# Proposed amendments to Part 91 MOS – danger areas and landing minima visibility - (CD 2405OS)

# Overview

We are seeking your feedback on the proposed amendments to the Part 91 (General Operating and Flight Rules) Manual of Standards (MOS).

The most significant changes relate to the [introduction of military operating areas](https://www.casa.gov.au/operations-safety-and-travel/airspace/airspace-regulation/extraterritorial-airspace#Militaryoperatingareas) (MOAs) and corrections to visibility requirements for landing minima. These could result in changes to your current practice.

A range of other minor corrections are also included, which amend the Manual of Standards to accurately reflect intended outcomes but do not change current practice.

### Principal changes that would occur

The most significant changes are:

* **Military operating areas:** MOAs are a type of danger area introduced in November 2023. Sections 11.22 and 11.23 of the Part 91 MOS have been updated to include MOAs. This will help ensure the pilot in command is aware of the requirements.
* **Visibility requirements for landing minima:** Section 15.10 has been updated to correct errors in the grouping of instrument approach procedures and the application of visibility corrections related to aerodrome lighting installations.

The changes and corrections in this amendment have been made in response to feedback from numerous sources over the past 12 months.

# Why your views matter

Your feedback will help us make sure the proposed requirements are suitable, the MOS is clear and it will work as intended.

Please submit your comments using the survey link on this page.

If you are unable to provide feedback via the survey link, please email [regulatoryconsultation@casa.gov.au](mailto:regulatoryconsultation@casa.gov.au?subject=Consultation%20on%20Proposed%20amendments%20to%20Part%2091%20MOS%20–%20danger%20%20areas%20and%20landing%20minima%20visibility%20-%20(CD%202405OS)) for advice.

# **Documents for review**

All documents related to this consultation are attached in the ‘Related’ section at the bottom of the overview page. They are:

* Part 91 MOS Amendment Instrument 2024 (No. 1) (this is the legal instrument that amends the MOS)
* Draft compilation 6 of Part 91 MOS (this is an indicative draft of what the full MOS would look like with the amendments incorporated within it)
* Draft Approach Types Summary (this is a table that will replace the existing Figure 4 in the GM 91.307 entry of the Part 91 AMC/GM document)
* MS Word copy of online consultation for ease of distribution and feedback within your organisation.

# **What happens next**

At the end of the response period, we will:

* review all comments received
* make responses publicly available on the consultation hub (unless you request your submission remain confidential)
* publish a Summary of Consultation which covers the feedback received and outlines any intended changes and next steps.

All comments received on the proposed legislation will be considered. Relevant feedback that improves upon the proposed instrument will be incorporated into the final instrument.

# Give Us Your Views

# [Appears on the overview page at the bottom]

Online Survey

[This link is on the front page of the survey and takes you to the survey questions]

**Related**

[This section is at the bottom of the front page and contains all the links to other sites and documents related to this consultation]

**Related Documents**

List of documents attached to the consultation:

* Consultation draft - Part 91 MOS Amendment Instrument 2024 (No. 1)
* Draft compilation 6 of Part 91 MOS
* Draft approach types summary
* MS Word copy of online consultation on Proposed amendments to Part 91 MOS – danger areas and landing minima visibility – (CD 2405OS)

# Audience and Interest Groups

**Audience**

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| --- | --- |
|  | Air operator |
|  | Flight instructors and flight examiners |
|  | Flight training operators |
|  | Pilots |
|  | Part 175 of CASR Aeronautical information service providers |
|  | Operations Control/Flight Dispatch |

**Interest**

|  |  |
| --- | --- |
|  | Operations standards |

# Page 1. Consultation Contents

This consultation is seeking feedback on proposed amendments to the Part 91 MOS, of which 28 amendments are minor in nature, and 2 amendments are potentially more significant to your operations.

The 2 significant amendments are those related to:

* **military operating areas** (a new type of danger area), and
* **landing minima visibility requirements**.

The survey has been designed so that you can provide feedback either entirely or just on the policy topics applicable to you.

When you have completed your feedback, select the **‘Finish’** button at the bottom right of this page.

|  |  |
| --- | --- |
| Page | Table of contents |
| 2 | Personal information (required) |
| 3 | Consent to publish submission (required) |
| 4 | Overview of the proposed amendment to the Part 91 MOS |
| 5 | Feedback on minor changes to Part 91 MOS |
| 6 | Military operating areas (MOAs) |
| 7 | Landing Minima visibility and ‘approach type’ guidance |
| 8 | General comments |

# Page 2. Personal information

## First name

*(Required)*

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## Last name

*(Required)*

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## Email address

*If you enter your email address, you will automatically receive an acknowledgement email when you submit your response.*

Email

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## Do your views officially represent those of an organisation?

*(Required)*

*Please select only one item*

Yes, I am authorised to submit feedback on behalf of an organisation

No, these are my personal views.

If yes, please specify the name of your organisation.

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## Which of the following best describes the group you represent?

*Please select all that apply*

Pilot

Flight or Ground Instructor

Aircraft Operator

Aircraft owner

Other

Please specify ‘Other’ if selected.

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# Page 3. Consent to publish submission

To provide transparency and promote debate, we intend to publish all responses to this consultation. This may include both detailed responses/submissions in full and aggregated data drawn from the responses received.

Where you consent to publication, we will include:

* **your last name** if the submission is made by you as an individual
* **the name of the organisation** on whose behalf the submission has been made
* **your responses** and comments

We **will not** include any other personal or demographic information in a published response

Do you give permission for your response to be published?

*(Required)*

*Please select only one item*

Yes - I give permission for my response/submission to be published.

No - I would like my response/submission to remain confidential but understand that de-identified aggregate data may be published.

I am a CASA officer.

Information about how we consult and how to make a confidential submission is available on our [website](https://www.casa.gov.au/rules/changing-rules/consultation-industry-and-public).

# Page 4. Overview of the proposed amendments to the Part 91 MOS

The 30 corrections proposed in this amendment are itemised in the table below.

Twenty-eight of the corrections are minor in nature and should not change current practices. However, items 8 and 11 may result in changes to current practice and the questions in this consultation request specific feedback on these changes.

We recommend that you review the proposed amendments using the MOS draft compilation provided in this consultation.

**Overview of 91 MOS amendments**

|  |  |  |  |
| --- | --- | --- | --- |
| Items of the amendment instrument | **MOS Reference** | **Changes current practice or intent of rules** | **Description** |
| 1 | Subsection 1.07 (6) | No | This change adds 4 new terms not defined in this MOS.  These terms are already defined elsewhere but are being added here for completeness.  Definitions for AFIS, approach procedure with vertical guidance, type A and type B are being added.  Go to MOS draft compilation pages 3, 4 and 16 to view the change. |
| 2 | Subsection 1.07 (6) | No | This change aligns the definition for *non-precision approach procedure* to the definition used by ICAO.  Go to MOS draft compilation page 13 to view the change. |
| 3 | Subsection 1.07 (6) | No | This change aligns the definition for *precision approach procedure* to the definition used by ICAO.  Go to MOS draft compilation page 14 to view the change. |
| 4 | Table 2.07 (3), Item 2B, Column 5 | No | This row (item 2B) of the VMC criteria table only relates to NVIS operations with a specific approval for reduced visibility. The amendment adds ‘Clear of cloud’ which was accidentally omitted when the MOS amendment that added item 2B was done.  Go to MOS draft compilation page 22 of 170 to view the change. |
| 5 | section 6.02 | No | Multiple gliders conducting soaring flights in a thermal do not fall under the definition of *flying in formation* from the CASR Dictionary. As a result, CASR 91.205 does not apply to these flights and therefore the exclusion contained in section 6.02 of the MOS is not needed.  Section 6.02 is therefore being deleted.  Go to MOS draft compilation page 37 of 170 to view the change. |
| 6 | section 8.02 | No | The existing subsection 8.02(2) unnecessarily states that if an ICAO landing forecast is used then forecast probabilities mentioned in subsection 8.02(1) can be disregarded.  The reason this is unnecessary is because under ICAO Annex 3 standards, an ICAO landing forecast never includes the probabilities mentioned in subsection 8.02(1).  The change replaces the existing subsection 8.02(2) with a new subsection to remove the unnecessary reference to ICAO landing forecasts.  Go to MOS draft compilation page 40 of 170 to view the change. |
| 7 | paragraph 10.02 (a) | No | The current wording of this MOS paragraph only requires the relevant infrastructure to be available for use which is incorrect. The relevant infrastructure needs to be both available, and suitable and safe to use.  Go to MOS draft compilation page 48 of 170 to view the change. |
| 8 | section 11.22 & new section 11.23 | **Yes** | This change **adds a new rule** relating to the use of Military Operating Areas (***MOA***s) which are a special form of danger area. The current version of section 11.22 of the MOS was written before MOAs were properly implemented into the Australian airspace framework. This new rule reflects the airspace framework as it now exists.  Go to MOS draft compilation page 62 and 63 of 170 to view the change. |
| 9 | section 15.02 | No | This change adds definitions which are used for ease of reference in section 15.10  Go to MOS draft compilation pages 72 and 73 to view the change. |
| 10 | section 15.03 | No | Questions to CASA identified that some pilots were confused about the interaction between the take-off minima rules and the fuel planning requirement for additional fuel. This change is intended to identify the link between these two matters for the MOS reader.  Go to MOS draft compilation page 73 of 170 to view the change. |
| 11 | section 15.10 | **Yes** | This change **entirely replaces** the existing section 15.10 of the MOS.  The existing section 15.10 specifies minimum visibility requirements by grouping certain kinds of instrument approaches together. However, these groupings did not properly integrate approaches with vertical guidance or APVs. These approaches are approaches that use GNSS to provide certified vertical guidance, this term is not referring to the ability of some GNSS units to provide advisory vertical guidance.  The change corrects the grouping of approaches into NPA, APV and PA approach classifications.  A second problem with the existing section 15.10 is that the visibility corrections for partial or complete failures in approach lighting systems are incorrect compared to current lighting installation standards.  This change also corrects the visibility requirements when approach lighting systems partially or fully fail.  Go to MOS draft compilation page 75 to 79 of 170 to view the change. |
| 12, 13, 14 and 15 | section 15.11 | No | These changes are consequential to the changes in section 15.10.  It aligns the missed approach rules to use the new grouping of approaches into NPA, APV and PA approach classifications.  9Go to MOS draft compilation page 79 and 80 of 170 to view the change. |
| 16 | Division 20.1 | No | This change adds a Note drawing the attention of the MOS reader to an existing definition in section 1.07 of the MOS that requires seats, seatbelts, shoulder harnesses and restraint systems to be approved under Part 21 of CASR.  Go to MOS draft compilation page 90 of 170 to view the change. |
| 17 | Division 20.2 | No | This change adds a Note drawing the attention of the MOS reader to an existing definition in section 1.07 of the MOS that requires seats, seatbelts, shoulder harnesses and restraint systems to be approved under Part 21 of CASR.  Go to MOS draft compilation page 91 of 170 to view the change. |
| 18 and 19 | section 21.03 | No | Questions to CASA identified that some pilots were unsure whether datalink, ADS-C, CPDLC, or SATCOM VOICE met the requirement for required broadcasts and reports to be made on a *published radio frequency*.  This change clarifies that these methods of communication are acceptable.  Go to MOS draft compilation page 95 of 170 to view the change. |
| 20 and 21 | section 21.05 | No | This changes clarify that a report to cancel SARWATCH is not required at controlled aerodromes because SARWATCH at these aerodromes is automatically cancelled by ATC.  Go to MOS draft compilation page 96 of 170 to view the change. |
| 22 | section 21.06 | No | This change clarifies that a report to cancel SARWATCH is not required at an aerodrome with an Aerodrome Flight Information Service (AFIS) because SARWATCH at these aerodromes is automatically cancelled by the AFIS.  For information, an AFIS and an SFIS (surveillance flight information service) are different services. At the time of publishing this consultation, the only AFIS at a civil aerodrome is at Port Hedland, with multiple military aerodromes using an AFIS at different times. Readers should refer to the AIP-ERSA for details of which aerodromes have an AFIS.  Go to MOS draft compilation page 98 of 170 to view the change. |
| 23 | Division 26.4 | No | This change amends the Division title to better reflect the content of the Division.  Go to MOS draft compilation page 115 of 170 to view the change. |
| 24 | Division 26.5 | No | This change amends the Division title to better reflect the content of the Division.  Go to MOS draft compilation page 121 of 170 to view the change. |
| 25 and 26 | section 26.48 | No | Subsection 26.48(3A) has 3 paragraphs. The last 2 paragraphs were accidentally both labelled as (b).  This change corrects the second paragraph (b) to be paragraph (c).  When section 26.48 requires a survival ELT to be carried on the aircraft, subsection 26.48(6) states the 3 allowable options for the location of the survival ELT on the aircraft.  This change adds a Note recommending that the survival ELT be carried on the person of the pilot.  Go to MOS draft compilation page 134 and 35 of 170 to view the change. |
| 27 and 28 | section 26.49 | No | Paragraphs 26.49(b) and (c) incorrectly requires all ELTs, including voluntarily carried or fitted ELTs, to be registered with the appropriate search and rescue authority. However, these 2 paragraphs should only apply to ELTs required by the MOS to be fitted to, or carried on, an aircraft.  This change fixes this error. CASA will similarly amend the relevant similar sections of the Part 121, 133 and 135 MOS at a later date.  Go to MOS draft compilation page 135 of 170 to view the change. |
| 29 and 30 | section 26.60 | No | Subsection 26.60(2) incorrectly does not specify that the relevant distance over water is a distance from land.  The first change fixes this.  Paragraph 26.60(2)(b) incorrectly applies to both single and multi-engine aeroplanes when it should just apply to multi-engine aeroplanes.  The second change fixes this error.  Go to MOS draft compilation page 140 and 141 of 170 to view the change. |

# Page 5. Feedback on minor changes to Part 91 MOS

**Proposed minor amendments**

Other than items 8 and 11 of the proposed Part 91 MOS amendment, all changes are assessed by CASA to be minor changes which are intended to:

* add clarity to existing practice and intention of existing rules
* correct errors of an unintentional nature
* not change the practical outcomes of the matters being amended.

These changes are available for review in the ‘Overview of 91 MOS amendments’ table contained in the fact bank below.

Link: [Part 91 (General Operating and Flight Rules) Manual of Standards 2020 – Draft compilation 6](https://consultation.casa.gov.au/++preview++/regulatory-program/cd-2405os/supporting_documents/Draft%20compilation%206%20of%20Part%2091%20MOS.PDF)

**Fact bank:** Overview of Part 91 MOS amendments

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| *Content:*   * Table - Overview of Part 91 MOS amendments contained in the online consultation |

**Please provide any comments you may have on the minor amendments to Part 91 MOS.**

When providing your comments please clearly identify the amendment item and MOS reference to which you are referring. For example:

Item 5 section 6.02 – comments

Item 7 paragraph 10.02 (a) – comments

Comments on minor amendments to Part 91 MOS.

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# Page 6. Military operating areas (MOAs)

**Policy proposal**

MOAs were introduced in 2023 to replace restricted areas (RAs) that lie outside (or near) the boundary of Australian territory. These changes aligned Australia’s airspace with international law and International Civil Aviation Organization requirements (ICAO).

MOAs are a special form of danger area where higher risk military activities will be conducted.

Australian aircraft are not permitted to enter MOAs without permission from the Controlling Authority in a similar manner to restricted areas within Australian territory.

We are proposing to:

* amend section 11.22 of the Part 91 MOS, by replacing it with a new section 11.22 on Danger areas
* add another section, section 11:23 – Military operating areas (MOAs).

**Policy Aim**

Align the Part 91 MOS with recent legislative changes under the Airspace Act 2007 and its associated regulations and instruments regarding the replacement of restricted area beyond or near the boundary of Australian territory with MOAs.

Link: [Part 91 (General Operating and Flight Rules) Manual of Standards 2020 – Draft compilation 6](https://consultation.casa.gov.au/++preview++/regulatory-program/cd-2405os/supporting_documents/Draft%20compilation%206%20of%20Part%2091%20MOS.PDF" \t "_blank)

**Fact bank:** Proposed new sections 11.22 – Danger areas, and 11.23 – Military operating areas

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| PDF - Amendment to 11.22 and 11.23 contained in the online consultation |

**Question** – Do the proposed amendments to section 11.22 and 11.23 achieve the policy aim?

*Radio buttons*

Yes

No, (please explain why below)

Please provide any comments you have on the proposed amendments to section 11.22 and the new section 11.23.

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# Page 7. Landing Minima visibility and ‘approach type’ guidance

**Landing Minima visibility**

**Policy proposal**

Feedback to CASA has identified that the grouping of instrument approach procedures (IAPs) in section 15.10 and 15.11 of the Part 91 MOS into precision approaches (PA) and non-precision approaches (NPA), without separately identifying approaches with vertical guidance (APV), resulted in the incorrect application of the minimum visibility requirements.

CASA’s analysis of section 15.10 also identified errors in the required visibility corrections for circumstances where the installed approach lighting system (ALS) was degraded or inoperative.

For certain IAPs, the presence of an ALS results in a lower published minimum visibility on the IAP chart compared to the ALS not being present. ALS installations of different lengths along the ground provide different minimum visibilities.

If the IAP chart published visibility is based upon a certain length of ALS, then if the ALS becomes degraded or inoperative the pilot must compensate for the absence or reduction in capability of the ALS by increasing the IAP minimum visibility. IAP design standards and their relationship to different ALS are contained in the Part 173 MOS.

It is proposed to amend section 15.10 to correct these errors in the grouping of IAPs and the application of visibility corrections in situations of degraded or inoperative ALS.

**Policy Aim**

Ensure APV operational benefits are maximised by specifying the correct minimum visibility requirements for these kinds of IAPs.

Ensure aviation safety is maintained by requiring pilots to appropriately compensate for degraded or inoperative ALS.

Link: [Part 91 (General Operating and Flight Rules) Manual of Standards 2020 – Draft compilation 6](https://consultation.casa.gov.au/++preview++/regulatory-program/cd-2405os/supporting_documents/Draft%20compilation%206%20of%20Part%2091%20MOS.PDF)

**Fact bank:** Amendments to section 15.10 – Landing minima

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| PDF - Amendment to section 15.10 Landing Minima contained in the online consultation |

**Question 1 –** Dothe proposed amendments to section 15.10 achieve the policy aim?

*Radio buttons*

Yes

No, (please explain why below)

Please provide any comments you have on the proposed amendments to section 15.10.

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**Proposed guidance**

We are proposing to replace the existing Figure 4 in the GM 91.307 entry of the [Part 91 AMC/GM](https://www.casa.gov.au/part-91-general-operating-and-flight-rules-amc-gm) document with a new Table.

We have identified that the existing Figure 4 contains errors compared to the ICAO standards.

The aim is to provide clear guidance on the type, method, classification, technology, and minima applicable to each IAP, on a local and international level.

**Fact bank:** Draft approach types table, for inclusion as Figure 4, in the Part 91 AMC/GM - GM 91.307)

Fact bank Content

Approach procedure types and classifications are described in multiple ways. The purpose of the table below is to link these different descriptions together in an informative way.

**Table 1: Draft Approach Types Summary**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Runway type | Operation type | Operation method | Procedure classification | Approach technology: (PBN nav spec) | Procedure (minima type) | | |
| **Non-precision approach runway** | Type A2 | 2D | Non-precision approach (NPA) | Conventional Ground Based6 | VOR  (MDA/H) | NDB  (MDA/H) | LOC  (MDA/H) |
| PBN:  (RNP APCH) | LNAV  (MDA/H) | LP  (MDA/H) |  |
| 3D | Approach procedure with vertical guidance (APV) | LNAV/VNAV  (DA/H) | LPV (DH at or above 250 ft)  (DA/H)5 |  |
| PBN:  (RNP AR APCH) | RNP 0.x  (DA/H)4 | | |
| **Precision approach runway** | Type B3&7 | Precision approach (PA) procedure | PBN:  (RNP APCH) | LPV (DH below 250 ft)  (DA/H)5 | | |
| Conventional Ground Based | ILS  (DA/H)7 | | |
| GNSS Based | GLS  (DA/H)7 | | |

**Notes:**

1. This table should be read from left to right and can be used to decode IAP terminology.
2. Type A: a minimum descent height or decision height at or above 250 ft.
3. Type B: a decision height below 250 ft. Type B includes CAT I ILSs and low-visibility CAT II and CAT III ILSs.
4. For a RNP AR APCH procedure the minima is represented as RNP 0.x where 0.x refers to the RNP value specific to the final approach segment (for example: 0.3).
5. LPV IAP are not currently available in Australia as they rely on the availability of an SBAS (satellite based augmentation system). An SBAS is expected to be available for Australian IAPs in late 2028 via the Australia / New Zealand Southern Positioning Augmentation Network (SouthPAN). Once this SBAS is available, it is expected that LPV IAP, mostly Type A but possibly a small number of Type B, will be designed and published.
6. DME or GNSS arrivals are technically classified as NPA but will only have circling minima published.
7. Obstructions and/or lack of infrastructure (for example related to non-precision approach runways as defined in the Part 139 MOS) may limit ILS or GLS PA to a decision height of 250 ft or above. In these situations, the procedure classification is still a PA but the operation type is Type A.

**Question 2 –** Does the draft approach types table provide clear guidance on the terminology used for type, method, classification, technology and minima, applicable to each IAP?

*Radio buttons*

Yes

No, (please explain why below)

Please provide any comments you may have on the draft approach types, table?

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# Page 8. General comments

Do you have any additional comments about the proposed policy amendment? This should not include points you have already raised.

Please include in these comments any **impact** this change may have on you or your operation.

Comments

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