

## Explanatory Statement

### Civil Aviation Safety Regulations 1998

#### Manual of Standards Part 173 Amendment Instrument 2020 (No. 1)

##### Purpose

The *Manual of Standards Part 173 Amendment Instrument 2020 (No. 1)* (the **instrument**) omits from the *Manual of Standards Part 173 – Standards Applicable to Instrument Flight Procedure Design* (the **Part 173 MOS**) outdated publishing standards for instrument flight procedures (**IFP**). Also, the instrument repeals instrument number CASA EX134/17 (*Exemptions and direction — publishing requirements for terminal instrument flight procedures*) (**CASA EX134/17**), which exempted a certified designer, or chief designer for a certified designer's organisation, from compliance with stated provisions of Part 173 of the *Civil Aviation Safety Regulations 1998 (CASR)* to the extent that each provision requires compliance with the IFP publishing standards.

The instrument also revises the standards stated in the Part 173 MOS relating to the calculation of visibility minima for instrument approach procedures.

Finally, the instrument includes minor or machinery-type amendments of the Part 173 MOS.

##### Legislation

Section 98 of the *Civil Aviation Act 1988* (the **Act**) empowers the Governor-General to make regulations for the Act and in the interests of the safety of air navigation. Relevantly, the Governor-General has made CASR.

Part 173 of CASR:

- (a) provides for the standards that apply to the design of IFP; and
- (b) applies to the following persons:
  - (i) persons who want to become, or are, certified designers or authorised designers of terminal IFP and certain employees of those persons;
  - (ii) persons who design IFP other than terminal IFP.

Part 173 of CASR provides for the standards that apply to the design of IFP by reference to the Part 173 MOS. Under subregulation 175.160 (1) of CASR, an AIS provider (being a person who holds a certificate under regulation 175.055 of CASR) must give a person a data product specification (**DPS**) that complies with subregulation 175.160 (4) if the person is responsible for aeronautical data or aeronautical information that the provider has published, or will publish:

- (a) in the Integrated Aeronautical Information Package; or
- (b) on an aeronautical chart.

Subsection 98 (5D) of the Act provides that a legislative instrument made under the Act or the regulations may apply, adopt or incorporate any matter contained in any instrument or other writing as in force or existing from time to time, even if the other instrument or writing does not yet exist when the legislative instrument is made.

Under subsection 33 (3) of the *Acts Interpretation Act 1901* (the *AIA*), where an Act confers a power to make, grant or issue any instrument of a legislative or administrative character (including rules, regulations or by-laws), the power shall be construed as including a power exercisable in the like manner and subject to the like conditions (if any) to repeal, rescind, revoke, amend, or vary any such instrument.

## **Background**

### ***Publishing standards for IFP***

Section 8.9 of the Part 173 MOS sets the publishing standards for IFP designs. These standards cover text format. For example, they describe the latitude, and longitude, format for depiction on an instrument approach chart and the pictorial layout for IFP charts.

The Part 173 MOS standards reflect the original IFP publishing standards in use at the time of the issuing of the MOS in 2003. Since then, there have been changes in the regulatory arrangements for the publication of aeronautical data, such as IFP charts. In particular, Part 175 of CASR (*Aeronautical Information Management*), which came into effect in 2014, establishes standards and requirements for the quality and integrity of aeronautical data and aeronautical information used in air navigation. Also, ongoing product improvement initiatives revealed shortcomings in the IFP publishing standards in the MOS.

All IFP information, including all IFP charts, published in the Aeronautical Information Publication (*AIP*) must comply with a DPS.

To accord with these new requirements, section 8.9 of the Part 173 MOS is replaced with new section 8.9. New paragraph 8.9.1 states that a certified designer must comply with the format and drafting conventions specified in a DPS, given to the designer under regulation 175.160, for the publication of an IFP. This amendment removes the need for CASA EX134/17.

### ***Calculation of instrument approach visibility minima***

The Part 173 MOS states the procedures and formulae for calculating the visibility minima that appear on instrument approach procedures.

There has been an ongoing issue with the interpretation of paragraphs 8.1.6.1 and 8.1.6.2 of the Part 173 MOS, which state the standards for calculating visibility minima for runway approach procedures. Due to the formatting of the requirements in the paragraphs, the standards have sometimes been incorrectly interpreted as requiring IFP designers to adjust the vertical minima to take into account the visibility minima. The correct interpretation is for the visibility minima to be adjusted to take into account the vertical minima.

Also, the calculation standards have been found restrictive compared to international standards, specifically in relation to allowing an operational benefit (reduced visibility minima) for a runway equipped with an approach lighting system that is shorter than the standard 900 m length.

To address these issues, the Part 173 MOS is amended to consolidate paragraphs 8.1.6.1, 8.1.6.2 and subsection 9.1.1 of the MOS into new, and amended,

paragraphs within paragraph 8.1.6 of the MOS. The new, and amended, paragraphs include standards to the effect that visibility minima calculations are to be based on runway alignment and length of approach lighting, if any, provided for the runway.

### **Documents incorporated by reference**

Schedule 1, item [7] of the instrument inserts new paragraph 8.1.6.1A in the Part 173 MOS. The paragraph incorporates by reference “PANS-OPS Vol II”. In doing this, the amendment relies on the tagged term **PANS-OPS**, for a stated document, mentioned in subparagraph 1.1.1.2 (a) (i) of the MOS. This follows the same approach taken in other provisions of the MOS, which also incorporate the document.

Also, paragraph 8.1.6.1A incorporates by reference “ICAO Doc 9905”. In doing this, the amendment relies on the tagged term **ICAO Doc 9905**, for a stated document, mentioned in subparagraph 1.1.1.2 (b) (iii) of the Part 173 MOS. This follows the same approach taken in other provisions of the MOS, which also incorporate the document.

The abovementioned documents are incorporated in the Part 173 MOS as existing from time to time. Regulation 173.010 of CASR defines **ICAO Doc. 8168 (PANS-OPS)** as ICAO Doc. 8168-OPS/611 Volume II, as in force from time to time. The MOS is made under and for Part 173 of CASR and, therefore, any definition in regulation 173.010 can be relied on for a word or phrase in the MOS, such as “PANS-OPS Vol II”. In relation to the reference in the MOS to “ICAO Doc 9905”, a reference in the CASR to an Annex to the Chicago Convention is defined in clause 15 of Part 2 of the CASR Dictionary as being a reference to that Annex as in force from time to time. Analogously with the definition of “Annex to the Chicago Convention” and the definition in Part 1 of the CASR Dictionary of **other AIS applicable ICAO documents** as being, relevantly, those documents as in force from time to time, a reference in the MOS to “ICAO Doc 9905” is also taken to be a reference to the document as in force from time to time. However, the Civil Aviation Safety Authority (**CASA**) is conducting a review of Part 173 of CASR and the MOS. Following the review, CASA intends to amend the MOS to explicitly state that the documents are incorporated as existing from time to time.

Paragraph 4.1.1.1 of the Part 173 MOS lists the documents required for the design of instrument flight procedures and management of the design process. These documents include, in paragraphs 4.1.1.1 (b) and (e), the documents identified in the MOS as “PANS-OPS Vol II” and “ICAO Doc 9905”. Under paragraph 4.1.2 of the MOS, certified designers and authorised designers must have access to the current versions of the documents. The documents are not free but are publicly available and subject to copyright, which belongs to the International Civil Aviation Organization (**ICAO**). The documents may be purchased from ICAO (<https://store.icao.int/>). CASA will, by prior arrangement, make the documents available for perusal free of charge at any CASA office.

### **Content of the instrument**

#### Section 1 — Name

Section 1 states the name of the instrument is the *Manual of Standards Part 173 Amendment Instrument 2020 (No. 1)*.

## Section 2 — Commencement

Section 2 states the instrument commences on the day after it is registered.

## Section 3 — Repeal of instrument number CASA EX134/17

Section 3 states CASA EX134/17 is repealed. That instrument is repealed, in accordance with subsection 33 (3) of the AIA, as it is no longer required.

## Section 4 — Amendment of the Manual of Standards Part 173

Section 4 states Schedule 1 to the instrument amends the Part 173 MOS.

## **Schedule 1 — Amendments**

### **Item [1] Chapter 1, after paragraph 1.1.5**

Item [1] inserts new paragraph 1.1.6 in Chapter 1 of the Part 173 MOS, which contains definitions of terms used in the MOS. Some of the definitions have been relocated from paragraph 8.6.1 of the MOS, as the defined terms apply more broadly than in section 8.6 of the MOS. Some of the definitions have been relocated from paragraph 8.1.14.8 of the MOS, as the defined terms apply more broadly than in the paragraph. The other definitions are new definitions.

### **Item [2] Subparagraph 2.1.1.1 (oa) (i)**

Item [2] makes a minor or machinery-type amendment of the subparagraph.

### **Item [3] Paragraph 2.1.1.1 (r)**

Item [3] makes a consequential amendment of the paragraph because of the replacement of section 8.9 of the Part 173 MOS in Item [23]. Under the amended paragraph, a certified designer must prepare an operations manual that includes, amongst other information, a description of the standards, rules and procedures to be used to ensure an IFP is published in accordance with the format and drafting conventions specified in a DPS given to the designer under regulation 175.160.

### **Item [4] Paragraph 2.1.1.2**

Item [4] makes a minor or machinery-type amendment of the paragraph.

### **Item [5] Paragraph 6.1.2.3**

Item [5] makes a consequential amendment of the paragraph because of the repeal of Chapter 9 of the Part 173 MOS in Item [24]. Under the amended paragraph, an application to CASA for a flight validation, under paragraph 6.1.2.2 of the MOS, must include a completed draft copy of the design procedure prepared for publication in accordance with a DPS given to the designer under regulation 175.160.

**Item [6] Paragraph 6.1.3.1 (b)**

Item [6] makes a consequential amendment of the paragraph because of the repeal of Chapter 9 of the Part 173 MOS in Item [24]. Under the amended paragraph, for an IFP that is to be published in the AIP, the certified designer must forward to the AIS (as defined in Annex 15 to the Chicago Convention) a copy of the design in the format specified in a DPS given to the certified designer under regulation 175.160.

**Item [7] Paragraphs 8.1.6.1 and 8.1.6.2**

Item [7] substitutes the paragraphs with new paragraphs stating revised standards for calculating visibility minima for runway approach procedures. The effect of the revised standards is as follows:

1. For aircraft operators, the revised standards will:
  - in relation to changes in minimum altitudes and lengths of approach lighting, enable approach procedures that show a more gradual and operationally-accommodating range of runway visual range (*RVR*)/visibility values; and
  - allow *RVR*/visibility credit for localiser and GNSS-based approach procedures.
2. For approach procedure design organisations, the revised standards will:
  - provide consolidated standards for *RVR*/visibility calculations, thereby simplifying the task of accessing the relevant standards for these calculations; and
  - reduce the chance of misinterpretation that decision height minima must be upwards-adjusted to account for a runway having no approach lighting or a short length approach lighting system.
3. For aerodrome operators, the revised standards will permit instrument approach procedures with closer alignment between visibility minima and the existing, and likely, range of approach lighting systems at aerodromes. The closer alignment allows better visibility minima and, therefore, improved scope for landing operations at aerodromes in all weather conditions.

**Item [8] Paragraph 8.1.6.2A**

Item [8] makes a minor or machinery-type amendment of the paragraph.

**Item [9] Paragraph 8.1.6.2A, Table 8-1A (first row)**

Item [9] makes a minor or machinery-type amendment of the Table.

**Item [10] Paragraph 8.1.6.2A, Table 8-1A (first cell in column headed “Runway capability”)**

Item [10] makes a minor or machinery-type amendment of the Table.

**Item [11] Paragraph 8.1.6.2A, after Table 8-1A**

Item [11] makes a minor or machinery-type amendment of the paragraph.

**Item [12] Paragraph 8.1.6.3**

Item [12] makes a minor or machinery-type amendment of the paragraph.

**Item [13] Paragraph 8.1.6.3**

Item [13] makes a consequential amendment of the paragraph because of the repeal of Chapter 9 of the Part 173 MOS in Item [24].

**Item [14] Paragraph 8.1.6.3, after Table 8-2**

Item [14] inserts a Note after Table 8-2, which explains how the values in the Table have been determined. Also, it inserts new Table 8-2A in the paragraph, which Table details circling visibility values. Table 8-2A is relocated from Chapter 9 of the Part 173 MOS.

**Item [15] Paragraph 8.1.7.1**

Item [15] makes a minor or machinery-type amendment of the paragraph.

**Item [16] Paragraph 8.1.7.1, Exception**

Item [16] makes a consequential amendment of the Exception because of the replacement of paragraphs 8.1.6.1 and 8.1.6.2 of the Part 173 MOS with new paragraphs in Item [7].

**Item [17] Paragraph 8.1.14.8**

Item [17] makes a minor or machinery-type amendment of the paragraph.

**Item [18] Paragraph 8.1.14.8, the text after Table 8-4**

Item [18] omits definitions of terms from the paragraph because they are relocated to new paragraph 1.1.6 of the Part 173 MOS in Item [1].

**Item [19] Paragraph 8.1.15.7, the text after Table 8-5**

Item [19] omits definitions of terms from the paragraph because they are relocated to new paragraph 1.1.6 of the Part 173 MOS in Item [1].

**Item [20] Paragraph 8.6.1, the Note after the definition of *ATP***

Item [20] makes a minor or machinery-type amendment of the paragraph.

**Item [21] Paragraph 8.6.1, Definitions and abbreviations of *AMSL*, *CASR 1998*, *GNSS*, *PANS-OPS*, *kt*, *MAPt*, *MDA*, *MDH*, *MDA/H*, *MSA*, *NM* and *TIFP***

Item [21] omits definitions of some terms from the paragraph because they are relocated to new paragraph 1.1.6 of the Part 173 MOS in Item [1].

**Item [22] Paragraph 8.6.1, the Note after the definition of VF**

Item [22] makes a minor or machinery-type amendment of the paragraph.

**Item [23] Section 8.9**

Item [23] substitutes the section with new section 8.9 of the Part 173 MOS. Under new paragraph 8.9.1, a certified designer must comply with the format and drafting conventions specified in a DPS, given to the designer under regulation 175.160, for the publication of an IFP.

**Item [24] Chapter 9**

Item [24] omits the Chapter.

***Legislation Act 2003 (the LA)***

Paragraph 10 (1) (d) of the LA provides that an instrument is a legislative instrument if it includes a provision that amends or repeals another legislative instrument. The instrument amends the Part 173 MOS, which is a legislative instrument. Also, the instrument repeals CASA EX134/17, which is a legislative instrument. Therefore, the instrument is a legislative instrument subject to tabling and disallowance in the Parliament under sections 38 and 42 of the LA.

**Consultation**

Before the instrument was issued by CASA, it published a notice of intention to issue the instrument under regulation 11.280 of CASR. The period during which comments were invited to be lodged was a period of 28 days, which CASA considered to be reasonable in the circumstances. The consultation period closed on 2 June 2019.

Nine persons made comments to CASA on an earlier draft of the instrument during the consultation period, which comments were considered by CASA when finalising the drafting of the instrument. Generally, these persons supported the proposed changes to the Part 173 MOS.

**Office of Best Practice Regulation (OBPR)**

In relation to the amendments of the Part 173 MOS relating to the standards for calculating visibility minima and IFP publishing standards, OBPR determined that no further analysis in the form of a Regulation Impact Statement (*RIS*) was required (OBPR id: 22376).

In relation to the amendments of the Part 173 MOS that are of a minor or machinery nature, a RIS is not required because the amendments are covered by a standing agreement between CASA and OBPR, under which a RIS is not required for amendments of a Manual of Standards that are of a minor or machinery nature (OBPR id: 14507).

**Statement of Compatibility with Human Rights**

The Statement of Compatibility with Human Rights at Attachment 1 has been prepared in accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*. The

instrument does not engage any of the applicable rights or freedoms, and is compatible with human rights, as it does not raise any human rights issues.

**Making and commencement**

The instrument has been made by the Director of Aviation Safety, on behalf of CASA, in accordance with subsection 73 (2) of the Act.

The instrument commences on the day after it is registered and is automatically repealed in accordance with section 48A of the LA.



## Statement of Compatibility with Human Rights

*Prepared in accordance with Part 3 of the  
Human Rights (Parliamentary Scrutiny) Act 2011*

### Manual of Standards Part 173 Amendment Instrument 2020 (No. 1)

The legislative instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

#### Overview of the legislative instrument

The *Manual of Standards Part 173 Amendment Instrument 2020 (No. 1)* (the **instrument**) omits from the *Manual of Standards Part 173 – Standards Applicable to Instrument Flight Procedure Design* (the **Part 173 MOS**) outdated publishing standards for instrument flight procedures (**IFP**). Also, the instrument repeals instrument number CASA EX134/17 (*Exemptions and direction — publishing requirements for terminal instrument flight procedures*), which exempted a certified designer, or chief designer for a certified designer's organisation, from compliance with stated provisions of Part 173 of the *Civil Aviation Safety Regulations 1998* to the extent that each provision requires compliance with the IFP publishing standards.

Also, the instrument revises the standards stated in the Part 173 MOS relating to the calculation of visibility minima for instrument approach procedures.

Also, the instrument includes minor or machinery-type amendments of the Part 173 MOS.

#### Human rights implications

The instrument does not engage any of the applicable rights or freedoms.

#### Conclusion

This instrument is compatible with human rights as it does not raise any human rights issues.

**Civil Aviation Safety Authority**