



ICAO

International Civil Aviation Organization

**THE FOURTH MEETING OF MODE S DOWNLINKED
AIRCRAFT PARAMETERS WORKING GROUP
(MODE S DAPs WG/4)**

Video Teleconference, 29 – 31 March 2021

Agenda Item 3: Sharing of State's implementation on Mode S and related issues, including the experience in Mode S Interrogator Identifier (II) Code usage in APAC region

PROPOSALS TO AMEND OLD CONCLUSIONS RELATING TO II CODES

(Presented by the China and Singapore)

SUMMARY

This flimsy provides an initial proposal to amend the old APANPIRG conclusions referenced in WP03.

1. INTRODUCTION

1.1 Arising from WP03, this flimsy attempt to provide proposed conclusions to supersede the obsolete ones considering about the current operation and testing situations of SSR Mode S Interrogator Code in the Asia/Pacific Region.

1.2 The conclusions mentioned in this flimsy will be updated continuously according to the new operation achievement related to SSR Mode S Interrogator Code.

2. DISCUSSION

2.1 Conclusion 19/40

2.1.1 The original Conclusion 19/40 is as follows:

Conclusion 19/40 - Coordination for SSR Mode S Interrogator Identifier Code

That,

a) in view of low density of SSR interrogator installations in the region, only Interrogator Identifier (and not Surveillance Identifiers) codes be used for SSRs Mode S in the areas of overlapping coverage

b) while implementing SSR Mode S, States should take into account following issues while assigning Interrogator Identifier codes for these installations:

- for planning the implementation of SSR Mode S interrogators, administrations should ensure that the interrogators with overlapping coverage are not operating with the same Interrogator Identifier (II) codes.

- where, the coverage of the interrogator extends beyond the boundaries of the State, The II code and PRF (*Pulse repetition frequency*) should be worked out in coordination with the ICAO Asia and Pacific Office and the neighboring States, and

- administrations should inform the ICAO Asia and Pacific Office about the assigned II codes and PRFs for these installations.

2.1.2 It is proposed that amendment be made to the conclusion to:

- a) make reference to IC which includes both II and SI,
- b) remove the reference to Pulse repetition frequency (PRF) as it was not coordinated.

2.1.3 The proposed conclusion is thus as follows:

Conclusion xx/xx - Coordination for SSR Mode S Interrogator Code (IC)

That,

a) in view of the increasing density of SSR interrogator installations in the region, and that States have varying readiness to extend from Interrogator Identifier (II) to both Interrogator Identifier and Surveillance Identifiers (SI) codes, there will be a period whereby both II and SI will be used.

b) while implementing SSR Mode S, States should take into account following issues while assigning IC for these installations:

- for planning the implementation of SSR Mode S interrogators, administrations should ensure that the interrogators with overlapping coverage are not operating with the same IC.

- where, the coverage of the interrogator extends beyond the boundaries of the State, The IC should be worked out in coordination with the ICAO Asia and Pacific Office and the neighboring States, and

- administrations should inform the ICAO Asia and Pacific Office about the assigned IC for these installations.

c) This conclusion will supersede Conclusion 19/40.

2.2 **Conclusion 20/56**

2.2.1 Original Conclusion 20/56 is as follows:

Conclusion 20/56- Coordination for SSR MODE S II Codes

That,

a) the Table on SSR Mode S Interrogator Identifier Codes as provided in **Appendix T** on Agenda Item 3.4 to the Report be adopted; and

b) States be advised to provide the required information as specified in the Table on SSR Mode S Interrogator Identifier Codes to the ICAO Asia/Pacific Office for coordination and registration.

2.2.2 It is proposed that amendment be made to the conclusion to:

- a) make reference to IC which includes both II and SI,
- b) request States to coordinate with ICAO Asia/Pacific Office for the IC.

2.2.3 The proposed conclusion is thus as follows:

Conclusion xx/xx- Coordination for SSR MODE S Interrogator Code (IC)

That,

States be advised to provide the following information on SSR Mode S Interrogator Code to the ICAO Asia/Pacific Office for coordination and registration.

- a) Name of country/territory and location of facility;
- b) Antenna Coordinates (Latitude and Longitude);
- c) Elevation of antenna above the Mean Sea Level (MSL) in meters;
- d) Coverage of SSR Mode S Interrogator in nautical miles/flight level;
- e) II Code (1 to 15) or SI Code (1 to 63) ; and
- f) Remarks (special configuration such as radar clustering, lockout override)

This conclusion will supersede Conclusion 20/56.

2.3 **Conclusion 20/57**

2.3.1 Original Conclusion 20/57 is as follows:

Conclusion 20/57 - Planning Criteria for SSR Mode S II Code Assignment

That, the planning criteria for SSR Mode S II code coordination and assignment as provided in **Appendix U** to the Report on Agenda Item 3.4 be adopted as a provisional guidance material for use in the Asia/Pacific Region.

2.3.2 It is proposed that amendment be made to the conclusion to:

- a) make reference to IC which includes both II and SI,
- b) remove the reference to obsolete material Doc 9864 referenced by the mentioned Appendix U and to reference to Doc 9924 instead.

2.3.3 The proposed conclusion is thus as follows:

Conclusion xx/xx - Planning Criteria for SSR Mode S Interrogator Code (IC) Assignment

That, the planning criteria for SSR Mode S IC coordination and assignment as provided in Doc **9924** be adopted for use in the Asia/Pacific Region.

This conclusion will supersede Conclusion 20/57.

3. ACTION REQUIRED BY THE MEETING

3.1 The meeting is invited to discuss and propose further amendments appropriate.
