



**Nineteenth Meeting of the CAR/SAM Regional Planning and Implementation Group
 (GREPECAS/19)
 Online, 27 – 29 October 2021**

Agenda Item 4: Global and Interregional Activities

CURRENT STATUS OF 5LNC CODES IN THE CAR/SAM REGIONS

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
<p>This Paper presents an update regarding the use of the five-letter name-code (5LNC) in the CAR/SAM Regions and proposes actions to promote their correct publication according to the guidance of the ICAO International Codes and Routes Designators (ICARD) Data Base.</p>	
Actions:	Suggested actions are described in Section 5.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"> • Air Navigation Capacity and Efficiency
<i>References:</i>	<ul style="list-style-type: none"> • Annex 11 – Air Traffic services • Doc 4444 - <i>Procedures for Air Navigation Services - Air Traffic Management - PANS-ATM</i> • State letter AN 1/45.5-17/101 • Recommendation 3.5/1 AN-Conf/13

1. Introduction

1.1 Annex 11 establishes that Air Traffic Services (ATS) routes and significant points shall be identified by designators.

1.2 The principles for the identification of ATS routes and the establishment and identification of significant points are detailed in Appendices 1 and 2 of Annex 11, respectively.

2. Background

2.1 In March 2017, ICAO finalized the initial implementation of the new ICARD platform. The updated ICARD database system, accessible through the ICAO secure portal, replaced the previous platform, with the main objective of meeting the needs of States to support the efficient and secure implementation of unique 5LNCs.

2.2 Prior to the implementation of the new ICARD platform, the following issues had been identified in relation to the 5LNC:

- a) a significant number of duplicate codes (including codes in triplicate and quadruplicate);
- b) similar sounding codes in close proximity or on the same flight plan route; and
- c) differences between 5LNC data registered in ICARD and those published in national Aeronautical Information Publications (AIPs)

2.3 In addition, Recommendation 3.5/1 of AN-Conf/13 issued related to the “ICAO LOCATION INDICATOR SYSTEM AND DATABASE OF SIGNIFICANT POINTS” should be considered, which mentions:

That States and industry stakeholders:

- a) *urgently complete the population of the ICAO International Codes and Routes Designators (ICARD) database with all five-letter name codes (5LNC) used worldwide to ensure the accuracy of the database;*
- b) *ensure that whenever a 5LNC that is used for military purposes is published in an ICAO Aeronautical Information Publication (AIP) and consequently coded into aircraft Flight Management System (FMS), such 5LNCs are coordinated through the ICARD process;*

That ICAO:

- c) *continue to address the limitations of both location indicator and 5LNC availabilities in the short-term and determine a long-term solution;*
- d) *consider, when developing such solutions, the need for global harmonization and interoperability;*
- e) *continue with its efforts to improve awareness and training on the use of ICARD in the regions that do not actively use ICARD;*
- f) *continue to work towards removing duplicated 5LNCs and sound-like conflicts; and*
- g) *implement improvements to the ICARD database functionality, including the use of maps depicting Flight Information Regions (FIRs), more information regarding 5LNC history and sound-like proximity checks for codes held in reserve but not yet allocated to a region.*

2.4 However, a significant number of States have not addressed the actions contained in State Letter AN 11/45.5-17/101 and have not updated the information on the 5LNC, nor have taken any measures related to Recommendation 3.5/1 of the AN/Conf-13. It is estimated that only 60-70% of all 5LNCs in use today worldwide are registered in the ICARD 5LNC database, while several States continue to use 5LNCs that have not been applied for or registered with ICARD.

3. Current Situation

CAR Region

3.1 With the implementation of the new ICARD platform, the ICAO NACC and SAM Regional Offices began a campaign to approach and guide the States and service providers regarding the need to address the existing duplicate codes.

3.2 As a first step, the commitment of the States to publish 5LNC only after they have been requested and approved in the system was assured. Subsequently, a significant number of published codes was identified that had not been entered into the ICARD database.

3.3 In this regard, the ICAO NACC Regional Office requested the States and Territories of the CAR Region to list the 5LNCs and ATS route identifiers that they have published in their AIP. Replies were received from all the States, Territories and International Organizations that provide services in the upper airspace of the CAR Region, tabulating the results and comparing what had been sent with what was entered into the ICARD.

3.3 The incorporation into the database of those codes that were not assigned using the ICARD system is pending.

SAM Region

3.4 The SAMIG and SAM/AIM fora have presented the problems related to the ICARD in reference to the 5LNC. The observed problems are detailed below:

- a) a significant number of duplicate codes (including codes in triplicate and quadruplicate);
- b) similar sounding codes in close proximity or on the same flight plan route;
- c) different coordinates for waypoints that are located on the border of Flight Information Region (FIRs) in the AIPs of the States involved;
- d) phonetic similarity code within 500 miles; and
- e) differences between the 5LNC data recorded in the ICARD and those contained in the national AIP.

3.5 In these meetings, the resolution of the cases of duplicate points, triplicates, etc., as well as the other listed problems, have been promoted. Likewise, a roadmap has been designed, with the following purpose:

- a) By 2019: Solve 15% of the previously observed problems.
- b) By 2020: Review and amend the AIP and other documents for 40% of problem codes.
- c) By 2021: Solve 60% of code-related problems.
- d) By 2022: Solve 80% of code-related problems.

3.6 Additionally, States have been urged to review the AIPs and enter the 5LNC that are in use in the State in order to guarantee that the entire 5LNC population is included in the ICARD.

3.7 Likewise, in the SAMIG and SAM/AIM fora, States have been urged to the following actions:

- a) request new 5LNC only when it has been verified that it is not in use, previously doing a cross-check between the ICARD and other industry databases;
- b) once its non-use has been verified, verify if there is no phonetic similarity within 500 NM; and
- c) publish the amendment once the codes have been validated by the ICAO Regional Office.

3.8 In the SAM Region, Argentina, Brazil, Chile, Colombia and Peru have made several amendments in order to gradually eliminate duplicate and triplicate codes, etc.

4. Conclusions

4.1 A more complete 5LNC database and an improved ICARD system that meets operational requirements will increase the level of situational awareness, which will help and increase the level of safety.

4.2 Increasing the safety of global air navigation through the resolution of conflicts related to duplicate, similar and homophone 5LNCs will improve governance and compliance.

5. Suggested Actions

5.1 The Meeting is invited to:

- a) urge the States, Territories and International Organizations that provide air traffic services in the CAR/SAM Regions to comply with Recommendation 3.5/1 of AN/Conf-13 in relation to the total population of the 5LNC codes that they use;
- b) request the NACC and SAM Offices to compile the 5LNCs and ATS routes published by the States, Territories and International Organizations of the CAR/SAM Regions and compare the information published with that available in ICARD and submit their analysis to ICAO Headquarters for the ICARD database to be updated; and
- c) any additional action deemed necessary.