

## **Explanatory Statement**

### **Civil Aviation Safety Regulations 1998**

#### **Manual of Standards Part 172 Amendment Instrument 2019 (No. 1)**

##### **Purpose**

The *Manual of Standards Part 172 Amendment Instrument 2019 (No. 1)* (the **MOS amendment**) is designed to align Australian requirements for simultaneous parallel runway operations, previously specified in the Manual of Standards (MOS) – Part 172 (the **MOS**), with new international standards from the International Civil Aviation Organization (**ICAO**).

##### **Legislation**

Subsection 98 (1) of the *Civil Aviation Act 1988* (the **Act**) provides that the Governor-General may make regulations for the purposes of the Act and in the interests of aviation safety.

Some of these regulations are contained in the *Civil Aviation Safety Regulations 1998* (**CASR**). In particular, Part 172 — Air Traffic Service (**ATS**) Providers, and Division 172.C.2, deals with ATS providers and ATS standards.

Under subregulation 172.022 (1) of CASR, CASA may issue a MOS for Part 172 of CASR, setting out various standards for ATS. Under paragraph 172.065 (1) (a), an ATS provider must ensure that any ATS it provides is in accordance with the standards set out in the MOS. CASA has issued a MOS for Part 172, namely, the MOS.

Under subregulation 172.065 (1), an ATS provider must ensure that any ATS that it provides is in accordance with the standards set out in the MOS and in Annex 11 of the Chicago Convention as varied by Gen 1.7 of Part 1 of the Aeronautical Information Publication (**AIP**). The AIP is a collection of documents relating to the safety of air navigation, published and updated from time to time by Airservices Australia under regulation 14 of the *Air Services Regulations 2019*. It also records and publishes any approved variations (“differences”) from an ICAO Annex that have been notified by CASA to ICAO, and that, relevantly, CASA has legislated in a MOS.

Under regulation 172.075, an ATS provider must ensure that any ATS that it provides is provided in accordance with ICAO Doc. 4444, as varied by Gen 1.7 of Part 1 of the AIP.

ICAO Doc. 4444 is also known as the *Procedures for Air Navigation Services — Air Traffic Management*, or by the abbreviation PANS-ATM. ICAO Doc 4444 and PANS-ATM are, therefore, shorthand that are used interchangeably. The abbreviation PANS-ATM is used in the remainder of this Explanatory Statement.

While subject to any differences filed by CASA and legislated in the MOS, PANS-ATM is a highly detailed procedural document containing relevant ATM procedures. By virtue of clause 3.4 in Chapter 3 of Annex 11, it is called up by, and may be regarded as matter that is applied, adopted or incorporated for, Annex 11.

Under regulation 172.085, if an ATS provider would be required to ensure that any ATS is provided in accordance with a standard in the MOS and a standard in Annex 11 (which may extend to PANS-ATM), and it is not possible to comply with both standards, the provider is only required to ensure that the service is provided in accordance with the standard in the MOS.

Under regulation 172.090, given that the MOS is the vehicle for any differences, if there is inconsistency between a procedure in the MOS and (relevantly) a procedure in PANS-ATM, the MOS procedure (and hence the differences) by implication, takes priority.

Thus, a relevant ICAO standard or procedure can be implemented in Australia by:

- requiring compliance with PANS-ATM and reproducing any relevant difference to the standard or procedure within the MOS; or
- having no equivalent standard or procedure in the MOS so that, by default under Division 172.C.2 of CASR, the ICAO standard in Annex 11, and PANS-ATM as in force from time to time, contains the relevant standard or procedure.

Under subsection 33 (3) of the *Acts Interpretation Act 1901*, 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**

Parallel runway operations allow for safe increased traffic capacity at busy aerodromes.

ICAO introduced standards and procedures for simultaneous parallel runway operations in 1995. When the MOS was originally drafted in 2000, it set out in the MOS procedures requiring the use of an instrument landing system (*ILS*) in instrument meteorological conditions (*IMC*) for parallel approaches. This was, in this one respect, essentially equivalent to the ICAO standards and procedures. Thus, for dependent and independent simultaneous approaches to parallel runways in IMC, the MOS specifically required ILS for final approach guidance.

These outcomes were achieved by relevant MOS provisions. Subsection 10.4.2 prescribed the requirements for independent parallel approaches in IMC. Subsection 10.4.3 prescribed the requirements for dependent parallel approaches in IMC. Subsection 10.4.4 prescribed the requirements for independent parallel departures. Subsection 10.4.7 prescribed the requirements for segregated parallel operations in IMC.

Thus, the MOS, having set these matters out, and having been given legislative priority over the relevant ICAO standard and procedure was the only relevant standard in Australia for simultaneous parallel runway operations.

Since 2005, the GNSS landing system (*GLS*) has been available and can provide precision 3D guidance at least equivalent to that of ILS, but with significant advantages in terms of signal constancy and increased runway capacity.

In other words, with GLS, there are no signal perturbations (path bending etc.) normally experienced when taxiing aircraft pass through the ILS localiser or glidepath beams. Also, unlike ILS, with GLS there is no requirement to limit the runway capacity to ensure preceding landing/departing aircraft do not similarly cause signal perturbations as they pass close to the ILS antennae.

GLS has become the precision guidance of choice for many airlines operating at Sydney Kingsford Smith aerodrome in visual meteorological conditions (VMC) or in *non-simultaneous* approach operations in IMC. However, use of GLS for dependent and independent *parallel* approach operations in IMC has not been available under the MOS (or under the ICAO standards) and these operations continued to be governed by subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7 of the MOS.

On 9 August 2018, ICAO informed Member States that Amendment No. 8 to PANS-ATM had been approved to come into effect from 8 November 2019 allowing use of more types of instrument approach guidance for dependent and independent parallel approach operations. Thus, under the change, ILS, as well as GLS, Required Navigation Performance, Authorisation Required (RNP AR) and Approach Procedures with Vertical Guidance (APV), may be used.

However, because the MOS has priority over PANS-ATM, the existing MOS requirement to use only ILS would remain until CASA amended the MOS either to incorporate the new requirements of Amendment No. 8, or to repeal the old standard and procedures and allow Amendment No. 8 to apply by default.

It is the purpose of the MOS amendment to allow the new ICAO standard and procedure to apply by default. It would, therefore, apply, along with such of the rest of PANS-ATM as is not subject to differences under the MOS. The intention is to avoid “replicating” and of necessity in such a process, modifying, in the MOS, the requirements of Amendment No. 8, both because they are lengthy and complex, and it is desirable to preserve a holistic application of PANS-ATM without any more avoidable differences. The aim, therefore, is to allow as much as possible of PANS-ATM to apply, consistently with ICAO and member states, while preserving in the MOS other, unrelated, differences that are necessary for Australian civil aviation purposes.

There is no aviation safety concern about the use of GLS or other guidance systems introduced by ICAO for simultaneous parallel runway operations (in accordance with the ICAO standards). Given the operator preference for GLS over ILS, introducing the capability for simultaneous parallel runway operations will provide an operational benefit to industry.

### **Instrument**

The MOS amendment formally commences on the day after it is registered but it takes effect only on and from 27 February 2020.

On that date, subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7 of the MOS are repealed. There then being no competing MOS standard to take legislative priority, consistently with Annex 11, the ICAO standards under section 6 of PANS-ATM for parallel runway approaches (as well, of course, as the whole document, subject to unrelated differences) would apply by virtue of regulations 172.65, 172.75 and 172.85 of CASR.

The purpose of the delayed taking of effect date is to allow the ATS provider (Airservices Australia) to make any necessary preparations for the change. However, if Airservices Australia is ready to make the changeover before 27 February 2020, the MOS amendment provides for an early opt in arrangement. Thus, at any time after the commencement of the MOS amendment, the ATS provider may tell CASA in writing that, on and from a specified date before 27 February 2020, the provider will no longer comply with subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7.

In that case, subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7 of the MOS are taken to have been repealed with respect to the ATS provider on and from the specified date, and the relevant provision of the PANS-ATM, as in force from time to time, is taken to apply instead of the MOS provisions.

A consequential amendment was also necessary. Subsections 10.5.5.1 and 10.5.5.2 of the MOS provide for horizontal separation minima based on ATS surveillance systems. However, under old subsection 10.5.5.3, these minima did not apply to independent or dependent parallel approaches under subsection 10.4.2 or 10.4.3. Given the proposed repeal of subsection 10.4.2 or 10.4.3, some modification was necessary to take account of the PANS-ATM. Thus, now the relevant subsection 10.5.5 horizontal separation minima based on ATS surveillance systems do not apply for independent or dependent parallel approaches to which a provision of section 6 of the PANS-ATM, as in force from time to time, applies on and after 27 February 2020. The early opt in mentioned above is also provided for.

Further details of the instrument are set out in Appendix 1.

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

Under subsection 8 (4) of the LA, an instrument is a legislative instrument if: made under a power delegated by the Parliament; any provision determines the law or alters the content of the law; and it has the direct or indirect effect of affecting a privilege or interest, imposing an obligation, creating a right, or varying or removing an obligation or right. The MOS amendment satisfies these requirements and is, therefore, a legislative instrument subject to registration, and tabling and disallowance in the Parliament, under sections 15G, and 38 and 42, of the LA.

### **Incorporation by reference**

In order to allow the early opt in arrangement described above, under paragraph 15J (2) (c) of the LA and subsection 98 (5D) of the Act, the MOS amendment applies, adopts or incorporates relevant matters contained in the PANS-ATM, as in force from time to time. This document is publicly available but subject to copyright that belongs to ICAO. It is made available by ICAO for a fee (<https://store.icao.int/>). This cost is not considered to be unreasonably onerous for Airservices Australia, the Commonwealth Government agency to whom it is most relevant, but it does involve a modest impost for others, although academic and other researchers may obtain free access through university library subscriptions.

CASA has no effective control over these costs and it is considered extremely unlikely that ICAO, as the relevant owner of the intellectual property in the document, would sell CASA the copyright at a price that would be an effective and efficient use of CASA's appropriated funds, or would otherwise permit CASA to make the document freely available.

CASA has incorporated the document in the instrument to facilitate the early opt in arrangement and because, under the Chicago Convention, the document is appropriate and necessary for the new parallel runway rules and because no other similar document that serves the same aviation safety purpose is freely available.

CASA has noted the views of the Senate Standing Committee on Regulations and Ordinances (in its report *Parliamentary scrutiny of delegated legislation*, tabled out of session on 3 June 2019) that:

The incorporation of material by reference (particularly where that material is not publicly available) has been a longstanding concern for the committee.  
[para 3.65]

and

The committee appreciates that it may in some cases be costly to provide free, public access to all incorporated Australian and international standards. Nevertheless, the committee reiterates that one of its core functions is to ensure that all persons subject to or interested in the law may readily and freely access its terms. It intends to continue to monitor this issue. Any justification for a failure to provide for public access to incorporated documents, and any action the committee takes in relation to this matter, will be determined on a case-by-case basis.  
[para 3.75]

CASA appreciates the Committee's concern and to mitigate the situation as far as currently practicable proposes that where an incorporated document is copyright and not otherwise freely available to the general public, but is available to CASA as a licenced subscriber, CASA will, by prior arrangement, make CASA's copy available, for in-situ viewing, free of charge, at any office of CASA.

It should also be noted that Airservices Australia – the only ATS provider authorised under CASR Part 172 – is a subscriber to ICAO's on-line library and has ready access to the PANS-ATM, as it is in force from time to time.

### **Consultation**

In accordance with section 17 of the LA, and section 16 of the Act, CASA carried out public consultation on the proposed changes by publishing the draft MOS amendment on the CASA website on 3 April 2019 and inviting comment on it from the aviation industry and the public.

The consultation period ended on 1 May 2019. There were 6 responses by the close of consultation, from major airlines, an aerodrome operator, a flying association and an aviation consultancy. All agreed with the proposed changes, but 2 commented on certain technical aspects and 1 requested a later implementation date to that originally proposed. CASA considers it has satisfactorily addressed the comments, including agreeing to change the implementation date from 8 November 2019 to 27 February 2020.

In these circumstances, it is CASA's view that no further consultation in relation to this instrument is necessary or appropriate.

Regulation 11.280 of CASR 1998 requires CASA to publish a notice of its intention to issue a MOS, including an amendment to a MOS, on the Internet. This requirement was complied with for the purposes of the consultation mentioned above.

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

Following preparation of a preliminary impact statement for the amendment regulations, OBPR determined that no further analysis in the form of a Regulation Impact Statement was required (OBPR ID: 25296).

#### **Statement of Compatibility with Human Rights**

The Statement of Compatibility with Human Rights at Appendix 2 has been prepared in accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

The legislative instrument does not negatively engage any of the applicable rights and freedoms and is, therefore, compatible with human rights, as it does not improperly infringe any human rights. However, as an aviation safety measure, the MOS amendment positively promotes the right to life by legislating for safer conditions at aerodromes.

#### **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 MOS commences on the day of registration but only takes full effect on and from 27 February 2020.

## Details of the *Manual of Standards Part 172 Amendment Instrument 2019 (No. 1)*

### 1 Name of instrument

This section names the instrument.

### 2 Commencement

Under this section, the instrument commences on the day after it is registered. However, it takes effect in accordance with the other provisions.

### 3 Amendment of the Manual of Standards (MOS) – Part 172

This section provides for Schedule 1 to amend the Manual of Standards (MOS) – Part 172.

## Schedule 1 Amendments

### Amendment [1]

This amendment inserts a new subsection 10.4.9 headed “Repeal of certain standards for parallel runway operations”. The purpose of the new subsection is to repeal the previous limiting MOS provisions which then allows the new arrangements in the PANS-ATM to automatically take their place by virtue of regulations 172.065, 172.075 and 172.085 of CASR.

Thus, under new subsection 10.4.9.1, subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7 of the MOS are repealed immediately before the repeal mentioned in new subsection 10.4.9.2 (which repeals new subsection 10.4.9 itself).

In other words, subsection 10.4.9.2 is a self-repeal provision. It means that subsection 10.4.9 is repealed immediately before the start of 27 February 2020.

27 February 2020 is the operative date for the new PANS-ATM arrangements for parallel runway operations to take over from the previous MOS provisions (subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7).

Although the MOS amendment will have *commenced* as an instrument on the day after registration, its intended legal effects will not “take effect” until 27 February 2020 – subject to the early opt in arrangements. The period in between is a lead-in time for operators to prepare.

The intention is that these legislative arrangements be immediately available to ATS providers by ensuring that the MOS amendment appears on the Federal Register of Legislation, and that its provisions are incorporated into the compilation of the MOS made very soon after commencement.

A Note explains that subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7, and new 10.4.9 itself (including the Notes), will be omitted from the *later* compilation of the MOS to be registered on or after 27 February 2020 for paragraph 15Q (2) (g) and section 15S of the LA.

Subsection 10.4.9.3 sets up the early opt in arrangements. Thus, at any time after the commencement of the MOS amendment, an ATS provider may tell CASA in writing that, on and from a specified date before 27 February 2020, the provider will no longer comply with subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7.

Under subsection 10.4.9.4, if subsection 10.4.9.3 applies to an ATS provider, then, despite subsection 10.4.9.1 (which brings about the repeal of subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7 immediately before 27 February 2020), subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7 *are taken to have already been repealed* with respect to the ATC provider on and from the specified date.

From that date, the provision of the PANS-ATM, as in force from time to time, mentioned in an item of column 2 of the following table is taken to apply instead of the MOS provision mentioned in column 1 of the same item.

<b>Item</b>	<b>For:</b>	<b>the PANS-ATM provision is:</b>
1	subsection 10.4.2, <i>Independent Parallel Approaches in IMC</i>	section 6.7.3.2, <i>Requirements and procedures for independent parallel approaches</i> ; and  section 6.7.3.3, <i>Suspension of independent parallel approaches to closely-spaced parallel runways</i> ; and  section 6.7.3.5, <i>Determination that an aircraft is established on RNP AR APCH</i>
2	subsection 10.4.3, <i>Dependent Parallel Approaches in IMC</i>	section 6.7.3.4, <i>Requirements and procedures for dependent parallel approaches</i>
3	subsection 10.4.4, <i>Independent Parallel Departures</i>	section 6.7.2.2, <i>Requirements and procedures for independent parallel departures</i>
4	subsection 10.4.7, <i>Segregated Parallel Operations in IMC</i>	section 6.7.3.6, <i>Requirements and procedures for segregated parallel operations</i>

A Note explains that the repeal of subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7 immediately before 27 February 2020 has the effect that the standards in those sections are replaced by the relevant ICAO procedures contained in the PANS-ATM, as in force from time to time.

Relevant MOS standards, where they exist, take priority over relevant inconsistent ICAO procedures. However, the PANS-ATM procedures, incorporated by reference under regulation 172.075 of CASR, will by virtue of regulation 172.075 take effect by default because the relevant MOS standards will have been repealed.

These provisions of the relevant PANS-ATM, as in force from time to time, are incorporated under regulation 172.075 because, consistent with ICAO document definitions in the CASR Dictionary, ICAO documents, embodying ongoing international aviation safety standards are incorporated as in force from time to time.



These new PANS-ATM procedures, therefore, take effect by default from 27 February 2020 because, with the repeal of subsections 10.4.2, 10.4.3, 10.4.4 and 10.4.7, there are no inconsistent MOS standards. However, an ATS provider may elect to opt in to the new PANS-ATM procedures at an earlier date by complying with subsection 10.4.9.3 as described above.

## **Amendment [2]**

This amendment is consequential.

Subsection 10.5.5 of the MOS deals with separation minima based on ATS surveillance systems. Subsection 10.5.5.3 previously provided that subsections 10.5.5.1 and 10.5.5.2 (specifying minima) dealt only with independent or dependent parallel approaches under subsections 10.4.2 and 10.4.3, that is, the ILS context.

A new subsection 10.5.5.3 provides that subsections 10.5.5.1 and 10.5.5.2 do not apply for independent or dependent parallel approaches to which a provision of section 6 of the PANS-ATM, as in force from time to time, applies on and after 27 February 2020.

A new subsection 10.5.5.3A addresses the early opt in arrangements. It provides that subsections 10.5.5.1 and 10.5.5.2 do not apply for independent or dependent parallel approaches to which subsection 10.4.2 or 10.4.3 applies *until* immediately before the repeal of new subsection 10.4.9 (immediately before 27 February 2020).

However, it also provides that subsections 10.5.5.1 and 10.5.5.2 do not apply for independent or dependent parallel approaches to which a provision of the PANS-ATM mentioned in column 2 of the Table in subsection 10.4.9.4 applies in accordance with subsection 10.4.9.3.

A new subsection 10.5.5.3B is a self-repeal that provides that subsections 10.5.5.3A and 10.5.5.3B are repealed immediately before the start of 27 February 2020.

A Note explains that subsections 10.5.5.3A and 10.5.5.3B (including the Note) will be omitted from the compilation of the MOS registered on or after 27 February 2020 for paragraph 15Q (2) (g) and section 15S 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 172 Amendment Instrument 2019 (No. 1)

#### Summary

The *Manual of Standards Part 172 Amendment Instrument 2019* (the **MOS amendment**) 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 MOS amendment is designed to align Australian requirements for simultaneous parallel runway operations, that were previously specified in the Manual of Standards (MOS) – Part 172 (the **MOS**), with new international standards from the International Civil Aviation Organization (**ICAO**).

Parallel runway operations allow for safe increased traffic capacity at busy aerodromes. Before the MOS amendment, such operations were governed by provisions in the MOS which mandated instrument landing systems (**ILS**) in instrument meteorological conditions (**IMC**) for parallel approaches.

However, since 2005, the GNSS landing system (**GLS**) has been available and can provide precision 3D guidance at least equivalent to that of ILS, but with significant advantages in terms of signal constancy and increased runway capacity.

GLS has become the precision guidance of choice for many airlines operating at Sydney Kingsford Smith aerodrome, in visual meteorological conditions (VMC) or *non-simultaneous* approach operations in IMC. However, use of GLS for dependent and independent *parallel* approach operations in IMC has not been available under the MOS (or under the ICAO standards) and these operations continued to be governed by the relevant provisions in the MOS.

On 9 August 2018, ICAO informed Member States that Amendment No. 8 to the *Procedures for Air Navigation Services — Air Traffic Management*, ICAO Document 4444 (**PANS-ATM**) had been approved to come into effect from 8 November 2019 allowing use of more types of instrument approach guidance for dependent and independent parallel approach operations. Thus, under the change, ILS, as well as GLS, Required Navigation Performance, Authorisation Required (RNP AR) and Approach Procedures with Vertical Guidance (APV), may be used.

Because the MOS has priority over the PANS-ATM, the existing MOS requirement to use only ILS would remain until CASA amended the MOS. That is the purpose of the MOS amendment.

CASA has reason to believe that aircraft operators prefer GLS over ILS because of its advantages, particularly increased runway capacity which will provide an operational benefit to industry. Aircraft operators may still use ILS if they so choose.

To allow an operational lead time, the MOS amendment commences on registration but does not take effect until 27 February 2020. However, a mechanism in the MOS amendment allows an ATS provider to opt in early to the new arrangements if they so wish.

### **Human rights implications**

In the circumstances, the MOS amendment does not give rise to any limitations on any of the relevant human rights.

### ***The right to life under the International Covenant on Civil and Political Rights (ICCPR)***

Insofar as the MOS amendment permits the use of GLS with its significant advantages in terms of signal constancy and faster movement of aircraft off the runways, it promotes the right to life under Article 6 of the ICCPR by legislating for safer conditions at aerodromes engaged in parallel runway operations.

### **Conclusion**

The MOS amendment is compatible with human rights and, in a not insignificant way, promotes the right to life through the prevention of accidents in the aviation safety context.