CIVIL AVIATION BUREAU of JAPAN

# AAITF/20 WP/15
# 5ANNC utilization and recommendations to ICARD Part 1

Japan

June 2025

# 1. INTRODUCTION

# 1. INTRODUCTION

## ✈ ICAO Annex11 Appendix 2 3.1(15th edition, 2018)

**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.

→ 5LNC

*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).*

→ 5ANNC

# 1. INTRODUCTION

## ✈ ICAO PANS-OPS(Doc 8168)

## Volume Ⅱ Part Ⅲ Section 5. 1.6.1

### 1.6 WAYPOIN 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.

# 1. INTRODUCTION

## ✈ ICAO PANS-OPS(Doc 8168)
## Volume Ⅱ Part Ⅲ Section 5. 1.6.1

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.

# 1. INTRODUCTION

## ✈ ICARD 5LNC User Guidelines

**SECTION 4 POSTING A REQUEST AND CHECKING PROXIMITY OF 5LNC**

**CHECKING PROXIMITY**

Checking the sound-like proximity of a 5LNC is **mandatory** and is the **responsibility of the Authorized User**. It is also the Authorized User's responsibility to coordinate any sound-like issues/mitigations with relevant States, if required.

# 1. INTRODUCTION

## ✈ AAITF/18 - WP/08 (19-23 June 2023)

## ASIA/PACIFIC REGION ICARD UPDATE

## (Presented by the Secretariat)

**2. DISCUSSION**

Notes for 5LNC Requests

2.9 ICARD shall be used as the central system for reservation and allocation of 5LNCs. It is mandatory for Administrations to await the approval/refusal from ICARD Regional Manager before proceeding to publication in AIP. The following notes are emphasized for special attention:

- **Notes for new 5LNC request**
  - 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.

# 2. DISCUSSION

# Problems regarding 5LNC in Japan

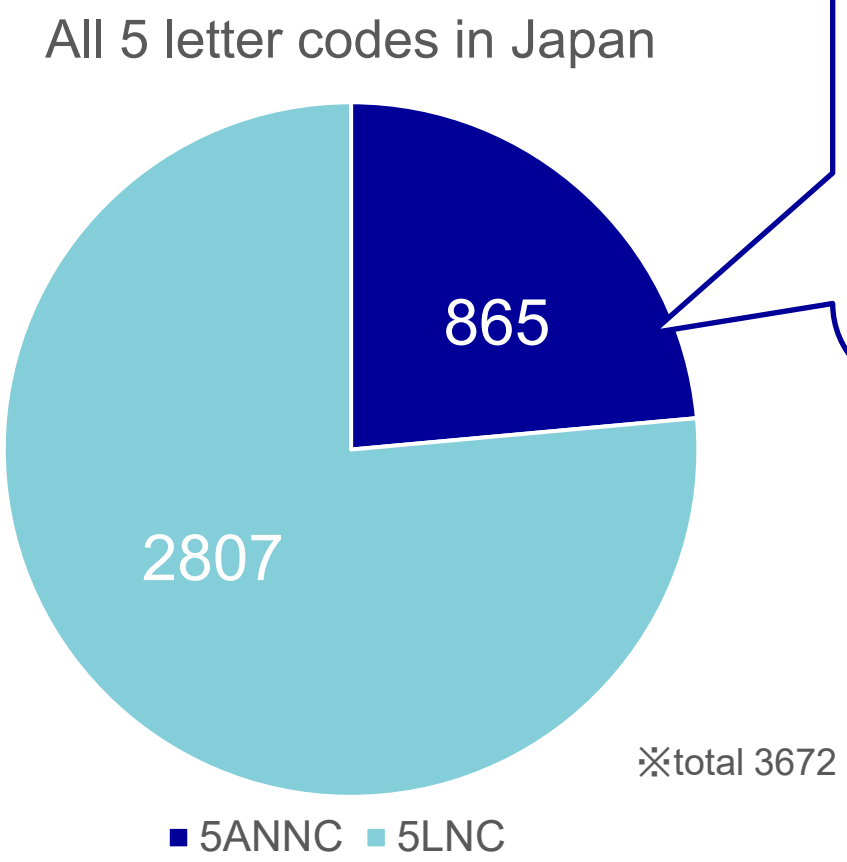
- Especially in enroute airspace, the 5LNCs that can be associated with pronunciation from letters are becoming depleted.

*For example...*
RANDOM PROXIMITY SERCH AT RJTT by radius of search 500NM shows as follows:
*"BUXUX DOVUV ERVUR GEROO IDPUV IRPUX KEXUV POXOG URKAX XILRI XILVO XIMDI XINBO XUNBA "*

- In ICARD procedures, there are many cases of rejections, and the workload of coordinating with the ATC units for 5LNC is increasing.

## 2.DISCUSSION

# The use of 5ANNC in Japan




Waypoints on
standard instrument departure (SID),
standard instrument arrival (STAR) and
instrument approach procedure (IAP)

where ATC does not issue direct routing to aircraft

(As of March 20, 2025)

## 2.DISCUSSION

# The use of 5ANNC in Japan

Advantages (from several domestic operators' perspectives)

- It can be predicted that there is a low chance of receiving a direct routing instruction to the waypoints of 5ANNC.

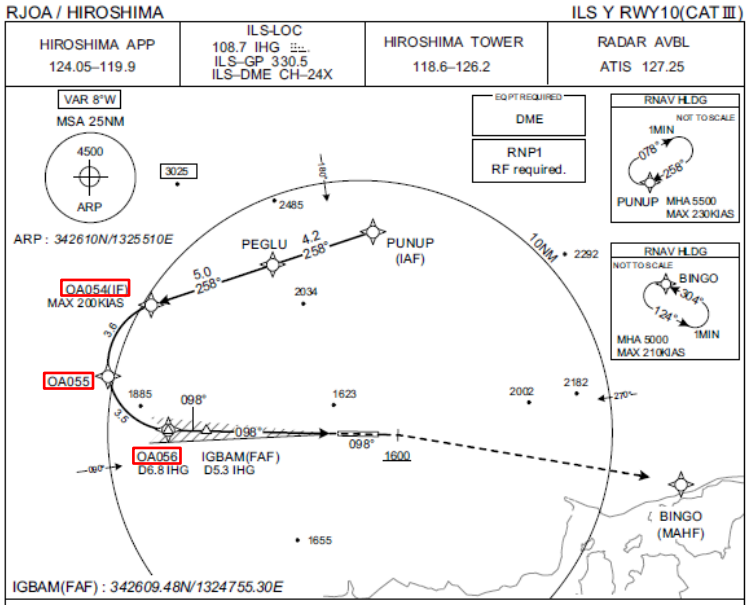
- 5ANNCs are generally easier for pilots to understand than 5LNC, particularly in cases where ATC communication may be affected by a strong or unfamiliar accent.

- In some states, all waypoints except for the starting point of a STAR are composed of 5ANNC.
  →some ingenuity is needed in the allocation of numbers

# The rules for naming 5ANNC in Japan 1

・The last two letters of the ICAO airport code followed by the last one-digit number of the RWY number associated with the flight procedure of waypoint and two-digit segment number*.

*Segment number：00-49 for departure procedure
50-99 for arrival procedure




Waypoint of RJOA ILS Y RWY10 Approach

- 5ANNC⇒OA054

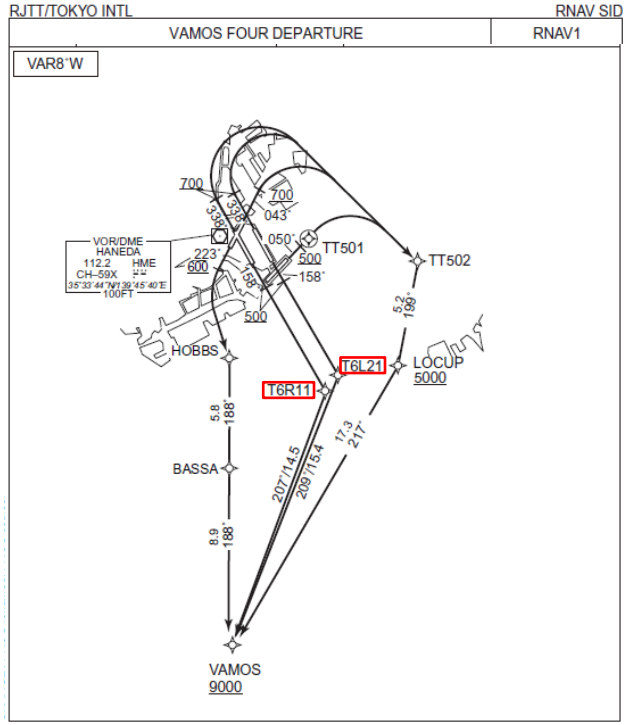
RJOA, Arrival for RWY10, 54（For arrival）

✓ All 5ANNCs regarding civilian airports in Japan are managed by the flight procedure designers.

# The rules for naming 5ANNC in Japan 2

・If there is a waypoint concerned with parallel RWY, the last letter of the ICAO airport code is followed by the last digit of the RWY number, the letter “L” or “R”and two-digit segment number.

*Segment number：00-49 for departure procedure
50-99 for arrival procedure




Waypoint of RJTT VAMOS 4 Departure

- 5ANNC⇒T6R11

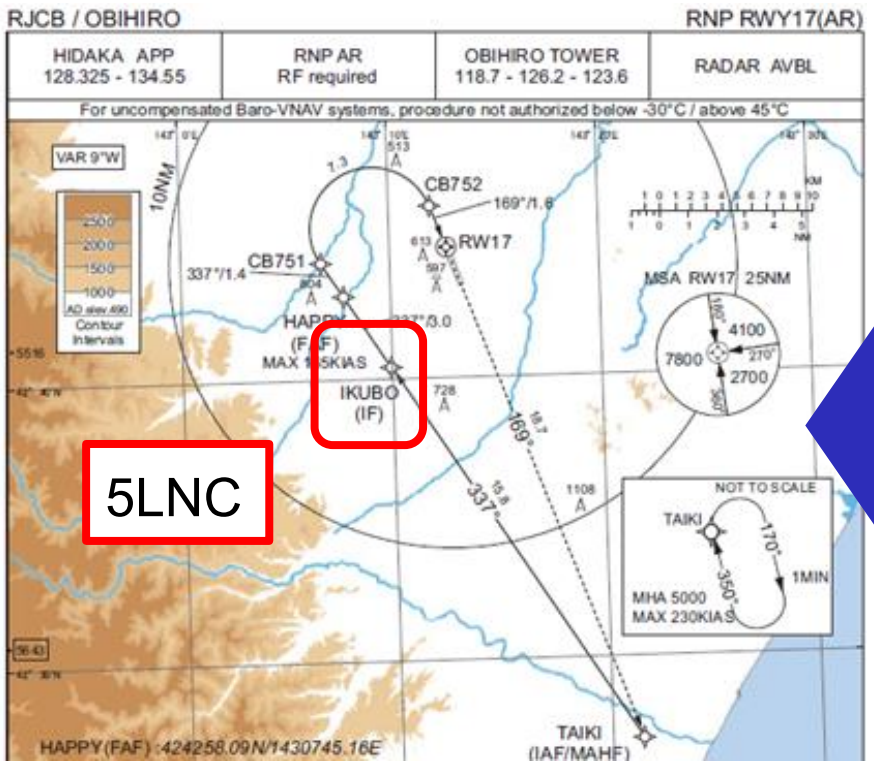
RJTT, Departure from RWY16R 11（For departure）

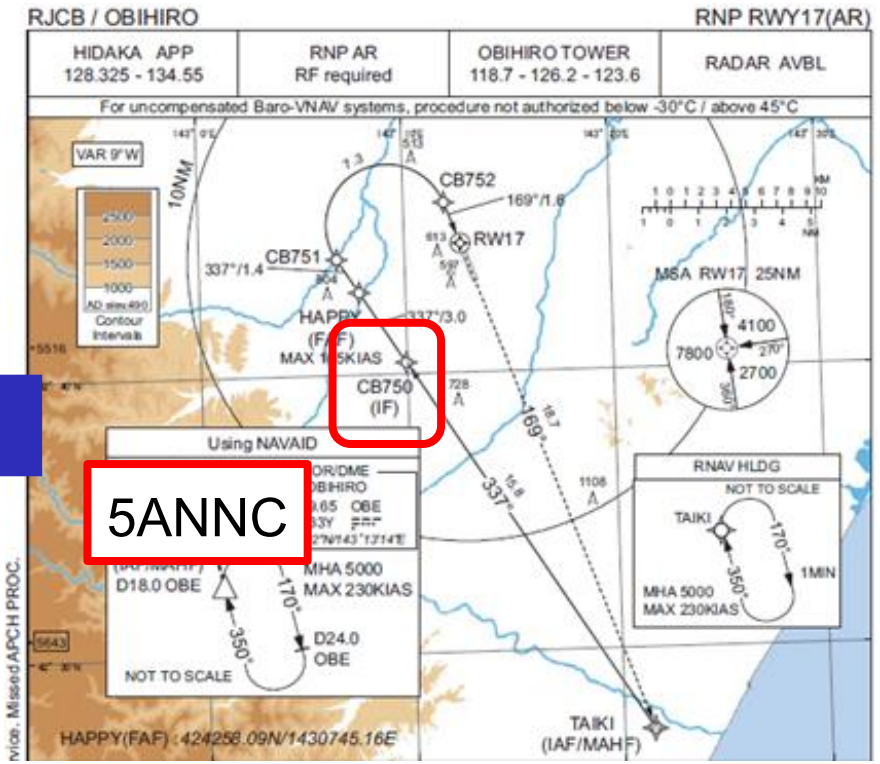
- 5ANNC⇒T6L21

RJTT, Departure from RWY16L 21（For departure）

## 2.DISCUSSION

# The use of 5ANNC in Japan




(Effect from April 17, 2025)

## 2.DISCUSSION

# The use of 5ANNC in Japan

It is necessary to consider…

the expansion
of 5LNC through ICARD rule changes

the enhancement
of the ICARD application

# AAITF/20 WP/15
# 5ANNC utilization and recommendations to ICARD Part 2

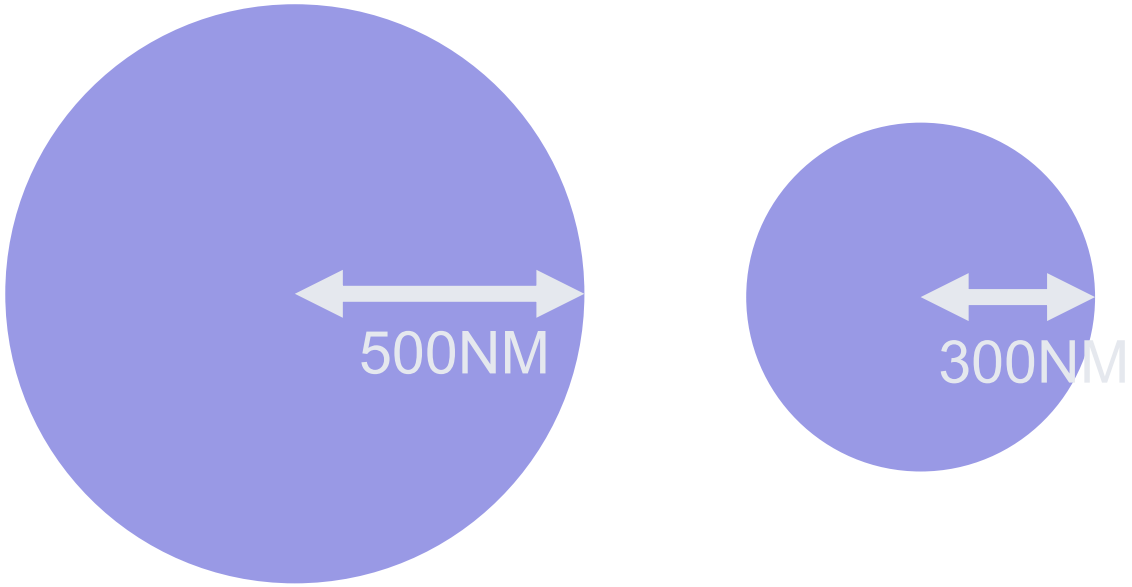
Japan

June 2025

## 2.DISCUSSION

### Proposed improvements to reduce range of the proximity check

The range of checking the sound-like proximity




APAC region

EUR／NAT region

## 2.DISCUSSION

## Proposed functional improvement in ICARD application

120 new 5LNCs (at RJBB and RJBE)

(Effect from March 20, 2025)

[ADGIR] [AGSUP] [AKPUN] [APORA] [ATKAS] [ATMUG] [ATVID] [AVDOX] [AVKUL]
[AVLEX] [AVMIT] [AVMOM] [BIKLO] [BIXIS] [BIXUR] [BOTRA] [DOPDA] [DUBKA]
[DUMES] [ELMUL] [ELPIK] [EMAJA] [EMSUV] [EMVEN] [ENKOV] [ENKUD] [ENSIP]
[EPKUR] [ESGOG] [GOTVI] [GUMID] [IDLAK] [IDLUP] [IDSIS] [IGBOD] [IGBUR]
[IGDIN] [IGLEV] [ISNES] [IVROG] [IVTER] [KANSAI(KIE)] [LANID] [LELUS] [LEMET]
[LETGA] [LIKPO] [LOTVO] [LOVGI] [LUXAD] [MADIP] [MEXAV] [MIBIB] [MIDUX]
[MIMIG] [MINOS] [MOVNI] [MUGLA] [MUKRI] [MULAB] [MUMSU] [NIKEX] [NIPUG]
[NIRIP] [NITAD] [NIXOV] [NOBUN] [NOLOP] [NUPNU] [OBKAG] [OBLUR] [OBMEL]
[OGABA] [OLBUG] [OLKIL] [OLTIG] [OMBIP] [OMGEK] [OMGOR] [ONEGU] [OPARU]
[OSBED] [OSNIT] [OSRIX] [OTBAB] [OTBON] [OTLIB] [OVMUK] [OVNAD] [PEGDO]
[PORUS] [PUNIB] [RURMU] [RUSEV] [RUSIM] [RUSUD] [SAKVA] [SAPEK] [SASVO]
[SOVRI] [SUPOL] [SURIF] [TARUP] [UBNET] [UPGEB] [UPLOV] [UPMIN] [UPNIP]
[UPRAL] [UPSED] [URDET] [VALVU] [VEKTA] [VESEV] [VEXOT] [VIRUD]

## 2.DISCUSSION

## Proposed functional improvement in ICARD application

Some of the codes rejected by the APAC regional office

**Sound-like checking results for code "NIRUM" within 250 NM**

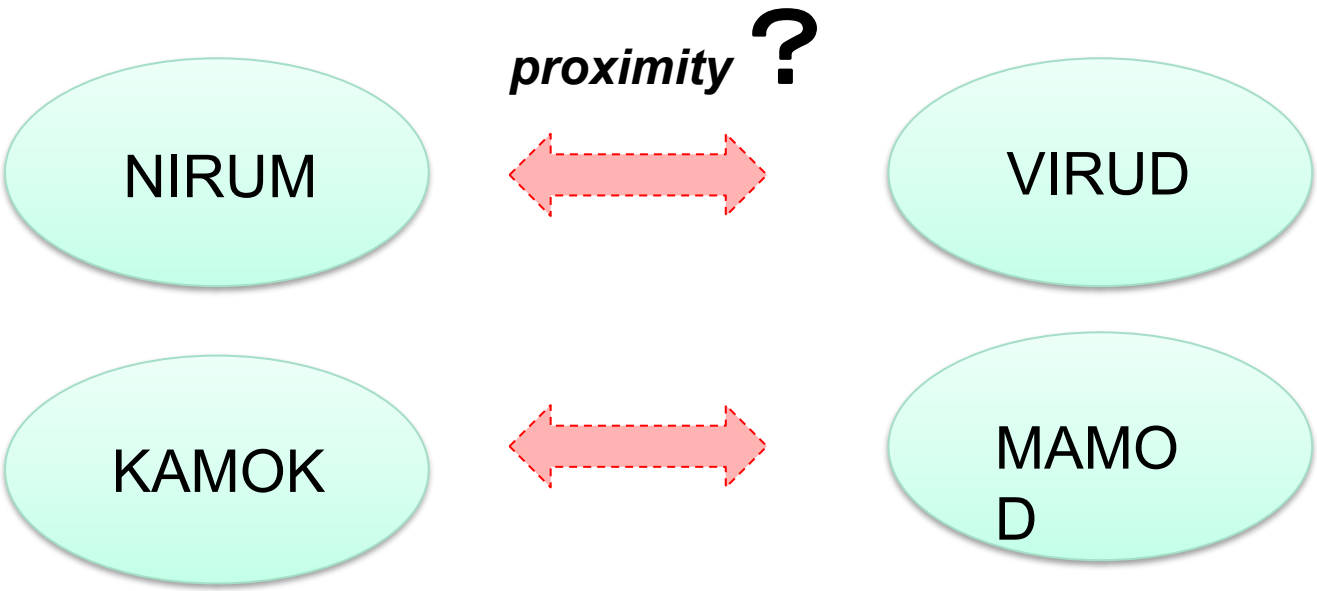
| CODE | Distance (NM) |
|---|---|
| VIRUD | 152.45 |

**Sound-like checking results for code "ESMUG" within 500 NM**

| CODE | Distance (NM) |
|---|---|
| ATMUG | 31 |

## Question regarding ICARD application

It is unclear what algorithm is used to determine sound-like proximity in ICARD application.



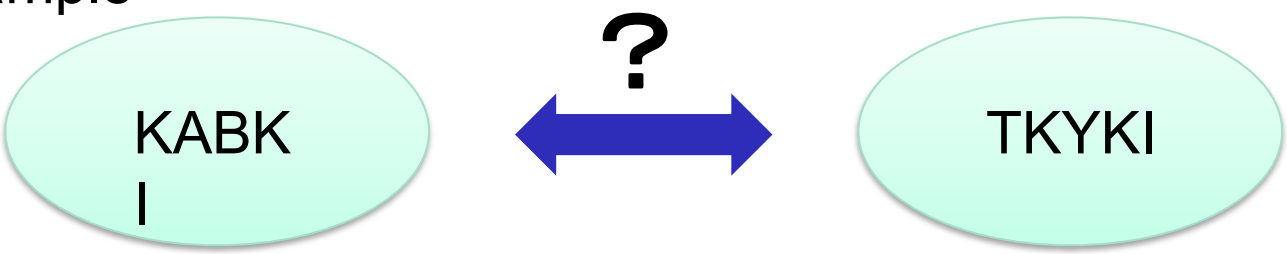
## 2.DISCUSSION

### Proposed functional improvement in ICARD application

Ideas for the enhancement of ICARD application functions

a. Implementing a function in the ICARD application to check in advance whether proximity issues occur between unregistered 5LNC extracted by the applicant.

Example



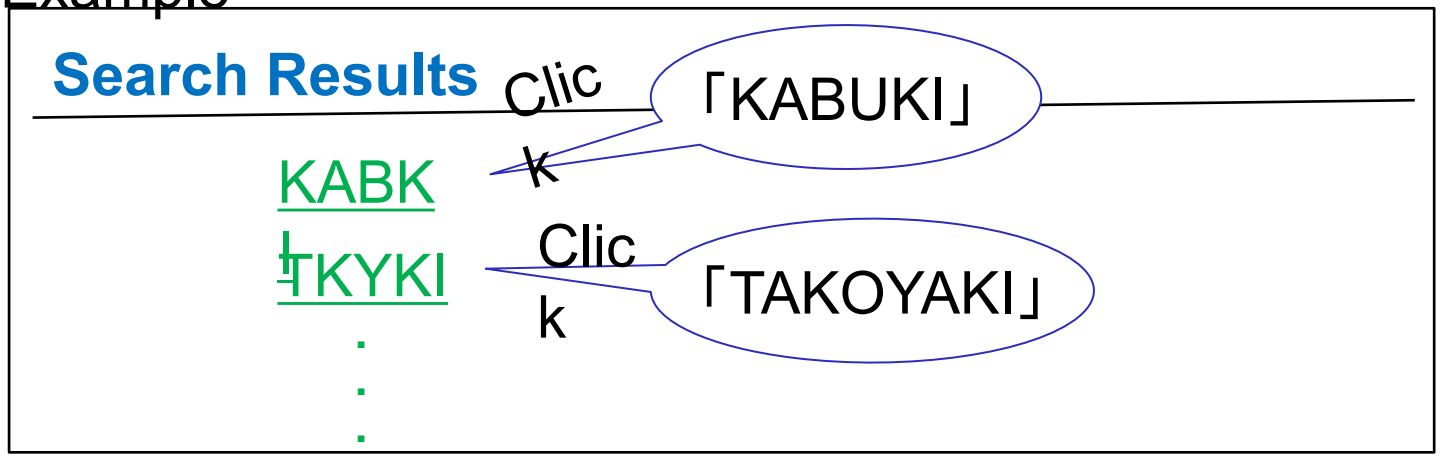
## 2.DISCUSSION

## Proposed functional improvement in ICARD application

Ideas for the enhancement of ICARD application functions

b. Implementing a function in the ICARD application that allows the applicant to click to check the pronunciation of all the codes in the ICARD data base.

Example



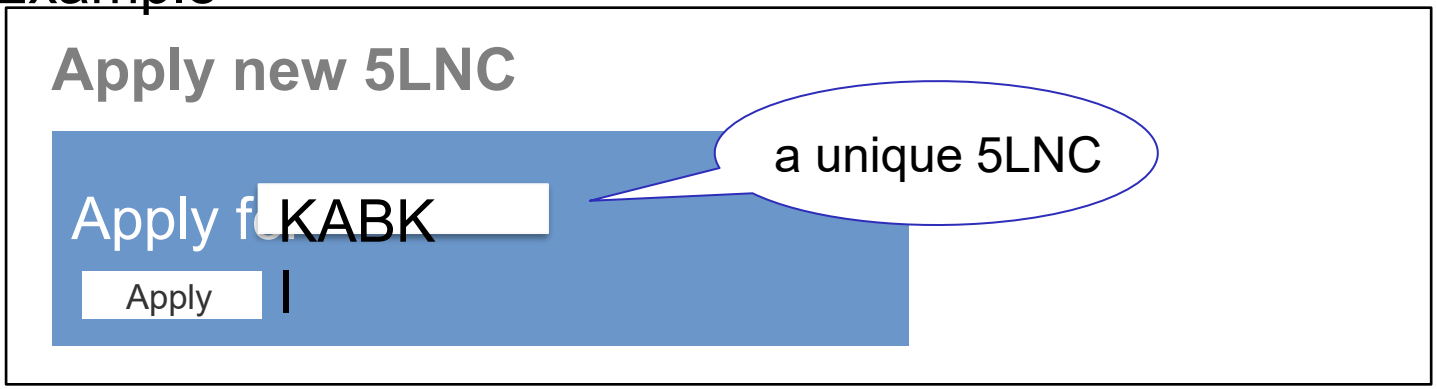
## 2.DISCUSSION

## Proposed functional improvement in ICARD application

Ideas for the enhancement of ICARD application functions

c. Implementing a function in the ICARD application that enables to apply for a unique 5LNC that is not in the global ICARD data base and that each state considers easy to speak.

Example

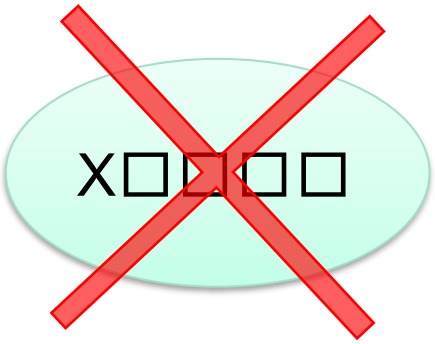


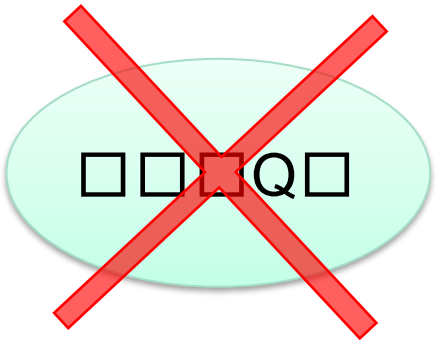
## 2.DISCUSSION

### Proposed functional improvement in ICARD application

In addition…

To remove codes that are unlikely to be approved from the reserve list in advance, such as 5LNC starting with X that are difficult to pronounce or 5LNC with a Q inserted.




ex.)
HANQU

## 2.DISCUSSION

## Proposed functional improvement in ICARD application

In addition…

To ensure that each state has properly completed the 5LNC deletion requests in the ICARD application for the 5LNC that have already been abolished in the AIP

# Thank you for listening