



**Seventh ATS Coordination Meeting of Bay of Bengal, Arabian Sea  
and Indian Ocean Region (BOBASIO/7)  
New Delhi, India, 18 – 19 September 2017**

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**AGENDA ITEM 5:   Airspace Safety**

**ACTION PLAN TO UPDATE ICARD DATABASE AND RESOLUTION OF DUPLICATED  
5LNCS**

(Presented by Airports Authority of India)

**SUMMARY**

This paper presents an action plan to address issues related to the 5LNC waypoint coordinates registered to India in ICARD database, with special emphasis on FIR boundary waypoints with other States.

**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 urges 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), being the Air Navigation Services provider (ANSP) has initiated action to comply with the requirements contained in the State letter at an early date.

**2.     DISCUSSION**

2.1     India has published approximately 800 waypoints qualifying to be registered in ICARD following 5LNC rules. The continuing process of airspace restructuring giving impetus to PBN implementation in terminal and enroute airspace, design of direct routes under flexible use of airspace and demand for establishment of large number of short domestic routes under the Indian Regional Connectivity Scheme requires creation of many more waypoints in near future.

2.2     AAI has initiated action to address the issues pointed out in the ICAO State letter. An assessment of the anomalies present and the quantum of work involved has prompted AAI to prepare an action plan to complete the task in phases.

2.3 The action plan involves the following activities:

- a) Identify 5LNCs which are not published in ICARD and register for new 5LNCs
- b) Conduct gap analysis between 5LNC published in AIP-India and ICARD and take steps to synchronise waypoint coordinates

2.4 It is expected to complete the activities including AIP amendment before 30 June 2018.

Coordination with Neighbouring FIR States for ICARD Updating

2.5 India shares FIR boundaries with the following States:

- |                     |                      |
|---------------------|----------------------|
| 1. Bangladesh (BGD) | 8. Nepal (NPM)       |
| 2. Bhutan (BTN)     | 9. Oman (OMN)        |
| 3. Indonesia (IDN)  | 10. Pakistan (PAK)   |
| 4. Malaysia (MYS)   | 11. Seychelles (SYC) |
| 5. Maldives (MDV)   | 12. Somalia (SOM)    |
| 6. Mauritius (MUS)  | 13. Sri Lanka (LKA)  |
| 7. Myanmar (MMR)    | 14. Yemen (YEM)      |

2.6 A total number of 89 waypoints have been established between India and the neighbouring FIR States, out of which 9 5LNCs have not been registered in ICARD, 13 5LNCs have been duplicated in other regions, and most of the 5LNCs need synchronization between AIPs of the concerned States and/or ICARD. Refer **Annexure-I** for the outcome of preliminary assessment carried out by AAI.

2.7 AAI proposes the following action plan to update ICARD in respect of common FIR waypoints:

- a) States may nominate a Point-Of-Contact (POC) who will be vested with authority of coordinate directly with the POC of other affected States in matters related to ICARD updating.
- b) Assess coordinates of FIR boundary waypoints which are found to be different in the AIP of the affected States and agree on a common set of coordinates.
- c) Approach ICAO RO for correction of waypoint coordinates in ICARD, where required.
- d) Agree on common AIRAC date(s) for publication of the revised waypoint 5LNC and/or coordinates

2.8 It is proposed to complete the synchronization process before 30 June 2018.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) discuss the proposal by India for updating ICARD information;
- b) discuss any relevant matters as appropriate; and
- c) request States to take action as proposed in para 2.7.

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

| NO: | STATE               | WP                  | WP COORDINATES       |                           |  | STATUS  |
|-----|---------------------|---------------------|----------------------|---------------------------|--|---|
|     |                     |                     | AIP-INDIA            | AIP-STATE                 | ICARD  |   |
| 1   | Bangladesh<br>(BGD) | AGODA               | 241922N<br>0883556E  | 241920N<br>0883606 E      | 241923.88N<br>0883624.12E                          | Registered to INDIA.<br>Coordinates different.              |
| 2   |                     | ATOGA               | 251602N<br>0900102E  | 251600N<br>0900112 E      | 251600.12N<br>0900112E                             | Registered to IND & BGD.<br>Coordinates different.          |
| 3   |                     | AVPOP               | 221809N<br>0890050E  | 221809N<br>0890050E       | 221806.12N<br>0890047.88E                          | Registered to INDIA.<br>ICARD Coordinates<br>different.     |
| 4   |                     | BEMAK               | 225539N<br>0885356E  | 225539N<br>0885356 E      | 225536.12N<br>0885406.12E                          | Registered to IND & BGD.<br>ICARD Coordinates<br>different. |
| 5   |                     | ESDOT               | 212045N<br>0903250E  | 212045N<br>0903250E       | 212048.12N<br>0903248.12E                          | Registered to IND & BGD.<br>ICARD Coordinates<br>different. |
| 6   |                     | IBAPA               | 251102N<br>0912609E  | 251102N<br>0912609 E      | 250911.88N<br>0912624E                             | Registered to IND & BGD.<br>ICARD Coordinates<br>different. |
| 7   |                     | MIGOP               | 251220N<br>0884708E  | 251218N<br>0884718 E      | 251218N<br>0884717.88E                             | Registered to IND & BGD.<br>Coordinates different.          |
| 8   |                     | NOKAT               | 224727N<br>0885630E  | 224727N<br>0885630 E      | 224724N<br>0885642E                                | Registered to IND & BGD.<br>ICARD Coordinates<br>different. |
| 9   |                     | REDAP               | 245402N<br>0881105E  | 245400N<br>0881115E       | 245400N<br>0881117.88E                             | Registered to IND & BGD.<br>Coordinates different.          |
| 10  |                     | SUMAG               | 223539N<br>0885626E  | 223539N<br>0885626 E      | 223535.88N<br>0885635.88E                          | Registered to IND & BGD.<br>ICARD Coordinates<br>different. |
| 11  |                     | TEBID               | 244102N<br>0880150E  | 244102N<br>0880150 E      | 244059.88N<br>0880148E                             | Registered to IND & BGD.<br>ICARD Coordinates<br>different. |
| 12  |                     | VANTU               | 260530N<br>0891450E  | 260530N<br>0891450 E      | 260530.12N<br>0891448.12E                          | Registered to IND & BGD.<br>ICARD Coordinates<br>different. |
| 13  | VINAD               | 252214N<br>0884920E | 252212N<br>0884930 E | 252212N<br>0884930E       | Registered to IND & BGD.<br>Coordinates different. |   |
| 14  | Bhutan<br>(BTN)     | BOGOP               | 264402N<br>0894450E  | 264401.5N<br>0894449.5E   | 264359.88N<br>0894500E                             | Registered to IND.<br>Coordinates different.                |
| 15  |                     | SUBSU               | 265855N<br>0885150E  | 265855.3N<br>0885149.8E   | NIL  | Not registered. 5LNC<br>available                           |
| 16  | Indonesia<br>(IDN)  | MEMAK               | 060000N<br>0930500E  | 060000.00N<br>0930500.00E | 060000N<br>0930459.88E                             | Registered to IND & IDN.<br>ICARD Coordinates<br>different. |

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|-----|--------------------|-------------------|---------------------|---------------------------|---------------------------|--|
|     |                    |                   | AIP-INDIA           | AIP-STATE                 | ICARD                     |  |
| 17  | Malaysia<br>(MYS)  | ANOKO             | 070819N<br>0942449E | 070812.12N<br>0942500.12E | 070812.12N<br>0942500.12E | Registered to IND & MYS.<br>Coordinates different.                                     |
| 18  |                    | EMRAN             | 083430N<br>0942500E | 083430N<br>0942500.12E    | 083430N<br>0942500.12E    | Registered to IND & MYS.   |
| 19  |                    | IGOGU             | 073101N<br>0942500E | 073100.84N<br>0942500.12E | 073100.84N<br>0942500.12E | Registered to IND & MYS.   |
| 20  |                    | IGREX             | 094328N<br>0942500E | 094327.84N<br>0942500.12E | 094327.84N<br>0942500.12E | Registered to IND & MYS.   |
| 21  |                    | NOPEK             | 063614N<br>0942500E | 063614.04N<br>0942500.12E | 063614.04N<br>0942500.12E | Registered to IND & MYS.   |
| 22  |                    | SAMAK             | 075842N<br>0942500E | 075841.88N<br>0942500.12E | 075841.88N<br>0942500.12E | Registered to IND & MYS.   |
| 23  |                    | Maldives<br>(MDV) | BIBGO               | 073000N<br>0705648E       | 073000N<br>0705648E       | 073000N<br>0705648.12E   |
| 24  | ELKEL              |                   | 014908N<br>0691100E | 014900N<br>0691100E       | 014900.12N<br>0691059.88E | Registered to IND & MDV.<br>Coordinates different.                                     |
| 25  | ESLAV              |                   | 070000N<br>0700000E | 070000N<br>0700000E       | NIL                       | Not registered. 5LNC<br>available.   |
| 26  | IPNEB              |                   | 050000N<br>0700000E | 050000N<br>0700000E       | NIL                       | Not registered. 5LNC<br>available.   |
| 27  | LATIK              |                   | 030812S<br>0680000E | 030809S<br>0680000E       | NIL                       | Registered to NZL. Change<br>5LNC. Coordinates<br>different.                           |
| 28  | MANAP              |                   | 030000N<br>0700000E | 030000N<br>0700000E       | NIL                       | Not registered. 5LNC<br>available.   |
| 29  | NODOL              |                   | 070752N<br>0740000E | 070752N<br>0740000E       | NIL                       | Registered to AUS. Register<br>for new 5LNC.   |
| 30  | NOKID              |                   | 060007N<br>0745725E | 060000N<br>0745728E       | 060000N<br>0745729.88E    | Registered to IND and<br>MDV but duplicated.<br>Change 5LNC. Coordinates<br>different. |
| 31  | OMLEV              |                   | 060000N<br>0700000E | 060000N<br>0700000E       | NIL                       | Not registered. 5LNC<br>available.   |
| 32  | OVPUK              |                   | 040000N<br>0700000E | 040000N<br>0700000E       | NIL                       | Not registered. 5LNC<br>available.   |
| 33  | POXOD              |                   | 073007N<br>0725547E | 073000N<br>0725548E       | 073000N<br>0725548E       | Registered to IND & MDV.<br>Coordinates different.                                     |
| 34  | RULSA              |                   | 033000N<br>0700000E | 033000N<br>0700000E       | 033000N<br>0700000E       | Registered to IND.   |
| 35  | Mauritius<br>(MUS) |                   | MURUS               | 055950S<br>0631945E       | 060000S<br>0631942E       | 060000N<br>0632500.12E   |

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|     |                  |                | AIP-INDIA           | AIP-STATE                 | ICARD                     |  |  |
| 36  | Myanmar<br>(MMR) | ANSOS          | 232703N<br>0932748E | 232702.70N<br>0932748.00E | 232700N<br>0932747.88E    | Registered to MMR.<br>ICARD Coordinates<br>different.                      |  |
| 37  |                  | BORBU          | 165346N<br>0920000E | NIL                       | 165346N<br>0920000E       | WP and route L524 missing<br>from AIP-MMR. Registered<br>to IND.           |  |
| 38  |                  | IBITA          | 185512N<br>0915949E | 185512.00N<br>0915949.00E | 191703.80N<br>0915948.98E | Registered to IND & MMR.<br>ICARD Coordinates<br>different.                |  |
| 39  |                  | LIBDI          | 141505N<br>0915949E | 141505.10N<br>0915949.30E | 141505.11N<br>0915949.31E | Registered to IND & MMR.<br>ICARD Coordinates<br>different.                |  |
| 40  |                  | LULDA          | 122345N<br>0942500E | 122345.00N<br>0942500.00E | 122447.88N<br>0942500.12E | Registered to IND & MMR.<br>ICARD Coordinates<br>different.                |  |
| 41  |                  | MEPEL          | 160200N<br>0920000E | 160200.00N<br>0920000.00E | 160159.88N<br>0920000E    | Registered to IND & MMR.<br>ICARD Coordinates<br>different.                |  |
| 42  |                  | MIPAK          | 115000N<br>0942500E | 115000.00N<br>0942500.00E | 114959.88N<br>0942500.12E | Registered to IND & MMR.<br>ICARD Coordinates<br>different.                |  |
| 43  |                  | NISUN          | 135605N<br>0921949E | 135605.20N<br>0921949.20E | 135605.21N<br>0921949.19E | Registered to IND & MMR.<br>ICARD Coordinates<br>different.                |  |
| 44  |                  | RINDA          | 153500N<br>0920000E | 153500.00N<br>0920000.00E | 153459.88N<br>0920000E    | Registered to IND & MMR.<br>ICARD Coordinates<br>different.                |  |
| 45  |                  | SAGOD          | 175548N<br>0915949E | 175548.20N<br>0915949.10E | 175541.88N<br>0920000E    | Registered to IND & MMR.<br>ICARD Coordinates<br>different.                |  |
| 46  |                  | 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. |  |
| 47  |                  | Nepal<br>(NPM) | BIRAT               | 262110N<br>0871815E       | 262110N<br>0871815E       | NIL  | Not registered. 5LNC<br>available.           |
| 48  |                  |                | BIRGA               | 265355N<br>0850030E       | 265355N<br>0850030E       | NIL  | Registered to POL. Register<br>for new 5LNC. |
| 49  |                  |                | GAURA               | 264446N<br>0851852E       | 264446N<br>0851852E       | NIL  | Registered to CAN.<br>Register for new 5LNC. |
| 50  | JALES            |                | 263810N<br>0855151E | 263811N<br>0855151E       | NIL                       | Registered to USA. Register<br>for new 5LNC. Coordinates<br>different.     |  |
| 51  | JANAK            |                | 263912N<br>0855724E | 263912N<br>0855724E       | NIL                       | Registered to USA. Register<br>for new 5LNC.                               |  |
| 52  | LUMBI            |                | 272539N<br>0831103E | 272539N<br>0831103E       | NIL                       | Registered to USA. Register<br>for new 5LNC.                               |  |
| 53  | MECHI            |                | 264605N<br>0881055E | 264605N<br>0881055E       | NIL                       | Registered to COL. Register<br>for new 5LNC.                               |  |

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|     |                |       | AIP-INDIA           | AIP-STATE           | ICARD                     |   |
| 54  | Nepal (NPM)    | OMUPA | 270001N<br>0844716E | 270001N<br>0844716E | 270001.12N<br>0844715.79E | Registered to INDIA and NPM.  |
| 55  |                | ONISA | 285808N<br>0800533E | 285808N<br>0800533E | NIL                       | Not registered. 5LNC available.   |
| 56  |                | PARSA | 270822N<br>0843954E | 270822N<br>0843954E | NIL                       | Not registered. 5LNC available.   |
| 57  | Oman (OMN)     | KITAL | 200300N<br>0601800E | N200300<br>E0601800 | 200300N<br>0601800E       | Registered to INDIA and OMN.  |
| 58  |                | LOTAV | 203700N<br>0605700E | N203700<br>E0605700 | 203700.12N<br>0605700E    | Registered to INDIA and OMN.  |
| 59  |                | PARAR | 222630N<br>0630700E | N222630<br>E0630700 | 222630.12N<br>0630700.12E | Registered to OMN.  |
| 60  |                | RASKI | 230330N<br>0635200E | N230330<br>E0635200 | 230329.88N<br>0635200.12E | Registered to INDIA and OMN.  |
| 61  |                | REXOD | 211230N<br>0613830E | N211230<br>E0613830 | 211229.88N<br>0613830.12E | Registered to INDIA and OMN.  |
| 62  |                | TOTOX | 215030N<br>0622230E | N215030<br>E0622230 | 215030.12N<br>0622230E    | Registered to INDIA and OMN.  |
| 63  | Pakistan (PAK) | GUGAL | 301430N<br>0735757E | 301430N<br>0735757E | 301430.12N<br>0735800.12E | Registered to IND and PAK. ICARD Coordinates different.                       |
| 64  |                | KABIM | 233002N<br>0662131E | 233001N<br>0662130E | 233002N<br>0662131E       | Registered to IND and PAK. ICARD Coordinates different.                       |
| 65  |                | PARTY | 241438N<br>0705159E | 241438N<br>0705159E | 241500N<br>0705212E       | Registered to IND and PAK. ICARD Coordinates different.                       |
| 66  |                | RABAN | 313532N<br>0743451E | 313700N<br>0743657E | 313700.12N<br>0743656.88E | Registered to PAK. Coordinates different.                                     |
| 67  |                | RAMSA | 252002N<br>0704423E | 252002N<br>0704423E | 252002.04N<br>0704422.92E | Registered to PAK.  |
| 68  |                | SAMAR | 312047N<br>0743357E | 312048N<br>0743357E | 312100N<br>0743412E       | Registered to IND and PAK but duplicated. Change 5LNC. Coordinates different. |
| 69  |                | SAPNA | 233002N<br>0675000E | 233002N<br>0675001E | 233002N<br>0675000E       | Registered to IND and PAK. Coordinates different.                             |
| 70  |                | TASOP | 251320N<br>0704759E | 251320N<br>0704759E | 251319.92N<br>0704758.92E | Registered to IND.  |
| 71  |                | TELEM | 240702N<br>0684600E | 240702N<br>0684600E | 240712N<br>0684612E       | Registered to IND and PAK. Coordinates different.                             |

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|     |                     |       | AIP-INDIA               | AIP-STATE                 | ICARD                     |   |
| 72  | Pakistan<br>(PAK)   | TIGER | 282850N<br>0721454E     | 282801N<br>0721459E       | 282800.84N<br>0721458.92E | Registered to PAK but duplicated. Change 5LNC. Coordinates different. |
| 73  |                     | VIKIT | 275215N<br>0712528E     | 275215N<br>0712528E       | 275212N<br>0712512E       | Registered to IND and PAK. ICARD Coordinates different.               |
| 74  | Seychelles<br>(SYC) | BUSUX | 035500S<br>0600000E     | 035500.00S<br>0600000.00E | 035500.12S<br>0600000E    | Registered to IND and SEY.  |
| 75  |                     | CLAVA | 014038N<br>0600004E     | 014612.11N<br>0600000.00E | 013400.12N<br>0600000E    | Registered to IND and SEY. Coordinates different.                     |
| 76  |                     | OTKIR | 022609S<br>0600004E     | 022619.49S<br>0600000.00E | 022617.88S<br>0600000E    | Registered to IND and SEY. Coordinates different.                     |
| 77  |                     | VUTAS | 091206N<br>0600004E     | 091200.00N<br>0600000.00E | 091200N<br>0600000E       | Registered to IND and SOM. Coordinates different.                     |
| 78  | Somalia<br>(SOM)    | ORLID | 111706N<br>0600004E     | 111812N<br>0600000E       | 111648N<br>0600000E       | Registered to IND and SEY. Coordinates different.                     |
| 79  | Sri Lanka<br>(LKA)  | ATETA | 091906N<br>0793855E     | 091906N<br>0793855E       | 091906.10N<br>0793854.82E | Registered to IND & LKA   |
| 80  |                     | BASUR | 075549N<br>0780915E     | 075543N<br>0780926E       | 075541.88N<br>0780924.12E | Registered to IND & LKA. Coordinates different.                       |
| 81  |                     | BIKOK | 081706N<br>0783555E     | 081706N<br>0783555E       | 081659.88N<br>0783600E    | Registered to IND. ICARD Coordinates different.                       |
| 82  |                     | DABAR | 100000N<br>0800454E     | 100000N<br>0800454E       | 100000N<br>0800454.12E    | Registered to IND and LKA but duplicated. Change 5LNC.                |
| 83  |                     | DEMON | 083329N<br>0785624E     | 083325N<br>0785638E       | 083324.12N<br>0785630.12E | Registered to IND but duplicated. Change 5LNC. Coordinates different  |
| 84  |                     | DUGOS | 085306N<br>0844753E     | 085306N<br>0844753E       | 085554.12N<br>0845518.12E | Registered to LKA. ICARD Coordinates different.                       |
| 85  |                     | IDIBI | 084426N<br>0792147E     | 084418N<br>0792154E       | 084417.88N<br>0792154E    | Registered to IND & LKA. Coordinates different.                       |
| 86  |                     | SULTO | 073837N<br>0880151E     | 073836N<br>0880154E       | 073835.88N<br>0880154.12E | Registered to LKA. Coordinates different.                             |
| 87  | Yemen<br>(YEM)      | ANGAL | 161404N<br>0600004E     | NA                        | 161406N<br>0600006.12E    | Registered to IND & YEM. Coordinates different.                       |
| 88  |                     | ASPUX | 174403.6N<br>0600003.8E | NA                        | 174406N<br>0600006.12E    | Registered to IND & YEM. Coordinates different.                       |
| 89  |                     | GIDAS | 142009N<br>0600004E     | NA                        | 141959.88N<br>0600006.12E | Registered to YEM. Coordinates different.                             |