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FUTURE.**



| ICAO

ICAO Provisions



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01 ICAO Provisions



This edition supersedes, on 8 November 2018, all previous editions of Annex 11.

For information regarding the applicability of the Standards and Recommended Practices, see Foreword.

INTERNATIONAL CIVIL AVIATION ORGANIZATION

5LNC : ICAO PROVISIONS IN ANNEX 11

2.15 Establishment 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.

5LNC : ICAO PROVISIONS IN ANNEX 11

Appendix 2 Principles Governing the Establishment and Identification of Significant Points

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.

5LNC : ICAO PROVISIONS IN ANNEX 11

Appendix 2 Principles Governing the Establishment and Identification of Significant Points

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

3.4 The unique five-letter pronounceable name-code designator assigned to a significant point shall not be assigned to any other significant point. When there is a need to relocate a significant point, a new name-code designator shall be chosen. In cases when a State wishes to keep the allocation of specific name-codes for reuse at a different location, such name-codes shall not be used until after a period of at least six months.

3.5 States' requirements for unique five-letter pronounceable name-code designators shall be notified to the Regional Offices of ICAO for coordination.

5LNC : ICAO PROVISIONS IN PANS-AIM DOC 10066

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.

5ANNC : ICAO PROVISIONS IN PANS OPS DOC 8168

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 PANS OPS DOC 8168

1.6 WAYPOINT NAMING

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 misselection 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.

02 ICAO ICARD Process

```
position:absolute;z-index:999;co  
ows:0 1px 5px #ccc}.gbrtl .gbm{-moz-  
or:#ccc;display:block;position:abso  
e=5);*opacity:1;*top:-2px;*left:-5p  
ay:1\0/;top:-4px\0/;left:-6px\0/;r  
oz-inline-box;display:inline-block;  
.gbmoe{display:block;list-style:none  
ay:inline-block;line-height:27px;pad  
(cursor:pointer;display:block;text-d  
ion:relative;z-index:1000}.gbts{*dis  
.gbtsa{padding-right:9px}#gbz .gbzt  
.gbt  
background:url(//
```



ICARD Process

- Each ICAO Regional Office has a nominated ICARD Data Manager
- Each State shall have nominated ICARD Authorised 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:

Steps to submit ICARD 5LNC requests



The screenshot shows the ICARD website interface. At the top, there is a navigation bar with the ICAO logo, the text "ICAO ICARD", and social media icons for Facebook, Twitter, LinkedIn, YouTube, and Email. Below the navigation bar is a menu with links: 5LNC, ROUTE DESIGNATORS, HANDLE MESSAGES, DOWNLOADS, USAGE, and PARAMETERS. A red circle highlights the "HELP" button in the top right corner. The main banner features the ICARD logo and a large image of a commercial airplane flying over a world map. Below the banner, there is a section titled "Find Allocated and Available 5LNC" with search criteria and map options.

ICAO ICARD

5LNC ROUTE DESIGNATORS HANDLE MESSAGES DOWNLOADS USAGE PARAMETERS

HELP

ICARD
INTERNATIONAL CODES AND
ROUTE DESIGNATORS

Find Allocated and Available 5LNC

SEARCH CRITERIA

Code: Search

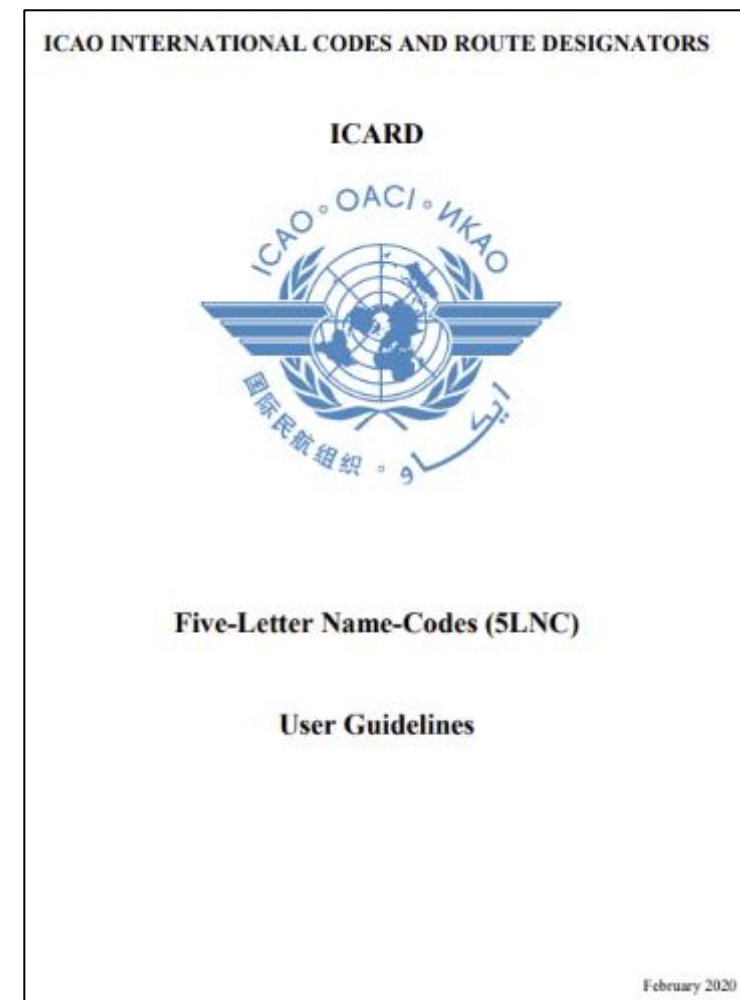
Region: APAC-Bangkok

SHOW MAP CENTERED ON

Latitude: Longitude: Map

DDMMSS[.ss]H where H is 'N' or 'S'

DDMMSS[.ss]H where H is 'E' or 'W'



ICARD Users

- Public User (Non-Authorized User)
 - Any person of the public who may query the content of the database but not make any reservations or change to the content.
- State User (Authorized User)
 - ICARD Authorized users are nominated by their State (State users, Country Managers).
 - The ICAO Regional Office should be informed of the name(s) of the person(s) who will act as ICARD authorized user(s).
- Regional Manager (Authorized User)
 - Each ICAO Regional Office has a nominated ICARD Data Manager and an alternate. The ICARD focal point in each ICAO regional office will:
 - Review and accept or refuse requests from State Users for the allocation, amendment or deletion of 5LNCs
 - Allocate, amend, or delete a 5LNC directly into ICARD

Find Allocated and Available 5LNC

Find Allocated and Available 5LNC

SEARCH CRITERIA

Code:

Region:

SHOW MAP CENTERED ON

Latitude:

Longitude:

DDMMSS[.ss]H where H is 'N' or 'S'

DDMMSS[.ss]H where H is 'E' or 'W'

Search Results

Available codes Green-----Available Blue-----Unavailable Orange-----Reserved Red-----Allocated Purple-----History

No Result.

Page 1 of 1

Allocated codes

Code	Latitude	Longitude	Coord. States	Purpose	Creation Date	Last Modified Date	Available Date	Action	Comment
OSATO	433020.25S	1722334.77E	NZL	TA	24/03/2014 00:00:00	23/11/2020 02:56:58	23/05/2021 02:56:58	<input type="button" value="X"/> <input type="button" value="↺"/> <input type="button" value="🗑"/>	
OSATO	411005.59S	1751445.67E	NZL	TA	20/08/2021 03:01:09	30/12/2021 00:07:50	30/06/2022 00:07:50	<input type="button" value="X"/> <input type="button" value="↺"/> <input type="button" value="🗑"/>	NZWN SID transition

Color Codes of 5LNCs in ICARD

- **Green** means the 5LNC is available for your Region, you can select and proceed to make a request.
- **Blue** means the 5LNC is available but it belongs to another ICAO Region
- **Orange** means
 - the 5LNC is pending action by the ICARD Regional Data Manager or,
 - may be part of a reserved block or,
 - it's frozen for a period of 6 months until it is released, further to deletion request.
- **Red** means the 5LNC is already allocated to/used by a Country.
- **Purple** means historical data, the 5LNC was used by a Country at some point in the past, some codes may come up multiple times in purple.

Regional Manager: 8 Functions under 5LNC

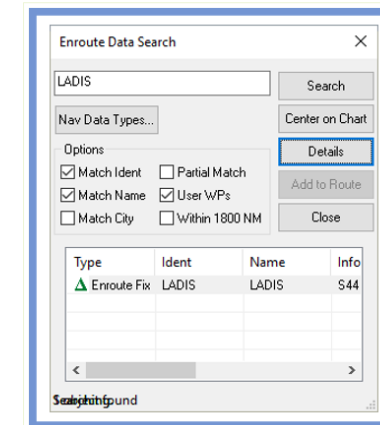
- Find Allocated and Available 5LNC
- Find 5LNC in Available List
- Find Allocated 5LNC
- Check my Requests
- Take a Decision
- Update Reserve List
- Transfer to Region
- Handle Blocks of Codes

Steps for new 5LNC request

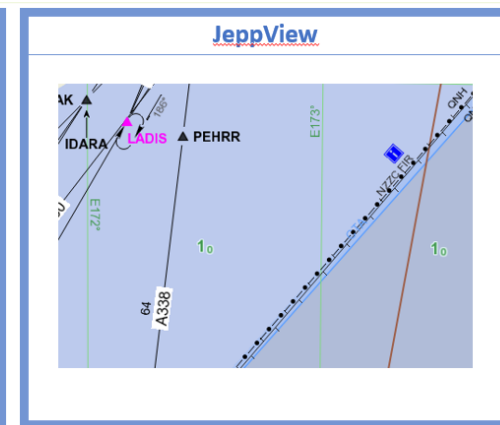
- In all cases, the coordinates of the requested new 5LNC must be within the territory of, or within a FIR administered by the requesting Administration. If this is not the case, the request will be refused.
- Proximate ‘sound-like’ checking shall be conducted before submission. 250NM shall be used for Terminal Airspace, 500NM shall be used for Enroute airspace and Flight Information Region (FIR) boundary points.
- For 5LNCs on FIR boundaries, the requesting Administration is responsible for coordination with all Administrations concerned before the new 5LNCs are requested in ICARD;
- After the submission of new 5LNC requests, the user requests are successfully recorded in the ICARD application, BUT NOT YET APPROVED by the ICARD Regional Data Manager. Administrations must wait for approval of the requested 5LNC/s by the ICARD Regional Data Manager before proceeding to publication in AIP. If requests are urgent, ICARD Users should inform the ICARD Regional Data Manager by e-mail to expedite processing.

Regional Manager: Handle request for registering new 5LNC

- New 5LNC (not yet published)
 - Check fields must be filled. If any of coordinates, purpose and coordinating State is/are not filled, postpone request and inform ICARD Planner.
 - Check 5LNC on JeppView.
 - If Jeppview detected a published 5LNC, it will be cross-checked with the relevant State's AIP.
 - If Jeppview detected a published 5LNC outside APAC, coordination between the ICARD Regional Manager will be required.
 - If 5LNC is published by other State, request should be rejected.
 - Regional Manager should send a request to associated State.



Type	Ident	Name	Info
▲ Enroute Fix	LADIS	LADIS	S44



Request:

- Allocate 'LADIS'

Issue:

- Yes. Published in New Zealand

Cross check:

- Proximity issue: No.
- 5LNC in Sky Vector: No.

Decision:

- Reject

Regional Manager: Check if all fields are filled

Request For CODE Allocation ABTUX

Latitude:
DDMMSS[.ss]H where H is 'N' or 'S'

Longitude:
DDDMMSS[.ss]H where H is 'E' or 'W'

Purpose: ▼

Comment:

Requested by: adasilva

For Countries: ▼

▼ Add co-ordinating country:

Proximity Search
 within
(NM)
Proximity check done ☐

*Purpose must be selected.

**Comment should always be provided in all requests (such as background, purpose, reason for amendment/deletion)

***If the 5LNC purpose is FIR, a coordinating State must be added.

Regional Manager: Check with the [list of Duplicated 5LNC](#)

5LNC	Count	Countries	Priority
BACON	5	Brazil, United States, Japan, China (Taiwan), Phillippines	United States of America
BONGO	5	United States of America, Venezuela, Burkina Faso/Ghana (FIR boundary), Japan, Australia	United States of America
CARLO	5	United States of America, Mexico, Spain, Pakistan, Philippines	United States of America
CRANE	5	United States of America, Japan, Brazil, Republic of Korea, Australia	United States of America
DRAKE	5	Chile/Argentina, Costa Rica (COCESNA), United States of America, United Kingdom, China (Taiwan)	United Kingdom
FLUTE	5	Brazil, United States of America, Germany/Denmark (FIR boundary), Thailand, Japan	United States of America
FRANK	5	Japan, China (Taiwan), United States of America, Brazil, Panama	United States of America

If the 5LNC is found on this list, please see the priority.

- If the priority is assigned to the requested State, proceed with checks.
- If the priority is assigned to another State, the request will be **Rejected**.
- If the priority has not been assigned, please see [5LNC DUPLICATE RESOLUTION RULES](#).

Regional Manager: Handle request for registering new 5LNC

- New 5LNC (not yet published)
 - If there is no object found in the JeppView, proximity shall be checked as follows:
 - If purpose is 'Terminal Airspace (SID/STAR/HLDG)', 250NM value should be used for proximity check.
 - If purpose is other than 'Terminal Airspace (SID/STAR/HLDG)', 500NM value should be used.
 - Insert appropriate value, then press 'list'. If there is no proximity issue, system will show 'No proximity issue detected'.
 - After that press 'Map' and check whether 5LNC is within the FIR concerned or not. If 5LNC is not within the FIR concerned, request should be postponed and clarified from State ICARD planners.
 - If proximity issue detected, request should be rejected and informed to the State ICARD planners, including proximity details.
 - If no proximity issue detected, request should be accepted.

Proximity Search

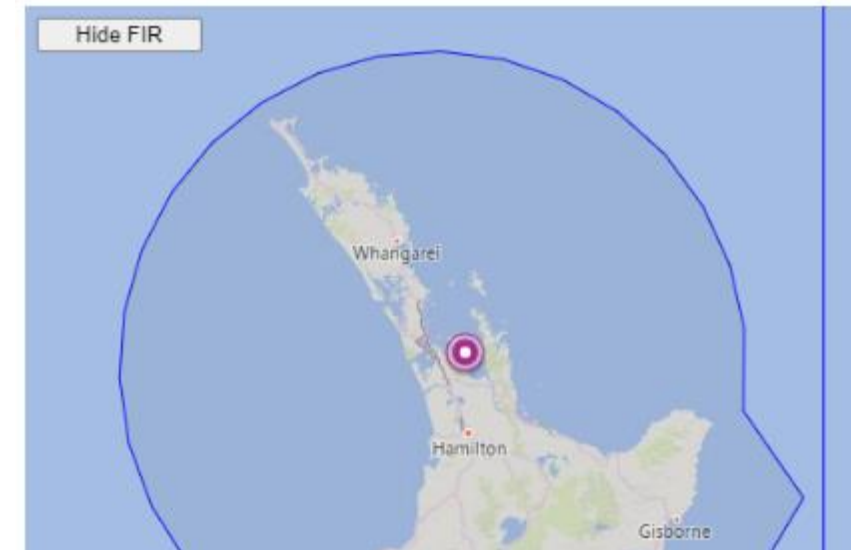
within

(NM)

Proximity check done ☒

Sound-like checking results for code "POMOV" within 250 NM

CODE	Distance (NM)
IRMOV	35.7



Steps for 5LNC amendment (AME)

- Same steps as submitting for a new request as above

Regional Manager: Handle request for amending 5LNC

- If the request is a change of coordinates not published yet in States AIP, perform another proximity check, and if the result is fine, Accept the request.
- If the request is a change of coordinates (within 1 NM of the previous coordinates and with the same purpose) or a change in the comments text, Accept the request.
- For an implemented 5LNC, a request in change of coordinates exceeding 1 NM, it is to be reminded that as **per Annex 11**, the 5LNC is to be substituted with a new one.
- For 5LNCs on FIR boundaries, advise the State to coordinate with all State(s) concerned before implementation and publication in AIPs.

Steps for 5LNC deletion (DEL)

- 5LNC deletion requests shall only be submitted in ICARD after the applicability date of the AIP amendment removing the 5LNC;
- For the 5LNCs located on a FIR boundary, make sure it has been coordinated between all Administrations concerned and removed from all AIPs involved before the code deletion request is submitted; and
- Once a 5LNC is deleted, it will be temporarily frozen for a period of 6 months. After this period, it will automatically return to the reserve list of the ICARD database of the same Region, ensuring a clear and predictable process.

Regional Manager: Handle request for deletion of 5LNC

- First check in JeppView, that the code is indeed no longer implemented. If the code still appears in JeppView, get confirmation from the State who requested the deletion, the date of 5LNC decommissioning and removal from AIP.
- For deletion of FIR boundary points, please make sure prior accepting the deletion, that it was coordinated between all States concerned and removed from all State AIPs involved.
- In any other cases, Accept the deletion of a 5LNC.

5LNC duplicates

Resolving 5LNC Duplicates

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, (a) new 5LNC(s) shall be proposed by the Regional Office(s) to the other State(s) with the same duplicated 5LNC;
- b) b) creation date versus no creation date (A) new 5LNC(s) shall be proposed to the State(s) with no ICARD creation date;
- c) c) No creation date If there are two or more 5LNCs of the same name without creation dates, Rule 3 applies.

5LNC duplicates

Resolving 5LNC Duplicates

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.)

5LNC duplicates

Resolving 5LNC Duplicates

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) b) if the 5LNC duplicates are in different regions, the Regional Offices involved shall agree on a resolution;
- c) 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.

03 ICAO Issues



ICARD Known Issues

1. Like-sounding proximate checks works only on accepted ICARD 5LNCs. When large number of new submission together, submitter have to check manually within list of submission.
2. Difficulty to select appropriate 5LNCs due to the more 5LNCs already allocated and 500NM like-sounding proximate criteria
3. ICARD does not reflect unregistered published 5LNCs, Unregistered published 5LNC available in other Regions
 - a. Can be detected with Jeppview
4. 5LNC that may pose pronounceability issues for example: “SRONO”, “TMANG”.

ICARD Known Issues

5. Do not use 5LNCS starting with the letter “X”

Search Results

Available codes Green-----Available Blue----Unavailable Orange----Reserved Red-----Allocated Purple-----History

<u>XEBAS</u>	<u>XEBIM</u>	<u>XEBUD</u>	<u>XEDAV</u>	<u>XEDIR</u>	<u>XEDUL</u>	<u>XEGEB</u>	<u>XEGIS</u>	<u>XEGUM</u>	<u>XEKED</u>
(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)
<u>XEBAT</u>	<u>XEBIN</u>	<u>XEBUG</u>	<u>XEDAX</u>	<u>XEDIS</u>	<u>XEDUM</u>	<u>XEGED</u>	<u>XEGIT</u>	<u>XEGUN</u>	<u>XEKEG</u>
(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)
<u>XEBAV</u>	<u>XEBIP</u>	<u>XEBUK</u>	<u>XEDEB</u>	<u>XEDIT</u>	<u>XEDUN</u>	<u>XEGEG</u>	<u>XEGIV</u>	<u>XEGUP</u>	<u>XEKEK</u>
(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)
<u>XEBAX</u>	<u>XEBIR</u>	<u>XEBUM</u>	<u>XEDED</u>	<u>XEDOL</u>	<u>XEGAB</u>	<u>XEGES</u>	<u>XEGOM</u>	<u>XEKAD</u>	<u>XEKEV</u>
(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)
<u>XEBEB</u>	<u>XEBIS</u>	<u>XEBUX</u>	<u>XEDER</u>	<u>XEDOM</u>	<u>XEGAD</u>	<u>XEGET</u>	<u>XEGON</u>	<u>XEKAG</u>	<u>XEKEX</u>
(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)
<u>XEBEP</u>	<u>XEBOK</u>	<u>XEDAB</u>	<u>XEDET</u>	<u>XEDON</u>	<u>XEGAG</u>	<u>XEGEV</u>	<u>XEGOP</u>	<u>XEKAK</u>	<u>XEKIB</u>
(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)
<u>XEBER</u>	<u>XEBOL</u>	<u>XEDAD</u>	<u>XEDEV</u>	<u>XEDOP</u>	<u>XEGAK</u>	<u>XEGEX</u>	<u>XEGOR</u>	<u>XEKAL</u>	<u>XEKID</u>
(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)
<u>XEBES</u>	<u>XEBOM</u>	<u>XEDAG</u>	<u>XEDEX</u>	<u>XEDOR</u>	<u>XEGAL</u>	<u>XEGIB</u>	<u>XEGOS</u>	<u>XEKAM</u>	<u>XEKIR</u>
(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)
<u>XEBET</u>	<u>XEBON</u>	<u>XEDAK</u>	<u>XEDIN</u>	<u>XEDUG</u>	<u>XEGAV</u>	<u>XEGIP</u>	<u>XEGUK</u>	<u>XEKAX</u>	<u>XEKIS</u>
(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)
<u>XEBEV</u>	<u>XEBOP</u>	<u>XEDAT</u>	<u>XEDIP</u>	<u>XEDUK</u>	<u>XEGAX</u>	<u>XEGIR</u>	<u>XEGUL</u>	<u>XEKEB</u>	<u>XEKIT</u>
(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)	(APAC)

ICARD Known Issues Cont'd

6. ICARD proximity detects 5LNCs that State does not find similar pronunciation.
7. States published 5LNCs and ATS Route designator before ICARD registration
 - a. Resulting in → New 5LNC Duplicate list
8. ICARD cannot detect 5LNC with same lat. and long.
9. ICARD do not provide notification function for Regional Manager and States.
10. Many duplicates still exist for many years without resolution
11. Some States did not provide Annual update on the status of duplicated 5LNCs (all published 5LNCs)

Thank You

