision of or support of ANS.

g. **Addition of a service to the ANSPC SPC**. The ANSPE for the addition of a service to an ANSPC SPC addresses whether the ANSP can safely operate and maintain their systems and services. The ANSPE should reference any acquisition documentation and a documented Risk Decision Brief (Safety Case or equivalent) to demonstrate how the ANSP will safely transition the new capability into service.

h. **Provision of evidence**. Organisations should make full use of existing data and documents rather than creating unique documents with no enduring value once the certificate is issued. Where existing documents are used as evidence they should be referenced in the ANSPE and relevant sections may be included in the ANSPE as attachments.

i. **Significant change**. A significant change is one that involves a change in technology, procedures or organisation structure that will have an impact on the way in which the ANSP provides ANS or that requires users of the system to make changes in technology, procedures or organisation structure.

ANSP.30 – ORGANISATIONAL STRUCTURE (AUS)

(a) A certified ANSP must define its organisational structure to include: ▼GM ▼AMC

1. the authority, duties and responsibilities of all personnel performing ANSP functions, including the management positions responsible for safety and quality management functions

2. the relationship and reporting lines between personnel performing ANSP functions and other parts of the organisation

3. formal relationships with external contributors to the service provision that may directly influence the safety of their services.

AMC ANSP.30(a) – Organisational structure (AUS)

a. An ANSP should ensure their organisational structure includes:

i. an Accountable Manager (usually FEG commander or equivalent)

ii. an appropriate chain of command

iii. appropriately qualified personnel

iv. Key Staff with appropriate experience

v. facilities which are sufficient and suitable for the type of services provided

vi. suitable, documented, policies, processes and procedures

vii. a SMS IAW DASR ANSP.40

viii. a QMS IAW DASR ANSP.50.

GM ANSP.30(a) – Organisational structure (AUS)

a. **Purpose**. **(Context)** Defence ANS support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** Ineffective ANS provision can compromise Aviation Safety. **(Defence)** This regulation requires the ANSP-AM to ensure ANSP operations are conducted as an approved organisation and managed to ensure Suitability For Flight.

b. An ANSP is an organisation that can consist of operational, maintenance, logistics and engineering personnel, usually as part of a Force Element Group (FEG) or equivalent force structure, which provides ANSP services to a defined scope.

c. An ANSP should list Key Staff (including engineering and maintenance appointments that contribute to the safe operation of an aviation system) in their organisational structure. Where Key Staff are employed in organisations external to the military unit, contractor or tasked organisation, which form the core of the ANSP, then the ANSP must also define the formal relationships with those organisations in which the personnel are employed (other contributors to the service provision that may directly influence the safety of ANS).

d. ANSP.30(a)3 requires ANSP organisations to define all formal relationships with all contributors to the service provision and define the external inputs that can influence the quality of the services provided. The ANSPE should refer to the formal agreements or MOUs in place.

e. External contributors to the provision of services may include both Defence organisations and organisations or agencies external to Defence.

ANSP.40 – SAFETY MANAGEMENT SYSTEM (AUS)

(a) A certified ANSP must utilise a Safety Management System (SMS) in accordance with DASR SMS. ▼ GM

GM ANSP.40(a) – Safety Management System (AUS)

a. **Purpose**. **(Context)** Defence ANS support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** Ineffective ANS provision can compromise Aviation

Safety. **(Defence)** This regulation requires the ANSP-AM to ensure a Safety Management System (SMS) is utilised by a Certified ANSP.

b. The ANSP's SMS should ensure that services or systems provided by external contributors to the service do not erode safety. Controls to prevent the erosion of safety include formal agreements that specify safety requirements.

ANSP.50 – QUALITY MANAGEMENT SYSTEM (QMS) (AUS)

(a) A certified ANSP must utilise a quality management system (QMS) to achieve consistency, continuity and compliance of safe service provision—through quality planning, quality assurance, quality control and quality improvement. ▾ GM ▾ AMC1 ▾ AMC2

AMC1 ANSP.50(a) – Quality Management System (AUS)

a. ANSPs should have a QMS that achieves the following purposes:

i. **Quality planning.** Quality planning defines the quality policy and approach to meet the safety needs of the ANSP.

ii. **Quality assurance.** Quality assurance, provided through a quality assurance program, contains procedures to verify all activities are being conducted in accordance with applicable safety requirements.

iii. **Quality control.** Quality control managed by appointed representatives to monitor regulatory compliance with, and adequacy of procedures and services, to ensure safe operations.

iv. **Quality improvement.** Quality improvement consists of reviews and remedial action as appropriate, for the continuous improvement of the safety of the services provided.

b. **Services contracted to an external organisation supporting an ANSP.** The ANSP-AM may contract or task an organisation to perform services on behalf of the ANSP—forming an integral part of the ANSP's system—hence the contracted or tasked organisation is required to work under the quality system of the ANSP. The contracting or tasking ANSP retains the responsibility for all contracted or tasked services irrespective of who is undertaking them. The ANSP-AM is ultimately responsible and therefore accountable for ensuring ANS provision as an approved organisation and managed to ensure Aviation Safety. To exercise this responsibility the ANSP-AM should be satisfied that the actions taken by contracted or tasked organisations meet the standards required by DASR ANSP. The ANSP should therefore manage such activities by:

i. active control through direct involvement

ii. endorsing the recommendations made by the contracted or tasked organisation

iii. ensuring the contract or task documentation includes an obligation on the external organisation to upon request, make all documentation supporting the contracted or tasked organisation's provision of contracted or tasked services available to Defence, including:

1. records (which may include any contracts, inspection documents, and accident reporting and incident reporting requirements)

2. documentation which may include documents provided to the recognised CAA or MAA, operations manuals, maintenance records, individual competency and currency records, safety occurrence reports and investigation reports.

AMC2 ANSP.50(b) – Flight Procedure Design Services (AIS)(AUS)

FDP service procedures should include (in addition to the DASR ANSP.50) requirements as per ICAO Doc 8168 - PANS-OPS and ICAO Doc 9906 - *Quality Assurance Manual for Flight Procedure Design*.

GM ANSP.50(a) – Quality Management System (AUS)

a. **Purpose**. **(Context)** An ANSP-AM has regulatory requirements to ensure compliance and conformance. **(Hazard)** Compromised compliance and conformance of regulatory requirements can adversely affect the safe delivery of capability. **(Defence)** This regulation requires an ANSP-AM to utilise a QMS to ensure ANS provision is conducted safely by an approved organisation.

b. ANSPs may use ISO9001 or equivalent certification by an appropriately accredited organisation covering the appropriate scope of service provision. However, there is no specific requirement for external accreditation of the QMS.

c. ANSPs may integrate their QMS with their other management systems (eg SMS) into a single management system, commensurate with the size and scope of the organisation. However, integrated systems must remain compliant with all relevant DASRs.

d. The ANSP's QMS should ensure that the level of safety is not eroded by services or technical systems provided by external contributors to the service. The ANSP should specify the required quality standards through formal arrangements and agreements.

ANSP.60 – OPERATIONS ORDERS, INSTRUCTIONS AND PUBLICATIONS (OIP) (AUS)

(a) A certified ANSP must utilise authorised OIP that are easily accessible and contain the procedures, instructions and information required for personnel to perform their duties. ▼GM ▼AMC

AMC ANSP.60(a) – Operations OIP (AUS)

a. The ANSP operations OIP management system should ensure the acquisition, production, maintenance and updates of OIP such that:

i. OIP contain the standards and procedures required by personnel to perform their duties

ii. OIP are complete, current and uniquely identified

iii. OIP are relevant, accurate and unambiguous for their intended use and environment

iv. OIP in electronic form have effective search and navigation functionality

v. OIP are accessible to the personnel who need them

vi. new issues, reissues, and amendments are made when changes have been approved by a relevant authority and are harmonised with ICAO and national civil practice

vii. OIP amendments are promptly released, to ensure they do not affect Suitability For Flight

viii. personnel are expeditiously informed of amendments

ix. personnel can easily identify the effect of any amendment by its format or content

x. hierarchies are established which confirm the precedence of any specific manual

xi. mechanisms used to store, distribute and access OIP do not degrade the content and condition of the OIP

xii. OIP contain their authority for use, document name, date of issue and document amendment status

xiii. OIP are provided in a medium satisfying contemporary human machine interface design principles and are compatible with user requirements

xiv. OIP with related content are aligned, consistent and have minimal duplication

xv. OIP management records are accessible, accurately maintained, controlled, and traceable

xvi. OIP can be reproduced to any previous status

xvii. OIP include contingency plans to allow timely and effective response to those emergencies and abnormal events which may significantly degrade or interrupt the provision of ANSP services

xviii. personnel are aware of the process for reporting errors or changes in the operational or technical environment which may require changes to OIP.

b. ANSPs must ensure personnel perform their duties in accordance with those OIP.

c. OIP should be reviewed:

i. on a regular basis (at least once a year)

ii. after major events (eg organisational structure changes)

iii. after technology changes (introduction of new equipment), and

iv. after changes in safety regulations.

d. OIP should include requirements for the retention of operational data and documents for the purpose of safety investigation.

e. ANSPs should develop a system to update OIP resulting from changes that originate within the ANSP, including:

i. changes resulting from the installation of new equipment

ii. changes in response to operating experience

iii. changes in the ANSP policies and procedures

iv. changes in the ANSPC.

f. ANSPs should establish policy addressing OIP errors, amendments and corrections. The policy should address formal notification to all users.

g. ANSPs should establish policy that OIP incorporate a standard system and format, including:

i. a compliance statement

ii. an approval page

iii. a structure of manual

iv. a list of effective pages

v. a record of normal revisions

vi. a record of temporary revisions

vii. revision highlights

viii. a distribution list

ix. a table of contents

x. chapter numbering

xi. paragraph numbering

xii. page numbering.

GM ANSP.60(a) – Operations OIP (AUS)

a. **Purpose**. **(Context)** Defence ANS support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** ANS may be compromised when OIP are incorrect or inaccessible to personnel. **(Defence)** This regulation requires the ANSP-AM to ensure that personnel have access to the information they require to perform their duties, so that the ANS is conducted safely by an approved organisation**.**

b. ANSP Orders, Instructions and Publications (OIP) includes all aspects of the ANS (including operations, engineering, maintenance, supply, support, and logistics).

c. **National harmonisation.** Defence ANSP provide services to civil aircraft as required and military aircraft often operate in civilian controlled airspace. ANS procedures require harmonisation in order to ensure interoperability in a safe and effective manner. As far as possible, Defence should align ANSP standards and procedures to those used by CASA—and based on ICAO Standards and Recommended Practices (SARPS)—to ensure airspace users receive services to a common standard when flying in Australian airspace.

(b) A certified ANSP providing Air Traffic Control (ATC) must utilise OIP that: ▾ GM ▾ AMC

AMC ANSP.60(b) – Air Traffic Control (ATC) OIP (AUS)

a. The basis for ATC OIP should include:

i. ICAO Annex 11 *Air Traffic Services*

ii. ICAO Doc 4444 *Procedures for Air Navigation Services Air Traffic Management*

iii. Australian Airspace Regulations

iv. CASR Part 172 *Air Traffic Services* (and associated *Manual of Standards*)

v. NATO Standard MPP-02 *Helicopter Operations from Ships other than Aircraft Carriers (HOSTAC)*

vi. ANP4312 *Royal Australian Navy Action Information Organisation User Instruction*.

b. ATC personnel fitness for duty requirements must comply with DASR AVFM and DASR MED.

GM ANSP.60(b) – Air Traffic Control (ATC) OIP (AUS)

a. Defence is committed to CASA to provide to civil aviation an equivalent level to that provided under the CASR (the *Subsidiary Agreement for the Transparency of Safety Oversight to the Delivery of Defence Air Traffic Services to Civil Aviation Operations* refers). This regulation allows for assurance, and continuing visibility of this commitment to CASA.

b. ANSPs may utilise shared civil-military documents, such as the Manual of Air Traffic Services (MATS), to enable harmonisation.

c. Where ICAO separation standards are varied due to operational considerations:

i. the application of variation to an air traffic separation standard must be authorised by the MAO-AM, Civil Air Operator Chief Pilot, or foreign unit Commander responsible for the aircraft to which the reduced standard will be applied

ii. reduction or variations to separation standards must be published in the Defence AIP or OIP

iii. there is no restriction on who may propose a change to separation standards, but consultation should involve the Defence ANSP to ensure any such change will not compromise safety of other flight operations.

1. define ATS procedures and ATC separation standards

2. are harmonised with Internal Civil Aviation Organisation (ICAO) and national civil practice

3. detail the coordination of activities and services, including the exchange of relevant information, with:

i. Aerodrome Operators,

ii. providers of Meteorological Services,

iii. AIS providers

iv. CNS providers

4. detail contingency arrangements to deal with failures or irregularities in the systems used to provide ATC

5. define ANSP personnel fitness for duty requirements.

(c) A certified ANSP that provides CNS services must utilise authorised OIP that define how: ▾ GM ▾ AMC

AMC ANSP.60(c) – CNS Services (AUS)

a. The basis for CNS OIP should include:

i. (AUS) CASR 171 Aeronautical telecommunications service and radionavigation service providers.

b. **Distribution of information.** Where ANSPs distribute information or Aeronautical Data to users, ANSPs should:

i. confirm the accuracy, sufficiency, completeness and currency of the information, including the source of such information, before such information is distributed

ii. distribute the information in a suitable format for users

iii. ensure that information is distributed in a timely manner and kept current

iv. use means of communication which ensure the protection of data from interference and corruption.

GM ANSP.60(c) – CNS Services (AUS)

a. **Purpose. (Context)** Communications, Navigation and Surveillance systems (CNS) enable ANS to support the safe operation of aircraft in airspace and on the ground at airports**. (Hazard)** Ineffective CNS Services can compromise Aviation Safety. **(Defence)** This regulation requires the ANSP-AM to ensure technical support for CNS systems used for Defence ANS is provided safely by an approved organisation.

b. ANSP must communicate CNS system availability to affected organisations through an AIS. CNS providers should establish procedures with AIS providers to ensure expeditious communication of relevant information.

1. the availability, continuity, accuracy and integrity of services are ensured

2. interruptions to provided services are communicated to affected organisations

3. changes to extant systems are managed.

(d) A certified ANSP that provides an AIS must: ▾ GM ▾ AMC

AMC ANSP.60(d) – Aeronautical Information Services (AIS) (AUS)

a. The basis for AIS OIP should include:

ii. ICAO Annex 2 - *Rules of the Air*

iii. ICAO Annex 4 - *Aeronautical Charts*

iv. ICAO Annex 11 - *Air Traffic Services*

v. ICAO Annex 15 - *Aeronautical Information Services*

vi. Australian Airspace regulations

vii. ICAO Doc 10066 - *Procedures for Air Navigation Services Aeronautical Information Management*

viii. ICAO Doc 9839 - *Quality Assurance for Aeronautical Information Services*

ix. (AUS) CASR part 175 - *Aeronautical information management.* (Defence AIP will follow the 28-day Aeronautical Information Regulation and Control (AIRAC) cycle).

x. (AUS) CASR part 173 - *Instrument flight procedure design*

xi. RTCA/DO 200B - *Standards for Processing Aeronautical Data*

xii. EUROCAE Document ED-76A - *Standards for Processing Aeronautical Data*

xiii. Australian Signals Directorate - *Information Security Manual*.

b. The AIS OIP should detail:

i. how the provider ensures the provision of Aeronautical Data and Aeronautical Information necessary for the safety and efficiency of air navigation

ii. how processes ensure the timely collection, processing, storing, integration, verification, validation, exchange and delivery of quality-assured Aeronautical Information

iii. the range of provided Aeronautical Information products

iv. the data format and quality to ensure the data is suitable for the intended end use

v. how Data Integrity is ensured

vi. how the provider ensures data used in the process of providing Aeronautical Data and Aeronautical Information are only obtained from trusted or approved sources and a list of those sources

vii. the mechanisms which allow the digital exchange and supply of Aeronautical Data and Aeronautical Information

viii. how information is exchanged with other AIS providers

ix. how the ANSP ensures that information is updated and distributed in a timely manner

x. the process by which the means of communication of Aeronautical Information are protected from interference and corruption.

GM ANSP.60(d) – Aeronautical Information Services (AIS) (AUS)

a. **Purpose. (Context)** Defence Aeronautical Information Services (AIS) support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** Ineffective AIS provision can compromise Aviation Safety. **(Defence)** This regulation requires the ANSP-AM to ensure AIS personnel have access to the information they require in order to perform their duties.

b. Aeronautical Information products include:

i. publications that advise those flight procedures and airspace requirements used to plan and conduct flights nationally and internationally

ii. Aeronautical Data supporting mission planning tools

iii. visual charts used for navigation and planning purposes

iv. publications containing information on departure and approach procedures for each:

(a) certified aerodrome

(b) relevant overseas aerodrome

v. instrument flight procedures as approved for runways listed in the AIP.

c. Ensuring data integrity includes error identification, investigation, correction and communication to users.

d. **Approved and trusted sources of data.** The AIS provider may consider Aeronautical Data Originators authoritative based on approval by a MAA or CAA or nomination by a Defence agency and advised to the AIS provider. The ANSP must document how they trust an Aeronautical Data Originator.

1. utilise OIP that define Aeronautical Information product development and delivery procedures

(e) A certified ANSP that provides FPD Services must utilise OIP that define how: ▾ GM ▾ AMC

AMC ANSP.60(e) – Flight Procedure Design Services (AUS)

a. The basis for Flight Procedure Design (FPD) Services OIP should include:

i. ICAO Annex 4 - *Aeronautical Charts*

ii. ICAO Annex 11 - *Air Traffic Services*

iii. ICAO Annex 15 - *Aeronautical Information Services*

iv. ICAO Doc 10066 - *Procedures for Air Navigation Services Aeronautical Information Management* (PANS/AIM)

v. ICAO Doc 8168 - *Procedures for Air Navigation Services Operations* (PANS/OPS) Vol 1 and 2

vi. ICAO Doc 9906 Volume 1-6 - *Quality Assurance Manual for Flight Procedure Design*

vii. ICAO Doc 10068 - *Manual on the Development of a Regulatory Framework for Instrument Flight Procedure Design Service*

viii. (AUS) CASR 173 - *Instrument Flight Procedure Design*

ix. RTCA/DO-200B - *Standards for Processing Aeronautical Data*.

b. **Procedures**. FPD Services OIP should include:

i. the process of IFP approval for release

ii. IFP design criteria (a statement indicating the ANSP has adopted ICAO PANS-OPS Doc 8168 Volume II (or other approved design criteria)—with a list of deviations from it—is sufficient)

iii. criteria utilised to develop procedures for the establishment of aerodrome operating minima

iv. qualification and competencies for IFP designers

v. requirements for periodic reviews and continuous maintenance of IFPs

vi. requirements for ground and flight validations of IFPs as detailed in ICAO Doc 9906 - *Quality Assurance Manual for Flight Procedure Design* Vol 5.

GM ANSP.60(e) – Flight Procedure Design Services (AUS)

Purpose. (Context) Flight Procedure Design (FPD) Services support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** Ineffective FPD service provision can compromise Aviation Safety. **(Defence)** This regulation requires the ANSP-AM to ensure FPD Services personnel have access to the information and software systems necessary to design safe procedures.

1. Aeronautical Data for the design of flight procedures is either obtained from authoritative sources or verified and validated by the FPD Services provider

2. flight procedures are designed, including how design criteria are determined

3. the integrity of software systems used in the design of flight procedures is assured

4. changes to software systems used in the design of flight procedures are managed to ensure no detriment to Aviation Safety

5. flight procedures are published

6. periodic reviews of published procedures are conducted.

ANSP.70 – EQUIPMENT SYSTEMS AND INSTALLATIONS (AUS)

(a) A certified ANSP must ensure that equipment, systems and installations used or intended for use in the provision of ANS: ▾ GM ▾ AMC1 ▾ AMC2 ▾ AMC3

AMC1 ANSP.70 (a) – Equipment, systems and installations (AUS)

a. **Equipment, systems and installations**. Equipment, systems and installations should be designed, manufactured, installed, tested, calibrated, commissioned, maintained and modified to ensure they:

i. support the provision of services in a safe, efficient, continuous and sustainable manner consistent with any foreseen level of overall demand

ii. are fit for their intended purpose

iii. meet the required operational performance and safety targets for all foreseeable operating conditions and for their whole operational life

iv. meet all applicable safety requirements

v. meet technical standards as detailed in the DASDRM such that an inverse relationship exists between the probability that any failure can result in a total functional failure and the severity of its effect on ANS

vi. account for limitations related to human capabilities and performance.

b. **Performance monitoring and reporting**. An ANSP should monitor and at least annually report the performance of its equipment, systems and installations to users of the service. The ANSP may achieve reporting requirements by publishing performance data on the ANSP website or by including the data in hardcopy or electronic newsletters.

c. Where underperformance of equipment, systems and installations is identified, the ANSP should identify the causes or causal factors and eliminate them, or after having determined the implication of the underperformance, manage the risks.

d. **Changes to equipment, systems and installations**. ANSPs should:

i. have procedures for managing safety when introducing new systems or modifying existing equipment, systems and installations and their support arrangements

ii. provide evidence showing the risks to health and safety, and to workers and other persons, have been eliminated so far as is reasonably practicable, and if it is not reasonably practicable to eliminate these risks, to show those risks have been minimised so far as is reasonably practicable.

e. **Security threats**. ANSPs should ensure:

i. the physical and cyber security of equipment, systems and installation so as to prevent unlawful interference impacting on the provision of services

ii. they establish a system, including policy and procedures, to ensure physical and cyber security deficiencies and breaches that may interfere with a service do not become causal factors of Aviation Safety hazards

iii. they manage changes to system configuration and data to ensure system safety levels are retained or enhanced

iv. overall system safety is retained or enhanced when system upgrades are introduced to service

v. system safety levels are retained or enhanced when they introduce additional elements to the system.

f. **Release from operations**. An ANSP should have systems for:

i. release from operations — the process of withdrawal from use of a system, equipment or installation from the operational environment

ii. return into operations—the process whereby the system, equipment or installation is checked and restored to operational use, to ensure that it is safe and fit for purpose prior to its release into service.

g. The release from operations and return into operations procedures should be designed to ensure there is no detriment to system safety.

h. **Provision of technical services**. Technical services (design, maintenance, production) for any system, equipment and/or installation intended to be used in the provision of an ANS must:

i. have documented procedures for the services that are readily available

ii. ensure the necessary calibrated equipment, tools and material are available for use to perform the work required

iii. ensure the working environment is appropriate for the tasks carried out

iv. maintain appropriate records of design, maintenance and production

v. include test schedules, with Regression Testing, to validate the system, equipment of installation serviceability before delivery for operational use.

i. An ANSP providing design services for any system, equipment or installation intended to be used in the provision of an ANS must:

i. establish and maintain a design assurance system for the control and supervision of the design, and any design change

ii. ensure each design, design change or repair solution complies with the applicable design requirements and all safety hazards have been assessed and controlled SFARP

iii. provide effective configuration management in order to maintain effective control of the approved configuration

iv. establish test schedules, that include Regression Testing, to validate system, equipment or installation serviceability before delivery for operational use.

j. An ANSP performing maintenance on any system, equipment or installation must:

i. ensure maintenance is performed in accordance with approved maintenance programs

ii. utilise maintenance policy to ensure that damage is assessed and modifications and repairs are carried out

iii. provide testing appropriate to the type of equipment and its application, including, where necessary:

(a) environmental

(b) regression

(c) ground and

(d) flight checking

iv. establish procedures to detect and rectify maintenance errors that could result in a failure, malfunction, or fault endangering the safe operation of the equipment if not performed properly. The procedures should identify the:

(a) method for capturing errors, and

(b) maintenance tasks or processes

k. ensure the activities do not impact ANS system safety

l. An ANSP should protect against cyber threats. The means of ensuring this protection should include information from:

i. ICAO Cybersecurity Policy Guidance https://www.icao.int/aviationcybersecurity/Documents/Cybersecurity%20Policy%20Guidance.EN.pdf

ii. Australian Signals Directorate - *Information Security Manual*.

AMC2 ANSP.70 (a) – Contracted Activities (AUS)

a. An ANSP should address all aspects of DASR ANSP.70 (a) when an ANSP contracts of purchases any part of its:

i. activities

ii. support systems or

iii. network functions

to external organisations or from external organisations.

AMC3 ANSP.70 (a) – Air Traffic Management Network Functions (AUS)

a. Air Traffic Management Network Functions are critical to effective ATM services. Physical and cyber threats to Air Traffic Management Network Functions present a hazard to Aviation Safety. Air Traffic Management Network Function protection controls should:

i. identify critical information and communications technology systems and data used for aviation purposes and, in accordance with a risk assessment, develop and implement measures to protect them from unlawful interference

ii. ensure that the measures implemented protect the confidentiality, integrity and availability of the identified critical systems and data.

iii. include, inter alia, security by design, supply chain security, network separation, and the protection against, or limitation of any remote access capabilities in accordance with the risk assessment.

GM ANSP.70 – Equipment, systems and installations (AUS)

a. **Purpose. (Context)** Defence ANS support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** Ineffective ANS provision can compromise Aviation Safety. **(Defence**) This regulation requires the ANSP-AM to ensure equipment, systems and installations are provided safely by an approved organisation.

b. **Prescription of design standards**. The DASDRM details ATM/CNS equipment design standards and includes requirements for software safety assurance. Where appropriate, DASA will base standards on international best practice and national interoperability requirements. Where necessary, the ANSP may seek advice from DASA on design standards for other ANS equipment. DASA may provide such advice via a Delegate of the Safety Authority (DoSA) with scope to prescribe and interpret design safety standards for specified equipment, systems and installations.

c. **Interfaces with other providers**. ANSPs should define interfaces and performance agreements with all other equipment, systems and installations contributors to the service provision, which may directly influence the safety of the ANSP services.

d. **Reasonable level of demand.** A reasonable level of demand would include increases in demand caused by credible scenarios such as power outages, internet outages and weather events: An ANSP must consider credible scenarios in safety analysis and develop the system architecture to provide sufficient capacity and redundancy to ensure continuity of service in these scenarios.

e. **System commissioning.** Before placing new systems or system components into operational use or returning components (which have been removed from operational service for modification or major repair activity) to operational service, the ANSP should document and review a summary of test procedures and results. Additionally, the ANSP should seek recommendation from technical and operational personnel before returning systems to operational use.

f. **Service release testing.** When conducting testing of systems or system elements prior to introduction to operational service, following modification or changes to data, test schedules and procedures should ensure all potential failure modes and impacts on system safety and effectiveness are tested. This should include Regression Testing to ensure identification and rectification of unintended changes to system performance.

1. support the safe and effective provision of the service

2. are tested before operational service, to ensure no detriment to Aviation Safety and operational capability

3. which have been modified are tested before return to operational service to ensure no detriment to Aviation Safety

4. are protected against physical and cyber threats from external and internal sources.

ANSP.80 – PERSONNEL COMPETENCY AND LICENSING (AUS)

(a) A certified ANSP must ensure that personnel are qualified, competent, current and authorised to undertake their assigned duties. ▾ GM ▾ AMC

AMC ANSP.80(a) – Personnel competency and licensing (AUS)

a. ANSPs should:

i. ensure tasks are undertaken by suitably competent and authorised personnel, including contractor personnel

ii. determine minimum staffing requirements for a service consistent with the defined and reasonable level of demand and ensure adequate numbers of personnel are provided

iii. maintain training, competency assessment and checking programs for their personnel that include the provision of the following training types:

(a) initial

(b) recurrent

(c) recency

(d) differences

(e) on the job training (OJT)

iv. define minimum qualification, experience, recency and currency requirements for each operational role, including those involved in the provision of training and checking

v. conduct non-technical skills training (to comply with DASR NTS).

GM ANSP.80(a) – Personnel competency and licensing (AUS)

a. **Purpose**. **(Context)** The safe delivery of ANS is supported by knowledge, skills and behaviours benchmarked against contemporary training and learning standards. **(Hazard)** Undesired ANS personnel knowledge, skills and behaviours can affect the safe delivery of ANS and compromise Aviation Safety. **(Defence)** This regulation requires an ANSP-AM to establish qualification and competency-based training systems to:

i. ensure ANSP personnel are adequately trained and authorised to perform their specified duties

ii. provide ANSP personnel with the requisite knowledge and skills to support the desired behaviours for safe ANS provision

iii. actively monitor and correct knowledge, skills and behaviours in ANSP personnel, to ensure that the required standards are maintained.

b. There will be differing competencies among technical personnel depending on what aspects of the equipment or systems they are responsible for; and the role the equipment or system plays in the safety of the service. Therefore, DASA does not prescribe any single competency or licensing framework for these roles. The ANSP, by the varying nature of the equipment and systems they use or support, has flexibility to select competencies that are appropriate to each specific role. This flexibility enables the ANSP to identify the tasks and skillsets required to hold specific competency, authorisation or licencing. ANSPs must include required authorisations or competencies in OIP.

c. ANSPs may use CASA, EASA and ICAO standards for technical personnel competency to manage competencies.

(b) A certified ANSP must only provide an Air Traffic Control Service utilising licenced Air Traffic Controllers. ▾ GM ▾ AMC

AMC ANSP.80(b) – Air traffic controller licensing (AUS)

a. The basis for the licencing of air traffic controllers should include:

i. ICAO Annex 1 – *Personnel Licencing*

ii. (AUS) CASR Part 65 – *Personnel Licencing*.

GM ANSP.80(b) – Air traffic controller licensing (AUS)

a. The ATC licence issued to a qualified individual by DASA must clearly state that compliance with ICAO training and competency standards has been achieved. DASA appoints the Chief Air Traffic Controller as a Delegate of the Safety Authority for the licensing of Air Traffic Controllers through the relevant licensing system.

b. In the interest of national harmonisation, ANSPs may consider the provisions in (AUS) CASR Part 65 – *ATS Licensing* for inclusion in the ANSP licensing system.

(c) A certified ANSP that provides FPD Services must ensure all personnel who design instrument flight procedures are qualified, competent and current in instrument procedure design. ▾ GM ▾ AMC

AMC ANSP.80(c) – Instrument flight procedure designer training and currency (AUS)

a. The basis for flight procedure designer training and currency should include:

i. ICAO Doc 9906 - *Quality Assurance Manual for Flight Procedure Design* Vol 1 and 2

ii. (AUS) CASR 173 - *Instrument flight procedure design.*

ANSP.90 – SERVICES PROVIDED BY NON-CERTIFIED PROVIDERS (AUS)

(a) A certified ANSP which uses data provided by a Data Services Provider (DSP) must ensure contractual arrangements regarding the supply of data in any form or for use by any operational platform include requirements on the DSP to: ▾ GM

GM ANSP.90(a) – Aeronautical Data from third parties (AUS)

a. **Purpose**. **(Context)** Aeronautical Data comes in many forms. Aeronautical Data is used in all contemporary aviation activities and may originate from numerous sources. **(Hazard)** Aviation Safety can be compromised if data creation; collation; integration and distribution standards; and processes are not fit for purpose. **(Defence)** This regulation requires the ANSP-AM to utilise contractual arrangements to ensure that Aeronautical Data from third parties does not compromise Aviation Safety.

b. A Data Service Provider receives, assembles, translates, selects, formats, distributes or integrates Aeronautical Data and information that is released as an authoritative source for use in aeronautical databases on aircraft or in operational aviation systems, applications and equipment.

c. Aeronautical databases include databases that support the flight operation of aircraft for the purposes of primary communication, navigation and surveillance (CNS) or

supplementing CNS (eg flight management systems, terrain databases, obstacle databases and aerodrome mapping databases).

d. Aeronautical databases include applications loaded into electronic flight bags but do not include databases having no safety effect eg in-flight entertainment systems.

e. Aeronautical Data may be sourced from third party organisations which are not subject to DASR ANSP eg Boeing Digital Solutions (Jeppesen) and OzRunways P/L.

1. provide services only within the scope of a Service Level Agreement or other document issued by the relevant CAA or MAA

2. comply with the service delivery provisions of the current version of RTCA 'Standards for Processing Aeronautical Data'

3. advise the ANSP where released aeronautical databases have subsequently been identified to have deficiencies or errors

4. advise the ANSP where any CAA or MAA has changed the approval or conditions of approval of the DSP as a source of Aeronautical Data.

(b) A certified ANSP that uses data provided by a DSP must advise all MAOs when released aeronautical databases, or updates to any existing aeronautical databases, are identified to have deficiencies or errors. ▼GM

GM ANSP.90(b) – Aeronautical Data error advice (AUS)

Purpose. **(Context)** Aeronautical Data comes in many forms. It is used in all contemporary aviation activities and may originate from numerous sources. **(Hazard)** Aviation Safety can be compromised if data creation; collation; integration and distribution standards; and processes are not fit for purpose. **(Defence)** This regulation requires the ANSP-AM to ensure that Aeronautical Data does not compromise Aviation Safety.