



SUMMARY OF PROPOSED CHANGE



Proposed standards for fatigue management for air traffic service (ATS) personnel

Part 65 (Air Traffic Service Licensing) Amendment (Fatigue Rules) Manual of Standards 2023

Part 172 (Air Traffic Service Providers) Amendment (Fatigue Rules) Manual of Standards 2023

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Introduction

We are seeking industry and public comment about implementing the fatigue management standards for air traffic service personnel.

Effective from 5 November 2020, ICAO amended Annex 11 to the Chicago Convention (Annex 11) to introduce standards for managing fatigue in the provision of air traffic control services.

Currently, Australia does not have legislation dealing with the management of human fatigue in the provision of air traffic control (ATC).

Airservices Australia (AA)—the national air traffic services (ATS provider—has used a fatigue risk management system (FRMS) since 2003. At the time the ICAO standards came into effect, AA wrote to CASA expressing its intent to continue using an FRMS into the future and agreed to, as necessary, amend its FRMS to address any differences with the Annex 11 standards.

Fatigue management is a core CASA aviation safety requirement, and we believe it is important to address the lack of formal legislation.

CASA recently identified that it has the ability, under Parts 11, 65 and 172 of the *Civil Aviation Safety Regulations 1998* (CASR), to adopt the ICAO fatigue management standards through amendment to the Parts 65 and 172 Manuals of Standards (MOS).

The purpose of this summary of proposed change (SPC) is to explain the action we propose to adopt suitable fatigue management standards for ATS personnel.

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Reference material

Acronyms

The acronyms and abbreviations used in this SPC are listed in the table below.

Acronym	Description
AC	advisory circular
AA	Airservices Australia
ATS	air traffic service
CAR	<i>Civil Aviation Regulations 1988</i>
CASA	Civil Aviation Safety Authority
CASR	<i>Civil Aviation Safety Regulations 1998</i>
FRMS	Fatigue risk management system
ICAO	International Civil Aviation Organization
MOS	manual of standards
SOC	summary of consultation
SPC	summary of proposed change

Definitions

Terms that have specific meaning within this SPC are defined in the table below. Where definitions from the civil aviation legislation have been reproduced for ease of reference, these are identified by 'grey shading'. Should there be a discrepancy between a definition given in this SPC and the civil aviation legislation, the definition in the legislation prevails.

Term	Definition
fatigue risk management system (FRMS)	A data driven means of continuously monitoring and managing fatigue related safety risks, based upon scientific principles, knowledge and operational experience that aims to ensure relevant personnel are performing at adequate levels of alertness.
Operational person	In relation to an ATS provider, means a member of the ATS provider's personnel to whom the ATS provider gives responsibility: <ul style="list-style-type: none"> a. for an air traffic control function to be performed in connection with an air traffic service it provides; or b. for a flight service function to be performed in connection with an air traffic service it provides.

References

Legislation

Legislation is available on the Federal Register of Legislation website <https://www.legislation.gov.au/>

Document	Title
Part 65 Manual of Standards	Air traffic services licensing
Part 172 Manual of Standards	Air traffic service providers
Civil Aviation Order 48.1 Instrument 2019	Management of fatigue risk in aviation operations

International Civil Aviation Organization documents

International Civil Aviation Organization (ICAO) documents are available for purchase from <http://store1.icao.int/>

Document	Title
Annex 11 to the Chicago Convention	Air traffic services

Purpose and scope of the proposed amendments

The purpose of this consultation is to seek industry and public comment about implementing the fatigue management standards for ATS personnel that were initially consulted in policy proposal (PP) 2207AS.

PP 2207AS was open for comment between 8 June 2022 and 7 July 2022 and covered comprehensive updates to Part 172 (ATS Providers) of CASR and the Part 172 MOS. It also included a specific section on fatigue management.

Background

Effective from 5 November 2020, ICAO amended Annex 11 to introduce standards for managing fatigue in the provision of air traffic control services.

The new standards require States to require ATS providers have one of the following:

- air traffic controller schedules commensurate with the service(s) provided and in compliance with the prescriptive limitation regulations established by the State
- or
- an FRMS, in compliance with regulations established by the State, for the provision of all air traffic control services
- or
- an FRMS for a defined part of its air traffic control services in conjunction with schedules in compliance with the prescriptive limitation regulations for the remainder of its air traffic control services.

Issue

The primary issue is Australia does not have legislation covering the management of human fatigue in the provision of air traffic services.

AA voluntarily uses an FRMS to manage fatigue among its air traffic control personnel. However, this voluntary arrangement is not sufficient to demonstrate that Australia has, adequate legislation.

Fatigue management is a core CASA aviation safety requirement, and CASA believes it is important to address this matter.

Options for fatigue management standards for Australia

Paragraph 2.28.1 of Annex 11 requires States to establish:

- prescriptive limits
- FRMS regulations.

Annex 11 does not specify any prescriptive limits. Instead, Appendix 5 to Annex 11 lists the items requiring maximum or minimum limits such as the maximum number of hours in any duty cycle. subsequently the Annex requires States to determine and specify values for each limit.

This is problematic as developing fatigue standards will take considerable time and effort. For example, the fatigue standards for flight crew involved significant work spanning more than 10

years. CASA carefully assessed the prescriptive limits for several States and found nothing suitable for adoption by Australia.

A relevant factor is that AA (the only ATS provider that is regulated under Part 172) has used an FRMS since 2003 and has informed CASA that it wishes to continue using an FRMS into the future. According to the Annex 11 standards, schedules based on prescriptive limits or FRMS are separate and distinct ways of managing fatigue. In other words, one method is not cross-referenced or dependent on the other method. We found that the European Aviation Safety Agency (EASA) and Canada do not prescribe scheduling limits, but instead require ATS providers to either have an FRMS or manage fatigue as part of the provider's SMS.

Considering these matters and to enable Australia to expeditiously introduce fatigue management legislation and standards, CASA considers that the FRMS option would be sufficient as the initial and only standard for fatigue management for ATS personnel.

Legislative changes to implement fatigue management for air traffic services personnel

Based on our original proposal and conclusions drawn from the responses to PP 2207AS, we propose to implement the fatigue management standards via amendment to the Part 65 and Part 172 MOS. For the Part 172 MOS, we are proposing the following standards:

- a. An ATS provider must have a fatigue risk management system (FRMS) that is acceptable to CASA for managing fatigue.
- b. The FRMS would apply to any person who performs a function as described in subregulations 65.075 (2) and 65.130 (2) of CASR:
 - Functions include, for example, providing an aerodrome control service, approach control service, area control service or traffic and flight information and alerting service.
 - A person who performs a function as described would be defined as an **operational person**.
- c. Consistent with the FRMS standards in Annex 11 and Civil Aviation Order (CAO) 48.1, an FRMS would have to include:
 - i. policy and objectives, and related documentation
 - ii. practical operating procedures:
 - o These would be based on equivalent CAO 48.1 requirements.
 - o Practical operating procedures would require maximum values for hours in a duty period, consecutive workdays, hours worked in a defined period and time in position.
 - o Practical operating procedures would require minimum values for the duration of non-duty periods, non-duty days in a defined period, duration of breaks.
 - o ATS provider would be required to amend the maximum and minimum values if data shows the values are respectfully too high or too low.
 - o Amendments to values would be subject to approval from CASA.
 - iii. hazard identification, risk assessment and mitigation processes
 - iv. safety assurance procedures
 - v. safety promotion procedures
 - vi. change management process:

- o The change management process would be consistent with CAO 48.1 and would include items termed 'significant changes', which would require CASA approval.

CASA's processes for approving and regulating an ATS provider's FRMS would be based on procedures specified in Appendix 7 to CAO 48.1, specifically:

- a. The provider would submit an application to CASA for approval of its FRMS.
- b. Once satisfied with application, CASA may grant a trial FRMS implementation approval for up to 24 months.
- c. If - after at least 12 months - CASA is satisfied that the FRMS is demonstrably delivering the safety outcomes expected and is capable of continuous improvider, CASA may grant a full FRMS implementation approval.

For the Part 65 MOS, we are proposing personal fatigue obligations for air traffic controllers and flight service officers. Specifically, these operational persons would have a condition on their licences to the effect they must not begin to perform an ATS function if, due to fatigue, the holder is, or is likely to be, unfit to perform a task that the holder must perform for that function. This condition is the same as the condition that already applies to pilots.

Consultation documents

Included with this policy proposal are:

- A document tabulating the proposed FRMS standards cross-referenced with relevant ICAO and existing Civil Aviation Order (CAO) 48.1 FRMS standards (Annex A).
- The consultation draft of the proposed amendment to Part 172 MOS.
- The consultation draft of the proposed amendment to Part 65 MOS.

Previous consultations

As stated earlier, CASA consulted with industry (PP 2207AS - Proposed amendments to regulations and standards for air traffic service providers), which included proposals for managing fatigue in the provision of ATS.

In total, there were 8 respondents to PP 2207AS: Two being ATS providers, two from airlines, one from an ATS training provider, and one from a remotely piloted aircraft system (RPAS) operator, and two individuals.

We reviewed the responses and summarised them in a Summary of Consultation, which can be found at <https://consultation.casa.gov.au/regulatory-program/pp-2207as/>

Impact on industry

We believe the proposed standards will have a positive safety benefit. They provide certainty about the requirements for an ATS provider's FRMS and establish consistency with related ICAO standards and the Australian standards for flight crew members.

We also believe the standards should not have a significant implementation impact on ATS providers as the ATS provider already has an FRMS which, CASA understands, has similar components and structure as the proposed standards. The ATS provider has previously advised CASA about its intention to retain this FRMS as well as modify it as necessary to meet the Annex 11 standard.

Safety risk analysis

We assess that carrying out the proposed action has no safety or regulatory risk or undesirable impacts. FRMS is a well-established practice for aviation safety within Australia and internationally.

Regulation impact statement

Formal regulation impact analysis will be conducted before the changes are formally implemented.

Closing date for comment

CASA will consider all comments received as part of this consultation process and incorporate changes as appropriate. Comments on the proposed standards for fatigue management for air traffic service (ats) personnel should be submitted through the online response form by close of business 23 June 2023.