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CAPACITY & EFFICIENCY

ICARD Issues

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MIDAD TF/5 & AIM SG/4
(Cairo, Egypt, 13-15 February 2018)



Background: Main ICARD Issues

- 5LNCs duplicates
- Publication of non-ICARD 5LNCs in National AIPs
- 5LNCs registered in ICARD but not used in AIP
- None-ICAO codes
- Sound-like proximity
- Increasing demand of 5LNCs for terminal use (SIDs, STARs, IAPs)
- Coordination of 5LNCs used as FIR BDRY with the neighboring States



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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 (SLNC) Duplicate Resolution Rules and submit updated information on 5LNCs

Sir/Madam,

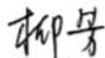
1. I have the honour to inform you that ICAO completed the initial rollout of the new ICARD platform in March 2017. This updated ICARD database system, accessible on the ICAO Secure Portal, replaces the previous platform and will meet the needs of States to support efficient and safe implementation of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

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

- State Letter issued on 11 August 2017 (Appendix A)

- Only six (6) States replied to the State Letter:

- Egypt, Lebanon, Oman, Qatar, Saudi Arabia and UAE



CLEAN-UP OF THE ICARD PLATFORM

- Comparison of your State's list of 5LNCs recorded in ICARD and 5LNCs published in your State's national Aeronautical Information Publication (AIP);
 - Release allocated 5LNCs that are no longer used in your AIP
 - Codes published in AIP but not allocated in ICARD should be recorded in ICARD. If the code is not available in ICARD, it should be changed.
- ICARD shall be used as the central system for reservation and allocation of 5LNCs.



5LNC DUPLICATE RESOLUTION RULES

- Voluntary release of the code by one States; if not, the following rule will be applied:
- **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.
 - *Note: the Regional Office(s) shall advise the State(s) concerned to change those duplicated 5LNCs not in ICARD. Publication in AIP(s) shall not be considered as sub-criteria in these Resolution Rules.*
- **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)
 - b) creation date versus no creation date
 - c) No creation date: Rule 3 applies.



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.)
- **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.



Some duplicates and more

- BAYAN (Mongolia, Bahrain, Qatar)
- BOTAS (Iran, Qatar)
- CEDAR (Brazil, Lebanon, UK)
- SALWA (Qatar, Saudi Arabia, USA)
- KITAP (Greenland-Denmark, Saudi Arabia, UAE)
- LOTOS (~~Bahrain~~, Saudi Arabia, Spain)
- MAKIN (Qatar, Russian Federation)
- MUSKO (Bahrain, Saudi Arabia, USA)
- NARMI (Bahrain/Saudi Arabia, France, Morocco)
- RIGEN (Sudan, Afghanistan)
- DELTA (Suriname, Japan, Italy, Vanuatu, Syrian Arab Republic, Bhutan, Liberia, Lao People's Democratic Republic, India, Sri Lanka)
- TANGO (Spain, Syrian Arab Republic, Pakistan, India, Thailand, Lao People's Democratic Republic, Viet Nam)
- CEDAR (Brazil, United Kingdom, Lebanon, Japan, Australia, China Hong Kong)



ATM SG/3 (Cairo, Egypt, 22-25 May 2017)

DRAFT CONCLUSION 3/3: ICARD ISSUES

That,

a) States be urged to take necessary actions on the resolution of the issues related to ICARD/5LNCs, including:

- i. registration of all 5LNCs published in AIP into ICARD;*
- ii. 5LNCs duplicates;*
- iii. Non-ICAO codes;*
- iv. sound-like proximity;*
- v. release of unused registered 5LNCs; and*
- vi. use of Alphanumeric codes for terminal airspace, in accordance with PANS-OPS (Doc 8168) provisions.*

b) Users (IATA, IFALPA, Jeppesen, etc.) are invited to report issues related to ICARD/5LNCs in the MID Region to the ICAO MID Office; and

c) an air navigation deficiency be filed against those States that are not complying with Annex 11 and Doc 8168 provisions related to 5LNCs.



Action by the meeting

- The meeting is invited to:
 - Note the information provided in this presentation;
 - Note the Draft Conclusion of ATM SG/3 meeting;
 - Urge States to implement the provisions of State Letter Ref.: AN 11/45.5-17/101 dated 11 August 2017, at **Appendix A**.



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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) 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)

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

UPDATE OF THE ICARD DATABASE AND RESOLUTION OF DUPLICATED 5LNCs

The update of the ICARD system and the resolution of 5LNC duplicates are of the utmost importance and all States are invited to take action as described below.

1. CLEAN-UP OF THE ICARD PLATFORM

1.1 A comparison of your State's list of 5LNCs recorded in ICARD and 5LNCs published in your State's national Aeronautical Information Publication (AIP) shall be undertaken to identify any discrepancies and to update the information in ICARD, to align with the information contained in your State's AIP. To get a list of your State's 5LNCs allocated in ICARD go to <https://www4.icao.int/ICARD> and:

- a) enter authorized username and password;
- b) in the main menu click on "Downloads"; and
- c) in the "List All per Country" option, select Region and Country, and click on the tabs to launch a report in pdf or excel formats.

1.2 ICARD shall be used as the central system for reservation and allocation of 5LNCs. The ICAO Regional Office accredited to your State shall be advised of any 5LNCs that are used but not recorded in ICARD, as well as any 5LNCs that are allocated to your State but no longer used and which shall be released from ICARD. Your State's contribution to this exercise will significantly reduce the creation of duplicates as well as enable ICAO to identify and resolve existing duplicates or similar-sounding 5LNCs that have a potential safety impact.

1.3 States are reminded of ICAO Annex 11 and Annex 15 provisions regarding 5LNCs, and the need to coordinate with other States and all ICAO Regional Offices to resolve existing duplicated 5LNCs.

2. 5LNC DUPLICATE RESOLUTION RULES

2.1 Whenever possible Member States with 5LNCs of the same name but allocated to more than one physical location (duplicates, triplicates, quadruplicates, etc.) shall discuss the voluntary release of duplicated 5LNCs to allow one State to retain that 5LNC. If no resolution is agreed, the following 5LNC duplicate resolution rules will apply:

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.

Example: 5LNC KOBAS allocated in ICARD to two Member States.

Note: the Regional Office(s) shall advise the State(s) concerned to change those duplicated 5LNCs not in ICARD. Publication in AIP(s) shall not be considered as sub-criteria in these Resolution Rules.

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, (a) 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

(A) new 5LNC(s) shall be proposed to the State(s) with no ICARD creation date;

- c) No creation date

If there are two or more 5LNCs of the same name without creation dates, Rule 3 applies.

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);
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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;
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