



| ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

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Five Alpha-Numeric Name Codes (5ANNC) & Five Letter Name Codes (5LNC) and ICARD issues

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ICAO

Background

In March 2017, the rollout of the new ICARD database system, accessible on the ICAO Secure Portal, replaces the previous platform and will meet the needs of States to support efficient and safe implementation of unique 5LNCs.

The update of the ICARD system is of the utmost importance as the current worldwide non-compliance with Annex 11 — Air Traffic Services, (Appendix 2, paragraphs 3.1, 3.4) regarding 5LNCs uniqueness, continues to create difficulties causing potential safety-related issues.

The following issues related to 5LNCs have been identified:

- a) a significant number of duplicated codes (including codes in triplicate and in 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 published in national Aeronautical Information Publications (AIPs)

ICARD Process



Submit “NEW” ICARD request **before** publication of 5LNC in State AIP



Submit “DEL” ICARD request **after** 5LNC has been removed from State AIP



For coordinates amendment **more than 1NM**, delete current 5LNC, and request for new 5LNC drawn from the available pool in ICARD.



See next slide for more info about 5LNC amendments

Notes for 5LNC Amendment

- Explanatory information should be provided in the 'comment box'. Types of amendments could be requested by State users
 - Changes of coordinates
 - Comments
 - Purpose
 - Addition or Deletion of Contracting States
- If the request is the change of coordinates for a 5LNC not yet published in State AIP, after proximity checking, the request can be approved
- 5LNC already published in State AIP shall not be relocated unless new coordinates are within 1 NM of the previous coordinates and with the same purpose.
- For 5LNCs on FIR boundaries, the State/Administration requesting the amendment must coordinate with the State(s) concerned before the submission of the amendment request



Current Issues

- 5LNC duplicates
- Publication of non-ICARD 5LNCs in National AIPs
- 5LNCs registered in ICARD but not used in AIP
- Pronounceability
- Sound-like proximity
- Potentially opening up for all 5LNCs globally instead of the regional area reserved system
- New issues/bugs



Current Issues- 5LNC duplicates

5LNC duplicates Total known APAC duplicates yet to be addressed (**Jan 2023**)

- 2649

Duplicates which APAC States have been resolved in 2022

- 89

Duplicates of priority yet to be determined.

- 203

Current Issues – 5LNC in National AIPs

- As stated in the State Letter (AN 11/45.5-17/101), ICARD shall be used as the central system for reservation and allocation of 5LNCs.

Issues experienced:

- Publication of non-ICARD 5LNCs in National AIPs
- 5LNCs registered in ICARD but not used in AIP

Follow-up Action:

- Please submit DEL request in ICARD to free up such 5LNC for other States.

Current Issues - Pronounceability Issues

- Name codes starting with X would be deemed unsuitable for Airspace users and ATC in the APAC regions

Follow-up action

- Even though such 5LNC may be available in ICARD,
- Avoid picking 5LNCs starting with X.

XEBAS (APAC)	XEBIM (APAC)	XEBUD (APAC)
XEBAT (APAC)	XEBIN (APAC)	XEBUG (APAC)
XEBAV (APAC)	XEBIP (APAC)	XEBUK (APAC)
XEBAX (APAC)	XEBIR (APAC)	XEBUM (APAC)
XEBEB (APAC)	XEBIS (APAC)	XEBUX (APAC)
XEBEP (APAC)	XEBOK (APAC)	XEDAB (APAC)
XEBER (APAC)	XEBOL (APAC)	XEDAD (APAC)
XEBES (APAC)	XEBOM (APAC)	XEDAG (APAC)
XEBET (APAC)	XEBON (APAC)	XEDAK (APAC)
XEBEV (APAC)	XEBOP (APAC)	XEDAT (APAC)

Current Issues - Sound-like proximity

Sound-like proximity check to be performed by State and ICAO managers either Map or list.

Guideline used:

- Terminal 5LNC – **250NM**
- En-route 5LNC – **500NM**
- Others/FIR boundary 5LNC - **500NM**

Follow-up Action:

- Please ensure the sound like proximity is performed and click the check box in ICARD.

Proximity Search

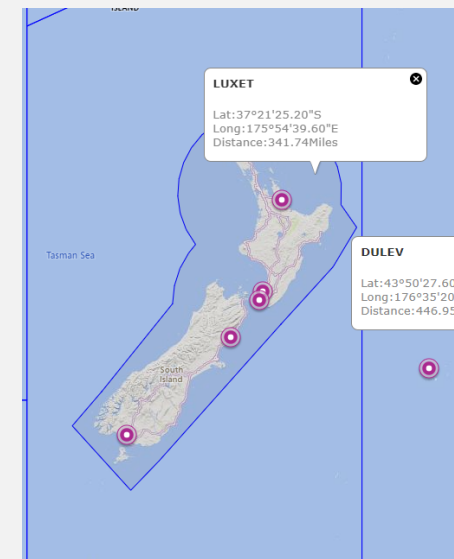
Map List within

(NM)

Proximity check done

Sound-like checking results for code "LUXEV" within 500 NM

CODE	Distance (NM)
LAXIV	108.36
TAXEV	127.02
LUXER	310.13
LUXET	341.74
DULEV	446.95



Potentially release of all 5LNCs globally instead of the regional area reserved system

- Current each ICAO has a set of 5LNCs reserved, meant for use in a particular region only
- During a EUR/NAT letter 22-0251 Workshops for the Improvement of 5LNC and 5ANNC Usage in the EUR Region 15-16 Sep 2022 (Hybrid), Lack of 5LNC was discussed.
- Under review: Due to the shortage of usable 5LNCs in EUR/NAT region, there was as proposal to release such reserved list so that all States globally

Potential effect

- Reduction of 5LNC available for APAC/MID States

New issue –Swapping of 5LNC name in ICARD system

Rare occurrence to some amendment and deletion type of requests

- E.G: Submission of 5LNC “AAAAA” by State 5LNC planner
- Appears as “BBBBB” to ICAO 5LNC manager.
- Accepted request as “BBBBB”
- Shown as accepted “AAAAA” for State
- Still under investigation

Temporary Solution

- Please acknowledge when ICAO 5LNC manager notifies the status of 5LNC request



Action Plan

As part of ICAO efforts to ensure the global uniqueness of 5LNCs (Annex 11 Standard), and to undertake action to support global outcomes where States have failed to follow the process described in the attached State Letter (Attachment, part 1), we:

- check all ICARD registration requests against available databases of published aeronautical information;
- If the 5LNC is already published elsewhere we ask the requesting State to select a different code from ICARD; and
- State of the AIP where the code is published to register it in ICARD.



Action Plan – 5LNC Duplicate resolution Rules

- 5LNC Duplicate Resolution Rules can be found in State Letter Ref: AN 11/45.5-17/101
- And also on the ICARD 5LNC drop down menu page

ICAO ICARD

5LNC | ROUTE DESIGNATORS | HANDLE MESSAGES | DOWNLOADS | USAGE | PARAMETERS | HELP

FIND ALLOCATED AND AVAILABLE 5LNC
 FIND 5LNC IN AVAILABLE LIST
 FIND ALLOCATED 5LNC
 CHECK MY REQUESTS
 TAKE A DECISION
 UPDATE RESERVE LIST
 TRANSFER TO REGION
 HANDLE BLOCKS OF CODES
 5LNC DUPLICATE RESOLUTION RULES

INTERNATIONAL CODES AND ROUTE DESIGNATORS



Tel: +1 514-954-8219 ext. 6718

Ref: AN 11/45.5-17/101

11 August 2017

Subject: ICAO International Codes and Route Designators (ICARD) database system

Action required: Implement the five-letter name-code (5LNC) Duplicate Resolution Rules and submit updated information on 5LNCs

Sir/Madam,

1. I have the honour to inform you that ICAO completed the initial rollout of the new ICARD platform in March 2017. This updated ICARD database system, accessible on the ICAO Secure Portal, replaces the previous platform and will meet the needs of States to support efficient and safe implementation of unique 5LNCs.

2. The update of the ICARD system is of the utmost importance as the current worldwide non-compliance with Annex 11 — *Air Traffic Services*, (Appendix 2, paragraphs 3.1, 3.4) regarding 5LNCs uniqueness, continues to create difficulties causing potential safety-related issues. The following issues related to 5LNCs have been identified:

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

3. In light of the increasing demand for 5LNCs to support implementation of performance-based navigation (PBN) without compromising safety, I invite you to carry out the actions described in the attachment through your State's ICARD focal point. Please contact the ICAO Regional Office accredited to your State should you require further support and guidance.

Accept, Sir/Madam, the assurances of my highest consideration.

Fang Liu
Secretary General

Enclosure:

Update of the ICARD database and resolution of duplicated 5LNCs

Action Plan – 5LNC Duplicate resolution Rules

Rule #1 - Priority is given to (a) 5LNC(s) which is (are) already allocated in ICARD. Duplicated 5LNCs that are not allocated in ICARD shall be replaced by new 5LNCs. If two or more 5LNCs of the same name are in ICARD, Rule 2 applies.

Rule #2 – If two or more 5LNCs of the same name are allocated in ICARD:

- a) creation date (date when the 5LNC was allocated in ICARD for that State) If there are two or more 5LNCs with a creation date, the earliest date will have priority. After verification that the State with the priority date is still using that 5LNC, new 5LNC(s) shall be proposed by the Regional Office(s) to the other State(s) with the same duplicated 5LNC;
- b) creation date versus no creation date
- c) No creation date If there are two or more 5LNCs of the same name without creation dates, Rule 3 applies.

Action Plan – 5LNC Duplicate resolution Rules

Rule #3 – If Rules 1 and 2 do not resolve the 5LNC duplication, the following characteristics will have priority:

- a) 5LNCs used in both terminal airspace (SIDs/STARs) and en-route airspace;
Note: The amount of changes foreseen and publication required in AIP sections AD and ENR could be very large
- b) 5LNCs used in high-density/high-complexity terminal airspace (e.g. SIDs/STARs, holdings, instrument approach procedures);
- c) 5LNCs used in en-route airspace (e.g. crossovers between two or more ATS routes, transfer of control points, upper/lower airspace routes, etc). Priority shall be given to highest number of ATS routes crossings through the 5LNCs concerned;
- d) 5LNCs used in low-density/low-complexity terminal airspace;
- e) 5LNCs used in other routes (domestic, temporary, helicopter, etc.)



Action Plan – 5LNC Duplicate resolution Rules

Rule #4 – Resolving conflicts:

- a) if any of the previous rules do not resolve 5LNC duplicates and if the 5LNC duplicates are within the area of accreditation of one Regional Office, that Regional Office will make the decision;
- b) if the 5LNC duplicates are in different regions, the Regional Offices involved shall agree on a resolution;
- c) if any of the previous rules do not resolve the 5LNC duplicates, ICAO Headquarters, in coordination with the relevant Regional Office(s), will make the final decision



Thank You!