



*International Civil Aviation Organization*

**The Sixth Meeting of the APANPIRG ATM Sub-Group  
(ATM/SG/6)**

Hong Kong, China, 30 July – 03 August 2018

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**Agenda Item 6: AOP, MET, AIM, SAR**

**UPDATING ICARD AND RESOLUTION OF DUPLICATED 5LNCs**

(Presented by India)

**SUMMARY**

ICAO vide its State Letter AN 11/45.5-17/101 dated 11 August 2017 urged States to implement the five-letter name-code (5LNC) Duplicate Resolution Rules and submit updated information on 5LNCs on priority basis. Accordingly, Airports Authority of India (AAI), has initiated action to comply with the requirements contained in the State letter at an early date.

This paper presents an update of India's action in regard to resolution of anomalies in ICARD database and synchronizing ICARD with AIP-India and requested action by the States which share FIR boundaries with India to harmonize the 5LNCs at FIR boundaries.

**1. INTRODUCTION**

1.1 ICAO State Letter AN 11/45.5-17/101 dated 11 August 2017 has identified a number of issues related to the five-letter name-code (5LNC) uniqueness, continuing to create difficulties causing potential safety-related issues, which include:

- a) Significant number of duplicated codes,
- b) Similar sounding codes in close proximity or on the same flight plan route,
- c) Differences between 5LNC data registered in ICARD and published in national Aeronautical Information Publications (AIPs).

1.2 ICAO urged States to implement the five-letter name-code (5LNC) Duplicate Resolution Rules and submit updated information on 5LNCs on priority basis.

1.3 Airports Authority of India (AAI), has initiated action to comply with the requirements contained in the State letter at an early date.

1.4 India presented a Working Paper on the subject in the combined meeting of BOBASIO/7, BIMT/5, ASIOACG/12 and INSPIRE/8 held at New Delhi in September 2017. The paper requested action by the 14 States which share FIR boundaries with India to harmonize the 5LNCs at FIR boundaries in regard to accuracy of the coordinates in the respective AIPs and also to remove anomalies in ICARD.

1.5 India presented an Information Paper on the subject in the Thirteenth Meeting of the Asia/Pacific Aeronautical Information Services - Aeronautical Information Management Implementation Task Force (AAITF/13) held in Bangkok, Thailand in June, 2018. The paper provided an update of India's action in regard to resolution of anomalies in ICARD database and harmonizing ICARD data with that of AIP-India.

## 2. DISCUSSION

### Update of Action to Correct ICARD Anomalies

2.1 In October 2017, AAI submitted a status report on ICARD compliance to ICAO Asia & Pacific Office, based on a query by the ICAO office. The list contained 1018 waypoints out of which 735 waypoints were published in AIP-India and the remaining 283 waypoints not published in AIP but registered in ICARD. Out of the 735 waypoints published in AIP, 304 were not registered in ICARD and 431 waypoints were registered in ICARD. Out of 431 registered waypoints, coordinates of 67 waypoints were matching with ICARD data, 168 were not matching with ICARD and the remaining 196 with minor differences in coordinates due to rounding-off errors. Also, out of the 735 waypoints published in AIP, 91 waypoints were located at FIR boundaries with other States.

2.2 Upon submitting the status report to ICAO, AAI started implementing a focused action plan to rectify the anomalies. The action plan involved the following activities:

- a) Register for 5LNC if available or new 5LNCs if not available for waypoints which were not published in ICARD;
- b) Conduct gap analysis between 5LNC published in AIP-India and registered in ICARD and take steps to harmonize the waypoint data; and
- c) Coordinate with the States which share FIR boundaries with India to harmonize the 5LNCs at FIR boundaries.

2.3 The action plan gave priority to address harmonization issues with waypoints at the FIR boundaries with neighbouring States. This has resulted in complete harmonization of waypoints along FIR boundaries with Bangladesh, Indonesia, Malaysia, Maldives, Mauritius, Pakistan, Oman and Seychelles. AAI is in communication with the remaining 6 States of Bhutan, Myanmar, Nepal, Somalia, Sri Lanka and Yemen to resolve the waypoint anomalies at an early date.

2.4 The present status of the project is as under:

- a) A total 780 waypoints are published in AIP-India. This includes a few waypoints registered a fresh in ICARD to rectify anomalies.
- b) Out of 780 waypoints, 597 waypoints are registered in ICARD, out of which 573 waypoint coordinates are matching with ICARD data, 16 are not matching with ICARD and 8 waypoints are having minor differences due to rounding-off error. The remaining 183 waypoints are not yet registered in ICARD.
- c) Out of the 183 waypoints not registered in ICARD, 25 new 5LNC have been registered in ICARD and will be published in September 2018. 9 waypoints are at FIR boundaries with neighbouring States and will require a mutual agreement between States and the remaining 149 terminal waypoints will be taken up in phase manner.

d) The list of waypoints to be resolved with remaining 6 neighbouring states is provided as **Annexure- 2**.

e) 272 waypoints, which are registered in ICARD but do not feature in AIP-India are being reassessed for their continued existence in ICARD database or for deletion. This action is expected to be completed within the next few months.

2.5 A chart showing the improvement in compliance to the ICAO State letter is provided as **Annexure-1**.

2.6 Action in respect of non-complying waypoints is being undertaken on priority. It is expected to complete action in all respects by end of December 2018, subject to similar action by neighbouring States.

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

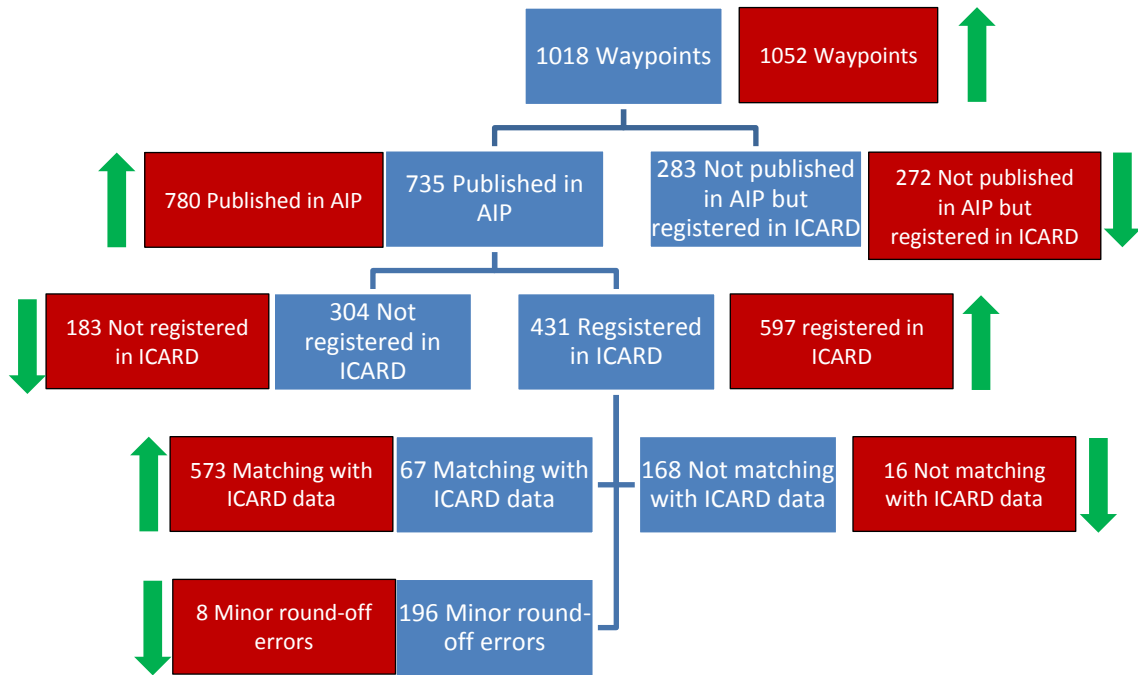
3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) request action by Bhutan, Myanmar, Nepal, Somalia, Sri Lanka and Yemen to resolve anomalies in FIR boundary waypoints with India; and
- c) discuss any relevant matters as appropriate.

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STATUS OF HARMONISATION OF 5LNC WITH ICARD

October 2017 – July 2018



Annexure – 2

**UPDATING OF FIR WAYPOINTS IN ICARD – PRELIMINARY ANALYSIS**

|     |               |       | WP COORDINATES      |                           |                           |                                                                            |
|-----|---------------|-------|---------------------|---------------------------|---------------------------|----------------------------------------------------------------------------|
| NO: | STATE         | WP    | AIP-INDIA           | AIP-STATE                 | ICARD                     | STATUS                                                                     |
| 1.  | Bhutan (BTN)  | BOGOP | 264402N<br>0894450E | 264401.5N<br>0894449.5E   | 264359.88N<br>0894500E    | Registered to IND.<br>Coordinates different.                               |
| 2.  |               | SUBSU | 265855N<br>0885150E | 265855.3N<br>0885149.8E   | 265855.3N<br>0885149.8E   | Registered to IND.                                                         |
| 3.  | Myanmar (MMR) | ANSOS | 232703N<br>0932748E | 232702.70N<br>0932748.00E | 232700N<br>0932747.88E    | Registered to MMR.<br>ICARD Coordinates different.                         |
| 4.  |               | BORBU | 165346N<br>0920000E | 165346N<br>0920000E       | 165346N<br>0920000E       | Registered to IND & MMR.                                                   |
| 5.  |               | IBITA | 185512N<br>0915949E | 185512.00N<br>0915949.00E | 191703.80N<br>0915948.98E | Registered to IND & MMR. ICARD<br>Coordinates different.                   |
| 6.  |               | LIBDI | 141505N<br>0915949E | 141505.10N<br>0915949.30E | 141505.11N<br>0915949.31E | Registered to IND & MMR. ICARD<br>Coordinates different.                   |
| 7.  |               | LULDA | 122345N<br>0942500E | 122345.00N<br>0942500.00E | 122447.88N<br>0942500.12E | Registered to IND & MMR. ICARD<br>Coordinates different.                   |
| 8.  |               | MEPEL | 160200N<br>0920000E | 160200.00N<br>0920000.00E | 160159.88N<br>0920000E    | Registered to IND & MMR. ICARD<br>Coordinates different.                   |
| 9.  |               | MIPAK | 115000N<br>0942500E | 115000.00N<br>0942500.00E | 114959.88N<br>0942500.12E | Registered to IND & MMR. ICARD<br>Coordinates different.                   |
| 10. |               | NISUN | 135605N<br>0921949E | 135605.20N<br>0921949.20E | 135605.21N<br>0921949.19E | Registered to IND & MMR. ICARD<br>Coordinates different.                   |
| 11. |               | RINDA | 153500N<br>0920000E | 153500.00N<br>0920000.00E | 153459.88N<br>0920000E    | Registered to IND & MMR. ICARD<br>Coordinates different.                   |
| 12. |               | SAGOD | 175548N<br>0915949E | 175548.20N<br>0915949.10E | 175541.88N<br>0920000E    | Registered to IND & MMR. ICARD<br>Coordinates different.                   |
| 13. |               | TEBOV | 202504N<br>0915949E | 202503.50N<br>0915949.00E | 202505.88N<br>0915948.12E | Registered to IND & BGD.<br>Change to MMR. ICARD<br>Coordinates different. |
| 14. | Nepal (NPM)   | BIRAT | 262110N<br>0871815E | 262110N<br>0871815E       | NIL                       | Not registered. Applied in ICARD                                           |
| 15. |               | BIRGA | 265355N<br>0850030E | 265355N<br>0850030E       | NIL                       | Registered to POL.<br>Register for new 5LNC.                               |
| 16. |               | GAURA | 264446N<br>0851852E | 264446N<br>0851852E       | NIL                       | Registered to CAN.<br>Register for new 5LNC.                               |
| 17. |               | JALES | 263810N<br>0855151E | 263811N<br>0855151E       | NIL                       | Registered to USA.<br>Register for new 5LNC.<br>Coordinates different.     |
| 18. |               | JANAK | 263912N<br>0855724E | 263912N<br>0855724E       | NIL                       | Registered to USA.<br>Register for new 5LNC.                               |
| 19. |               | LUMBI | 272539N<br>0831103E | 272539N<br>0831103E       | NIL                       | Registered to USA.<br>Register for new 5LNC.                               |
|     |               |       | WP COORDINATES      |                           |                           |                                                                            |

| NO: | STATE           | WP    | AIP-INDIA               | AIP-STATE           | ICARD                     | STATUS                                                               |
|-----|-----------------|-------|-------------------------|---------------------|---------------------------|----------------------------------------------------------------------|
| 20. | Nepal (NPM)     | MECHI | 264605N<br>0881055E     | 264605N<br>0881055E | NIL                       | Registered to COL.<br>Register for new 5LNC.                         |
| 21. |                 | OMUPA | 270001N<br>0844716E     | 270001N<br>0844716E | 270001.12N<br>0844715.79E | Registered to INDIA and NPM.                                         |
| 22. |                 | ONISA | 285808N<br>0800533E     | 285808N<br>0800533E | 285808N<br>0800533E       | Registered to NPM                                                    |
| 23. |                 | PARSA | 270822N<br>0843954E     | 270822N<br>0843954E | 270822N<br>0843954E       | Registered to NPM                                                    |
| 24. | Somalia (SOM)   | ORLID | 111706N<br>0600004E     | 111812N<br>0600000E | 111648N<br>0600000E       | Registered to IND and SEY. Coordinates different.                    |
| 25. | Sri Lanka (LKA) | ATETA | 091906N<br>0793855E     | 091906N<br>0793855E | 091906.10N<br>0793854.82E | Registered to IND & LKA                                              |
| 26. |                 | BASUR | 075549N<br>0780915E     | 075543N<br>0780926E | 075541.88N<br>0780924.12E | Registered to IND & LKA. Coordinates different.                      |
| 27. |                 | BIKOK | 081706N<br>0783555E     | 081706N<br>0783555E | 081659.88N<br>0783600E    | Registered to IND. ICARD Coordinates different.                      |
| 28. |                 | DABAR | 100000N<br>0800454E     | 100000N<br>0800454E | 100000N<br>0800454.12E    | Registered to IND and LKA but duplicated. Change 5LNC.               |
| 29. |                 | DEMON | 083329N<br>0785624E     | 083325N<br>0785638E | 083324.12N<br>0785630.12E | Registered to IND but duplicated. Change 5LNC. Coordinates different |
| 30. |                 | DUGOS | 085306N<br>0844753E     | 085306N<br>0844753E | 085554.12N<br>0845518.12E | Registered to LKA & IND. ICARD Coordinates different.                |
| 31. |                 | IDIBI | 084426N<br>0792147E     | 084418N<br>0792154E | 084417.88N<br>0792154E    | Registered to IND & LKA. Coordinates different.                      |
| 32. |                 | SULTO | 073837N<br>0880151E     | 073836N<br>0880154E | 073835.88N<br>0880154.12E | Registered to LKA. Coordinates different.                            |
| 33. | Yemen (YEM)     | ANGAL | 161404N<br>0600004E     | 161406N<br>0600006E | 161406N<br>0600006.12E    | Registered to IND & YEM. Coordinates different.                      |
| 34. |                 | ASPUX | 174403.6N<br>0600003.8E | 174406N<br>0600006E | 174406N<br>0600006.12E    | Registered to IND, OMN & YEM. Coordinates different.                 |
| 35. |                 | GIDAS | 142009N<br>0600004E     | 142000N<br>0600006E | 141959.88N<br>0600006.12E | Registered to YEM. Coordinates different.                            |

| WP COORDINATES |                                  |       |                     |                                                                  |                           |                                                 |
|----------------|----------------------------------|-------|---------------------|------------------------------------------------------------------|---------------------------|-------------------------------------------------|
| NO:            | STATE                            | WP    | AIP-INDIA           | AIP-STATE                                                        | ICARD                     | STATUS                                          |
| 36.            | Myanmar (MMR) & Bangladesh (BGD) | CHILA | 222303N<br>0924456E | MMR-<br>222303.00N<br>0924455.50E<br>BGD-<br>222303N<br>0924456E | 222330.12N<br>0924506.12E | Registered to MMR & BGD. Coordinates different. |