



**Notice of Proposed Rule Making
NPRM 26/17/171-43
17 August 2026**

**Part 171
Aeronautical Telecommunication
Service Organisation – Certification
and Operation**

**Consequential Amendments
Nil**

**Docket 26/17/CAR 171-43
2026 Rules Review**

Proposed Applicable 26 November 2026



Background to the Civil Aviation Rules

The Papua New Guinea (PNG) Civil Aviation Rules (CARs) establish the *minimum* regulatory safety standards and boundary for participants to gain entry into, operate within, and exit the PNG civil aviation system. The PNG Rules are divided into Parts and each Part contains a series of individual rules which relate to a particular aviation activity.

Advisory Circulars accompany many rule Parts and contain information about standards, practices and procedures that the Director has been established to be an ‘*Acceptable Means of Compliance*’ (AMC) for the associated rule. An Advisory Circular may also contain Guidance Material (GMs) and Explanatory Material (EMs) to facilitate compliance with the rule requirements.

The objective of the Civil Aviation Rules system is to obtain a balance of responsibility between, on the one hand, the State and regulatory authority, the Civil Aviation Safety Authority of PNG (CASA PNG) and, on the other hand, those who provide services and exercise privileges in the civil aviation system. This balance must enable the State and regulatory authority to set standards for, and monitor performance of aviation participants whilst providing the maximum flexibility for the participants to develop compliance within the safety boundary.

Section 45 of the *Civil Aviation Act 2000* prescribes general requirements for participants in the civil aviation system and requires, amongst other things, participants to carry out their activities safely and in accordance with the relevant prescribed safety standards and practices. Section 69 of the Act allows the Minister to make ordinary rules for any of the following purposes:

- (a) The implementation of Papua New Guinea’s obligations under the Convention
- (b) To provide for a safe, sustainable, effective and efficient aviation services
- (c) The provision of aviation meteorological services, search and rescue services and civil aviation security programmers and services
- (d) Assisting aviation safety and security, including but not limited to personal security
- (e) Assisting economic development
- (f) Improving access and mobility
- (g) Protecting and promoting public health
- (h) Ensuring environmental sustainability
- (i) Any matter related or reasonably incidental to any of the following:
 - (1) The Minister’s functions and role under section 8 of the Act;
 - (2) The Authority’s general objects and functions under section 11 of the Act;
 - (3) The Authority’s functions in relation to safety under section 12 of the Act; and
 - (4) The Director’s functions and powers under section of 17 the Act
 - (5) The Director’s powers under section 52A, 53 and 54 of the Act
- (j) Any other matter contemplated by any provision of the Act.



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1. Purpose of this NPRM

The purpose of this Notice of Proposed Rulemaking is to submit for consideration the proposed amendments to Civil Aviation Rule Part 171.

2. Background to the Proposal

2.1 General Summary

Amendment 7 to Part 171 transposes standards from the following;

- (1) ICAO Annex 10 Volume VI, incorporating of Annex 10 definitions, abbreviations and units of measure, and implementing of Amendment 94 to Volume I, Amendment 93 to Volume III and Amendment 91 to Volume V.
- (2) Adoption of Amendment 95 to Annex 10 Volume I, adoption of Amendment 94 to Volume III and adoption of Amendment 92 to Annex 10 Volume IV is incorporated by reference.
- (3) Amendment 95 to Annex 10, Volume I addresses the changes to the definitions of area navigation, navigation specification and performance-based navigation.
- (4) Amendment 94 to Annex 10, Volume III addresses the deletion of obsolete technical provision of SSR Mode S air-ground data link (SP/5).
- (5) Amendment 92 to Annex 10, Volume IV is incorporated by reference to address the updates of technical provisions related to SSR Mode S transponder and 1090 MHz extended squitter automatic dependent surveillance – broadcast (ADS-B) and traffic information services.
- (6) ICAO State letter reference AN 7/62.2.5-26/21, AN 7/64.2.5-26/20 and AN 7/67.2.-26/17.

This NPRM proposes changes to Aeronautical Telecommunication Service Organisation – Certification and Operation in Part 171 as detailed in section 6.

2.2 NPRM Development

As a signatory to the Convention on International Civil Aviation, Papua New Guinea is committed to aligning its regulations to ICAO SARPS, where practicable. NPRM development is triggered by several key factors. A primary trigger for NPRM is the amendments of various Annexes to the Convention. Additionally, NPRMs may be triggered when internal reviews, audits or accident and incident investigations reveal safety or compliance gaps in existing regulations that could impact aviation safety. Evolving industry best practices and technological advancements play a significant role in driving the need for regulatory updates through NPRMs. The proposed amendments are developed in consultation with internal subject matter experts.

2.3 Key Stakeholders

The Civil Aviation Safety Authority identifies the following as key stakeholders for the proposed rule amendments contained in this NPRM:

- (1) The Civil Aviation Safety Authority
- (2) The Ministry for Transport
- (3) The Ministry of Civil Aviation
- (4) Aviation Document Holders



(5) Other interested Stakeholders

3. Consequential Amendments

- (1) Amendment 95 to Annex 10, Volume I changes the definitions of area navigation, navigation specification and performance-based navigation (PBN) to provide clarification that all area navigation operations are included in the PBN concept.
- (2) Amendment 94 to Annex 10, Volume III is intended to address deletion of obsolete technical provisions of SSR Mode S air-ground data link.
- (3) Amendment 92 to Annex 10, Volume IV is intended to address updates of technical provisions related to SSR Mode S transponder and 1 090 MHz extended squitter automatic dependent surveillance – broadcast (ADS-B) and traffic information services.

4. Exemptions

There are no current Exemptions against this Rule Part.

5. Impact Assessment

5.1 Safety

- (1) Amendment 95 to Annex 10 Volume I has a positive impact ensuring consistency across Annexes and PANS.
- (2) Amendment 94 to Annex 10 Volume III has no impact on aviation safety.
- (3) Amendment 92 to Annex 10 Volume IV has a positive impact on safety. The provision of ADS-B version 3 and Mode S transponder are expected to support additional capabilities that will improve traffic awareness and surveillance.

5.2 Compliance Cost

The compliance cost is minimal.

5.3 Security

No security impact is envisaged with the implementation of the amendments.

5.4 Environment

No environmental impact.

5.5 Efficiency and capacity

- (1) Amendment 95 to Annex 10 Volume I has no efficiency impact with the implementation.
- (2) Amendment 94 to Annex 10 Volume III has a positive impact with the implementation to support future improvement in spectrum efficiency for surveillance systems.
- (3) Amendment 92 to Annex 10 Volume IV has positive impact with the introduction of ADS-B Version 3 and Mode S transponder capabilities providing additional precise information and strengthen protection against disruption to surveillance and collision – avoidance systems improving overall efficiency.

5.6 Expected implementation time

19 November 2026

6. Summary of changes

The proposed changes in amendment 07 of CAR Part 171 relate to:

(a) New Rules:

- (1) Rule 171.55, b (6) – Introduces ATM contribution to safeguarding against unlawful interference.
- (2) Rule 171.55, b (7) – Introduces ATM security on contingency planning.
- (3) Rule 171.55, b (8) – Introduces ATM support for law enforcement.
- (4) Rule 171.55, b (9) – Introduces airspace management for ATM security.
- (5) Subpart E – 171.301 - Interrogators commissioned on or after 1 January 2030
- (6) Subpart E – 171.301 - 1090 MHz receiver
- (7) Appendix B, B.1 - Definitions
- (8) Appendix B, B.2 (a) - Secondary Surveillance Radar (SSR)
- (9) Appendix B, B.2 (b) - Human Factors Consideration
- (10) Appendix B, B.3 (a) - Secondary Surveillance Radar (SSR) System Characteristics.
- (11) Appendix B, B.4 (a) - Definitions
- (12) Appendix B, B.4 (b) - ACAS 1 General Provisions and Characteristics
- (13) Appendix B, B.4 (c) - General Provisions relating to ACAS II and ACAS III
- (14) Appendix B, B.4 (d) - Performance of the ACAS II collision avoidance logic
- (15) Appendix B, B.4 (e) - ACAS use of extended squitter
- (16) Appendix B, B.5 (a) - Mode S Extended Squitter transmitting system characteristics
- (17) Appendix B, B.5 (b) - Mode S Extended Squitter receiving system characteristics
- (18) Appendix B, B.6 (a) - General requirements for airborne surveillance application
- (19) Appendix F – Additional definitions from Annex 10, Volume IV

(b) Amendments:

- (1) Rule 171.55, b (5) – word ‘including Cyber Security: and’ inserted
- (2) Appendix B – words ‘and Collision Avoidance System’ inserted and reads ‘Surveillance and Collision Avoidance System’.
- (3) Appendix C, C.1.2 – Deletes the words “SSR Mode S Air Ground Data Link” and inserts the word “Reserve”.
- (4) Appendix C, C.1.2 – Deletes all associated paragraphs under this provision.

(c) Editorials

Nil

7. Legislative Analysis

7.1 Power to make rules

The Minister may make ordinary rules under sections 69, 70, 71 and 72 of the *Civil Aviation Act 2000*, for various purposes including implementing Papua New Guinea’s obligations under the Convention, assisting aviation safety and security, and any matter contemplated under the Act.

These proposed rules are made pursuant to:



- (a) Section 69(1)(a) which provides for the Minister to make rules for the implementation of Papua New Guinea's obligations under the Convention;
- (b) Section 72(a) which provides for the Minister to make rule for the designation, classification and certification of-
 - (1) Air services;
 - (2) Aerodrome operators;
 - (3) Aviation security providers;
 - (4) Aviation training organizations;
 - (5) Aircraft design, manufacture, maintenance and supply organizations;
 - (6) Air traffic services;
 - (7) Aviation meteorological services;
 - (8) Aeronautical communication services; and
 - (9) Aeronautical procedures.

The proposed amendment of Part 171 complies with the requirements of the *Civil Aviation Act* and does not contravene the *Constitution*, the *Aerodrome (Business Concession) Act*, *Civil Aviation (Aircraft Operator Liability) Act*, *Aircraft Charges Act*, *Airport Departure Tax Act*, the *Explosive Act*, *Firearms Act*, *Customs Act*, *Plant and Disease Control Act* and the *Environmental Act*.

The proposed Rule has been checked for language and compliance with the legal conventions of Papua New Guinea.

7.2 Matters to be taken into account

This NPRM is developed in accordance with the primary statutory requirements, including but not limited to those set out in s.2 and s. 75 of the Act and key government policy priorities. The matters taken into consideration include:

- 7.2.1 Enhancing safety, security, efficiency, and service quality in the civil aviation system in a sustainable manner.
- 7.2.2 Facilitating access to the air transport network, contributing to the economic and social development of Papua New Guinea.
- 7.2.3 Establishing rules of operation and responsibilities within the civil aviation system to promote safety and security at a reasonable cost.
- 7.2.4 Implementing Papua New Guinea's obligations under international aviation and meteorological agreements.
- 7.2.5 Modernizing and harmonizing regulations with international practice is important.
- 7.2.6 Ensuring provision of civil aviation and meteorological services and facilities as efficiently and economically as practicable.
- 7.2.7 Driving sustainability and inclusive national development and
- 7.2.8 Engaging all stakeholders through transparent policy and rulemaking processes.



8. Submissions on the NPRM

8.1 Submissions are invited

Interested persons are invited to participate in the making of the proposed rule amendment by submitting written data, views, or comments. All submissions will be considered before final action on the proposed rule amendment is taken. If there is a need to make any significant change to the rule requirements in the proposal as a result of the submissions received, then interested persons may be invited to make further submissions.

8.2 Examination of submissions

All submissions will be available in the rules docket for examination by interested persons both before and after the closing date for submissions. A consultation summary will be published with final rule.

Submissions may be examined by application to the Docket Clerk at the CASA PNG Head office between 8:30 am and 3:30 pm, on weekdays, except statutory holidays.

8.3 Disclosure

Submitters should note that any information attached to submissions will become part of the docket file and will be available to the public for examination at the Civil Aviation Safety Authority Headquarter.

Submitters should state clearly if there is any information in their submission that is commercially sensitive or for some other reason the submitter does not want the information to be released to other interested parties.

9. How to make submission

Submissions may be sent by the following methods:

By Mail: Docket Clerk (NPRM 26/17/171-43)
Civil Aviation Safety Authority of Papua New Guinea
PO Box 1941
Boroko
National Capital District

Delivered: Docket Clerk (NPRM 26/17/171-43)
Civil Aviation Safety Authority of Papua New Guinea
Morea-Tobo Road
Six Mile, Jacksons Airport
Port Moresby NCD

By Fax: Docket Clerk (NPRM 26/17/171-43)
3251789 / 325 1919

By Email: Docket Clerk (NPRM 26/17/171-43)
rules@casapng.gov.pg

9.1 Final date for submissions

Comments must be received before **COB, 25th September 2026.**



9.2 Availability of the NPRM

Any person may obtain a copy of this NPRM from-

CASA PNG web site: www.casapng.gov.pg

or at a cost from

Docket Clerk

Civil Aviation Safety Authority of PNG Headquarter

Building 1, Level 1

Morea-Tobo Road

Six Mile, Jacksons Airport

Port Moresby NCD.

9.3 Further information

For further information, contact:

<mailto:gsikre@casapng.gov.pg> Gloria Sikre (Ms)

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Part 171

Aeronautical Telecommunication Service Organisation – Certification and Operation

Subpart B – Certificate Requirements

Part 171.55 Security Programme

(b)

- (5) to protect critical information and communications technology systems from interference that may jeopardise the safety of air navigation services including Cyber Security; and
- (6) ATM contribution to safeguarding against acts of unlawful interference; and
- (7) contingency planning for ATM security; and
- (8) ATM support for law enforcement; and
- (9) airspace management for ATM security.

...

Subpart E - Transition Provision

171.301 - Transition

Transition provision referenced in Part 20 apply to this Part.

Appendix B - Surveillance and Collision Avoidance Systems

B.3 (i) Interrogators commissioned on or after 1 January 2030 must also comply with the Mode A and C interrogator specified in ICAO Annex 10, volume IV chapter 3.1.1.5.22 and 3.1.1.8.2.2.

(ii) 1090 MHz receiver

Decoding of 1090 MHz messages

1090 MHz produced on or after 1 January 2030 must be capable of decoding messages transmitted by transponders that comply with the active state transponder output power specified in ICAO Annex 10, volume IV chapter 3.1.1.7.17.2 and 3.1.2.10.2.1.2.

Appendix B – Surveillance and Collision Avoidance System

B.1. Definition

Definitions relating to Surveillance and Collision Avoidance Systems as prescribed in Appendix F.

B.2. Incorporation by reference

The following chapters of ICAO Annex 10 Volume IV are incorporated by reference in this part

B.2.1 General information on Secondary surveillance radar (SSR) as prescribed in ICAO Annex 10, Volume IV chapter 2.



B.2.2 Surveillance Systems as prescribed in ICAO Annex 10, Volume IV Chapter 3.

B.2.3 Airborne collision avoidance system as prescribed in ICAO Annex 10, Volume IV Chapter 4.

B.2.4 Mode S extended squitter as prescribed in ICAO Annex 10, Volume IV Chapter 5.

B.2.5 Technical requirements for airborne surveillance applications as prescribed in ICAO Annex 10, Volume IV Chapter 7.

Appendix C – Communication

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C.1.2 Reserved SSR Mode S Air-Ground Data Link

(a) General provisions

~~The general requirements set out below and the Standards and Recommended Practices in sections 5.2.2 to 5.3 of ICAO Annex 10 Volume III Part I Chapter 5 define the protocols and services that will enable the global provision of the Mode S Air-Ground Data links.~~

- ~~(1) *Message categories.* The Mode S subnetwork must only carry aeronautical communications classified under categories of flight safety and flight regularity as specified in Annex 10, Volume II, Chapter 5, 5.1.8.4 and 5.1.8.6.~~
- ~~(2) *Signals in space.* The signal in space characteristics of the Mode S subnetwork must conform to the provisions contained in Annex 10, Volume IV, Chapter 3, 3.1.2.~~
- ~~(3) *Code and byte independency.* The Mode S subnetwork must be capable of code and by the independent transmission of digital data.~~
- ~~(4) *Data transfer.* Data must be conveyed over the Mode S data link in segments using either standard length message (SLM) protocols or extended length message (ELM) protocols as defined in 3.1.2.6.11 and 3.1.2.7 of Annex 10, Volume IV.~~
- ~~(5) *Bit numbering.* In the description of the data exchange fields, the bits must be numbered in the order of their transmission, beginning with bit 1. Bit numbers must continue through the second and higher segments of multi-segment frames. Unless otherwise stated, numerical values encoded by groups (fields) of bits must be encoded using positive binary notation and the first bit transmitted must be the most significant bit (MSB) (3.1.2.3.1.3 of Annex 10, Volume IV).~~
- ~~(6) *Unassigned bits.* When the length of the data is not sufficient to occupy all bit positions within a message field or subfield, the unassigned bit positions must be set to 0.~~

Appendix F – Definitions

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Active surveillance means the process of tracking an intruder by using the information gained from the replies to own ACAS.

...

Extended hybrid surveillance means the process of using qualified ADS-B airborne position messages via 1 090 MHz extended squitter without validating 1 090 extended squitter data for the track by ACAS active interrogations.

..

Hybrid surveillance means the process of using a combination of active surveillance and passive surveillance with validated data to update an ACAS track in order to preserve ACAS independence.

...

Matching Interrogator Identifier (II) code means II code whose binary format in the interrogator code (IC) field is the same as the binary format in the IC field of the surveillance identifier (SI) code.

...

Matching Surveillance Identifier (SI) code means SI code whose binary format in the IC field is the same as the binary format in the IC field of the interrogator identifier (II) code.

...

Multilateration (MLAT) System means A group of equipment configured to provide position derived from the secondary surveillance radar (SSR) transponder signals (replies or squitters) primarily using time difference of arrival (TDOA) techniques. Additional information, including identification, can be extracted from the received signals.

...

Passive surveillance means the process of tracking another aircraft without interrogating it, by using the other aircraft's extended squitters. ACAS uses the information obtained via 1 090 MHz extended squitter to monitor the need for active surveillance, but not for any other purpose. Passive surveillance applies to both hybrid and extended hybrid surveillance.

...

Time Difference of Arrival (TDOA) means the difference in relative time that a transponder signal from the same aircraft (or ground vehicle) is received at different receivers.

...

Time of closest approach (tca) means for encounters in the standard encounter model, a reference time for the construction of the encounter at which various parameters, including the vertical and horizontal separation (vmd and hmd), are specified.

...

Validation means the process of verifying the relative position of an intruder using passive information via 1 090 MHz extended squitter by comparing it to the relative position obtained by ACAS active interrogation.

...

Wide area multilateration (WAM) system means A multilateration system deployed to support en-route surveillance, terminal area surveillance and other applications such as height monitoring and precision runway monitoring (PRM)...