



# ICAO

International Civil Aviation Organization

**Twenty Ninth Meeting of the Communications/  
Navigation and Surveillance Sub-group (CNS SG/29)  
of APANPIRG**

*Bangkok, Thailand, 16-20 June 2024*

**Agenda Item 6:** Aeronautical Mobile Communications Service and Aeronautical electromagnetic spectrum utilization

6.4 Other issues related to aeronautical communications service and aeronautical radio spectrum management, especially on 5G implementation and potential impacts to aircraft radio altimeters

## **OUTCOMES OF SURVEY FOR ASSEMENT OF READINESS FOR AMENDMENT 91 TO ANNEX 10, VOLUME III ON SELECTIVE CALLING (SELCAL) CODES IMPLEMENTATION**

(Presented by the Secretariat)

### **SUMMARY**

This paper presents information about outcomes of the survey conducted by ICAO APAC Office to assess the readiness of ANSP's Flight Plan (FPL) processing systems handling SELCAL32.

## **1. INTRODUCTION**

1.1 The current pool of SELCAL addresses is oversubscribed by approximately four to one, resulting in the risk that the same address could be allocated to four or more aircraft. Operationally, these aircraft may sometimes receive the same SELCAL notification, thus increasing pilot workload and creating potential for operational errors.

1.2 Amendment 91 to Annex 10, Volume III arises from recommendations developed by the second meeting of the Communications Panel Data Communication Infrastructure Working Group (CP DCIWG/2) to expand the pool of selective calling (SELCAL) codes.

1.3 This paper shares information about a survey conducted by the ICAO APAC Office to assess the readiness of ANSPs' Flight Plan (FPL) processing systems handling SELCAL32.

## **2. DISCUSSION**

2.1 On June 12, 2019, the Air Navigation Commission (211-11) considered a preliminary review (AN-WP/9183 and AN-WP/9183 DP No. 1) of proposals developed by the second meeting of the Communications Panel Data Communication Infrastructure Working Group (CP-DCIWG/2) for the Amendment of Annex 10 — *Aeronautical Telecommunications*, Volume III — *Communication Systems*, Part II — *Voice Communication Systems*, relating to SELCAL. The Commission agreed that the proposal should be transmitted to States and appropriate international organizations for comment. Accordingly, State letter AN 7/1.3.95-19/58, dated August 12, 2019, was sent with a due date for replies of November 11, 2019. By January 29, 2020, 55 replies were received from 50 states, including 15

council member states and three international organizations. All States and international organizations agreed with the proposal, except for three States with no position.

2.2 Amendment 91 to the International Standards and Recommended Practices, Annex 10 — Aeronautical Telecommunications, Volume III — Communication Systems was adopted by the Council at the sixth meeting of its 221st Session on November 6, 2020.

2.3 When adopting the Amendment, the Council prescribed March 22, 2021, as the date on which it will become effective, except for any part concerning which a majority of Contracting States have registered their disapproval before that date. In addition, the Council resolved that Amendment 91, to the extent it becomes effective, will become applicable on November 3, 2022.

2.4 A State Letter with Ref.: AN 7/64.2.2-20/127 and **Subject: Adoption of Amendment 91 to Annex 10, Volume III** was circulated to States on December 9, 2020. Action required by the letter: a) Notify any disapproval before March 22, 2021; b) Notify any differences and compliance before October 3, 2022; c) Consider the use of the Electronic Filing of Differences (EFOD) System for notification of differences and compliance. The letter is provided in **Appendix A**.

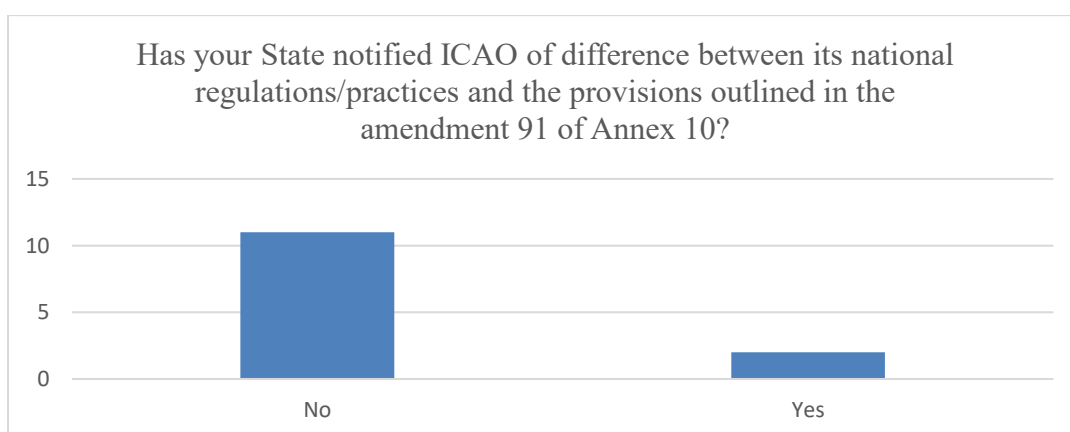
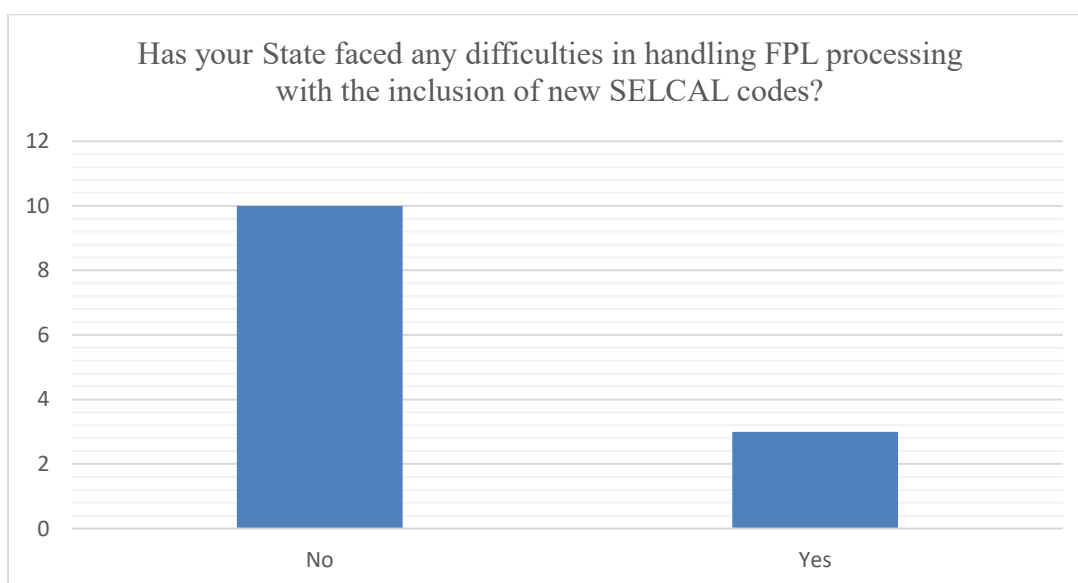
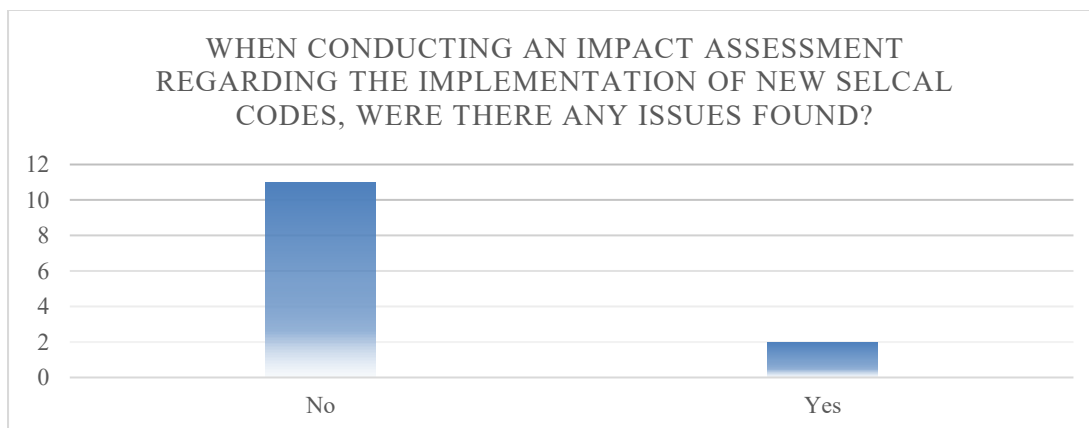
2.5 The SELCAL amendment uses sixteen (16) new audio tones, in addition to the existing 16 audio tones, to create SELCAL codes from a total of 32 available audio frequencies (called SELCAL32). As of November 3 2022, SELCAL codes using the tones Red T through Red 9, as given in Table 3-1 of the Amendment, shall only be assigned to SELCAL-equipped aircraft with the capability of receiving these tones, and aeronautical stations which are required to communicate with SELCAL-equipped aircraft shall have SELCAL encoders that support all tones. The air navigation services providers (ANSPs) were requested to upgrade ground systems (flight planning and SELCAL encoder) to support the global implementation of SELCAL32 by November 3, 2022, and should consider taking the necessary steps to comply with the Amendment.

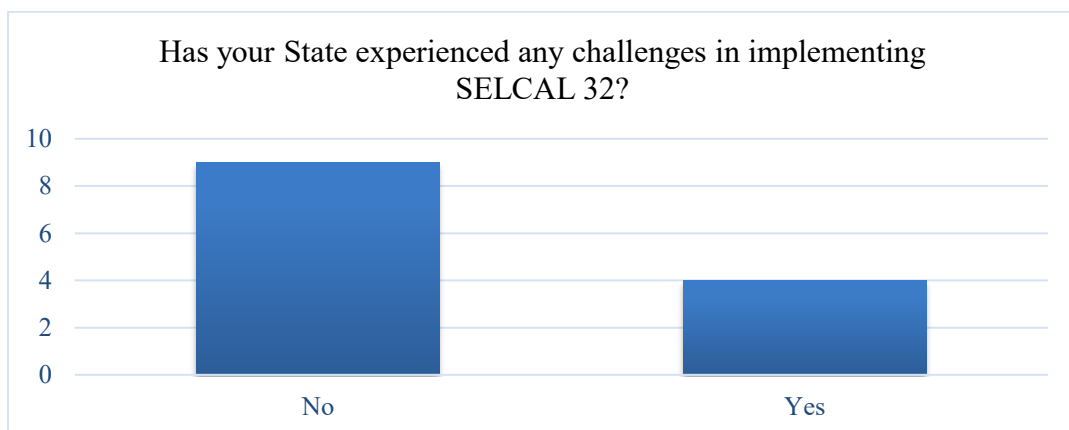
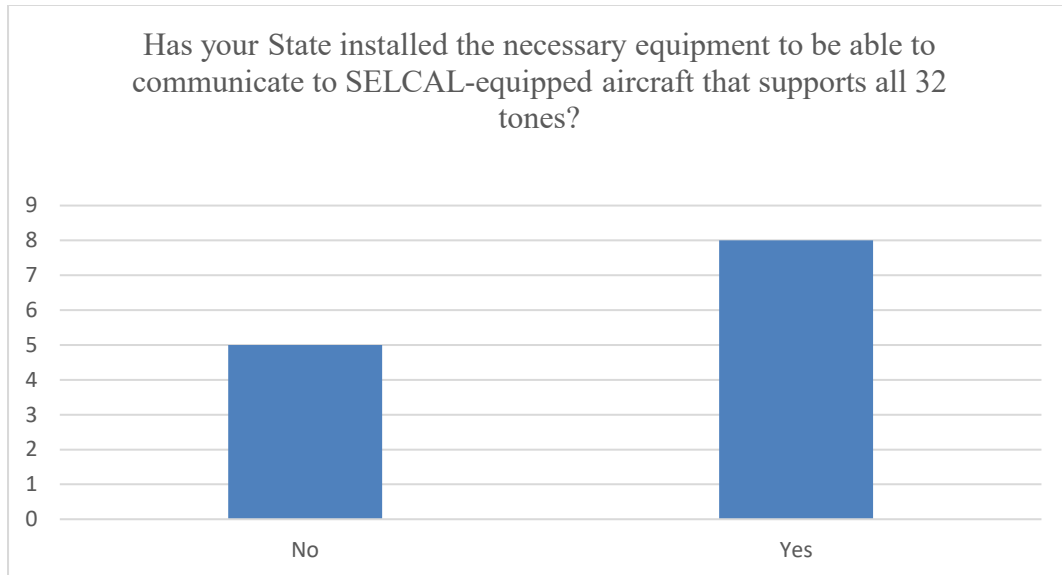
2.6 ICAO APAC Regional Office received a reminder email from Aviation Spectrum Resources, Inc. (ASRI) on March 17, 2022, and then forwarded the email with the State Letter to the Member States.

2.7 The Ninth Meeting of the Aeronautical Communication Services Implementation Coordination Group (ACSICG/9) reviewed the Amendment *from April 19 to April 21, 2022*, through WP/15. However, considering the ACSICG may not be the most appropriate platform to discuss this topic, ICAO Regional Office issued the State Letter Ref.: T 8/4.3: AP107/22 (CNS) dated August 10 2022 with the Subject of *Selective Calling (SELCAL) Code Pool Expansion*, which is provided in **Appendix B**, to remind the State/Administration to notify ICAO Headquarters (HQ) on any differences and compliance regarding Amendment 91 to Annex 10, Volume III before October 3 2022, to share readiness status for the applicability of SELCAL32, and take other actions as appropriate.

2.8 ICAO APAC Office surveyed the readiness of APAC States/Administrations' flight plan processing systems handling SELCAL32 in 2024 by State Letter Ref.: T 8/4.3: AP072/23 (CNS) 6 June 2024 on the subject- Survey to assess the readiness of Flight Plan (FPL) processing systems handling SELCAL32 by the letter provided in **Appendix C**. The objective of the survey was to evaluate the preparedness of ICAO member States for the implementation of Annex 10 Amendment 91 concerning the selective calling system (SELCAL) that became applicable on November 3, 2022, and identify any associated challenges. The expansion of the SELCAL code introduced by Annex 10 Amendment 91 has the potential to impact flight planning systems. Item 18 in the Flight Plan (FPL) may include the “SEL/” indicator followed by the new SELCAL code.

2.9 A total of **thirteen responses** from Australia, China, Hong Kong China, Macau China, Fiji, French Polynesia, India, Indonesia, Japan, New Zealand, Pakistan, Singapore, and Thailand were received. The following are the evaluations of responses for all questions:





2.10 Based on responses received, it can be concluded that the most APAC States/Administrations that participated in the survey are ready to implement ICAO provisions Amendment 91 to the International Standards and Recommended Practices, Annex 10 — Aeronautical Telecommunications, Volume III — Communication Systems. However, it is to be noted that only 13 States/Administrations participated in the survey, which makes it difficult for us to assess APAC region readiness.

### **3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) share readiness to implement SELCAL32 provisions if not responded to the survey;  
and
- c) discuss any relevant matter as appropriate.

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