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## ICAO APAC & MID Webinar on the usage of 5LNC / 5AANC (4 May 2023)

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## ICAO provisions

- Current ICAO provisions related to the coding and use of 5LNCs are contained in various documents, including Annex 10, Annex 11 and DOC 9432.
- 5ANNCs may be used in accordance with ICAO DOC 8168 PANS-OPS and should contain characters taken from the airport designator, and/or characters indicating the use of the significant point with maximum three numbers.



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## 5LNC : ICAO PROVISIONS IN ANNEX 11 (15th edition, 2018)

All requirements for composition of coded designators for significant points marked by the site of a radio navigation aid are clearly defined in ICAO Annex 11 and Appendix 2.

*Significant point.* A specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes.

*Note.— There are three categories of significant points: ground-based navigation aid, intersection and waypoint. In the context of this definition, intersection is a significant point expressed as radials, bearings and/or distances from ground-based navigation aids.*

### 2.15 Establishment and identification of significant points

2.15.1 Significant points shall be established for the purpose of defining an ATS route or instrument approach procedure and/or in relation to the requirements of air traffic services for information regarding the progress of aircraft in flight.

2.15.2 Significant points shall be identified by designators.

2.15.3 Significant points shall be established and identified in accordance with the principles set forth in Appendix 2.



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## 5LNC : ICAO PROVISIONS IN ANNEX 11 (15th edition, 2018)

### Some extracts of principles from Annex 11, Appendix 2

#### 1. Establishment of significant points

1.1 Significant points should, whenever possible, be established with reference to ground-based or space-based radio navigation aids, preferably VHF or higher frequency aids.

1.2 Where such ground-based or space-based radio navigation aids do not exist, significant points shall be established at locations which can be determined by self-contained airborne navigation aids, or, where navigation by visual reference to the ground is to be effected, by visual observation. Specific points may be designated as “transfer of control” points by agreement between adjacent air traffic control units or control positions concerned.

#### 3. Designators for significant points not marked by the site of a radio navigation aid

3.1 Where a significant point is required at a position not marked by the site of a radio navigation aid, and is used for ATC purposes, it shall be designated by a unique five-letter pronounceable “name-code”. This name-code designator then serves as the name as well as the coded designator of the significant point. *Note. — The principles governing the use of alphanumeric name-codes in support of RNAV SIDs, STARs and instrument approach procedures are detailed in the PANS-OPS (Doc 8168).*

3.2 The name-code designator shall be selected so as to avoid any difficulties in pronunciation by pilots or ATS personnel when speaking in the language used in ATS communications.

3.3 The name-code designator shall be easily recognizable in voice communications and shall be free of ambiguity with those used for other significant points in the same general area.

3.4 The unique five-letter pronounceable name-code designator assigned to a significant point shall not be assigned to any other significant point

## 5LNC : ICAO PROVISIONS IN PANS-AIM (1st edition, 2018)

Publication of significant points, which are not part of the ATS Route system, either in AIP ENR-Section or via AIP data set

### ENR 4.4 Name-code designators for significant points

#AIP-DS# A list of alphabetically arranged name-code designators (five-letter pronounceable “name-code”) established for significant points at positions not marked by the site of radio navigation aids, including:

- 1) name-code designator;
- 2) geographical coordinates in degrees, minutes and seconds of the position;
- 3) reference to ATS or other routes where the point is located; and
- 4) remarks, including supplementary definition of positions where required.



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## 5ANNC : ICAO PROVISIONS IN DOC 8168 PANS OPS (7th edition, 2020)

PANS OPS Vol II details provisions for waypoint naming which include five-alphanumeric name-codes

### 1.6 WAYPOINT NAMING

1.6.1 Waypoints used in support of RNAV SIDs, STARs and instrument approach procedures shall be designated by either a unique, five-letter, pronounceable “name-code” or a five-alphanumeric name-code. The following principles apply:

- a) waypoints shall be designated by a five-alphanumeric name-code only if they are used for waypoints unique to one aerodrome that has a properly assigned four-letter location indicator (in accordance with Doc 7910);
- b) in the following cases a unique, five-letter, pronounceable “name-code”, in accordance with Annex 11, shall be applied:
  1. final waypoint of a SID;
  2. initial waypoint of a STAR;
  3. waypoints common to more than one terminal control area or used in a procedure common to more than one airport which are not used for en-route; and
  4. waypoints for ATC purposes.



## 5ANNC : ICAO PROVISIONS IN DOC 8168 PANS OPS (7th edition, 2020)

PANS OPS Vol II details provisions for waypoint naming which include five-alphanumeric name-codes

### 1.6 WAYPOINT NAMING (continued)

1.6.2 The following criteria apply when five-alphanumeric name-codes are used:

- a) the five-alphanumeric name-code convention that is adopted shall be applicable to all aerodromes within the State;
- b) five-alphanumeric name-codes should contain characters taken from the airport designator, and/or characters indicating the use of the significant point, with all combinations containing no more than three digits;
- c) the convention and the rules of application shall be published in the State AIP;
- d) the five-alphanumeric name-code shall be unique within the terminal area in which it is used;
- e) as global uniqueness cannot be assured, all waypoints that have a five-alphanumeric name-code identifier should be clearly listed as terminal waypoints in the AIP; and
- f) as global uniqueness cannot be assured for waypoints containing five-alphanumeric name-codes, to avoid any potential mis-selection by the pilot, ATC should not use waypoints designated by five-alphanumeric name-codes in any re-routing from the en-route structure into a terminal procedure.



## ICAO Five-Letter Name-Code database (ICARD)

The management of 5LNC is done through the ICARD database located on the ICAO Secure Portal.

- Database of 290,000 (5LNCs)
- 1995 : Developed by Eurocontrol and ICAO EUR/NAT
- 1998 : the first internet application on the EUROCONTROL website
- 2009 : extended to other ICAO regions
- 2010 : transferred from EUROCONTROL to ICAO Hq
- 2017 : new enhanced ICARD platform

Five-Letter Name-Code  
— System —  
Version 2



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## ICARD: ICAO International Codes and Route Designators

- Each ICAO Regional Office has a nominated ICARD Data Manager
- Each State shall have nominated ICARD Authorized User(s) to perform requests of 5LNC.
- States are required to coordinate usage of unique five-letter pronounceable name-code designators (5LNC's) with the appropriate Regional Office
- ICARD User Guidelines is available on the ICAO website:

<https://www.icao.int/safety/OPS/OPS-Tools/Pages/ICARD.aspx>



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