



International Civil Aviation Organization

ICARD 5LNC Workshop

ICAO Five-Letter Name-Code (5LNC) and Route Designators database (ICARD)

Ha Noi, Viet Nam, 13 March 2012

*Presented by Nikki Goldschmid,
ICAO EUR/NAT ATM/A, ICARD data manager*



Five-Letter-Name Codes (5LNCs)



- **Annex 11, Chapter 2, Appendix 2**
 - **Designators for significant points not marked by the site of a radio navigation aid**
- 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



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Five-Letter-Name Codes (5LNCs)



- **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**
- **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**



Five-Letter-Name Codes (5LNCs)



- **To meet the above-mentioned requirements for voice communications (easy pronounceable, free of ambiguity, easily recognizable), certain vowels and consonants and certain combinations thereof were not used for forming 5LNCs. For example:**
 - **The letters C, F, Q, W, Y and Z are not used for reasons of phonetic ambiguity with other letters;**
 - **H is never used due to its phonetic peculiarity; and**
 - **E never appears as a last letter in tribute to French pronunciation.**



Five-Letter-Name Codes (5LNCs)



- 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**



ICAO
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Five-Letter-Name Codes (5LNCs)



- **States' requirements for unique five-letter pronounceable name-code designators shall be notified to the Regional Offices of ICAO for coordination**
- **significant points shall be determined and reported in terms of WGS-84 geographical coordinates**

5LNC Background information

➤ 1960's -140 670 ICAO codes

APAC	27 535
EUR/NAT	38 598
MID	12 934
WACAF	18 437
SAM	18 629
NACC	19 131
ESAF	5 406

OCT 1983 + NOV 1985

5LNCs record lists

ODD PAGES

Allocation of odd-numbered pages to Regional Offices:

0: → pages allocated to Nairobi office

Paris	Bangkok	Mexico	Dakar	Lima	Cairo
1 3 5	7 9	11	13	15	17
19 21 23	25 27	29	31	33	35
37 39 41	43 45	47	49	51	53
55 57 59	61				

Paris	Bangkok	Mexico	Dakar	Lima	Cairo
63 65 67	69 71	73	75	77	79
81 83 85	87 89	91	93	95	97
99 101 103	105 107	109	111	113	115
117 119 121	123 125	127	129	131	133
135 137 139	141 143	145	147	149	151
153 155 157	159 161	163	165	167	169
171 173 175	177 179	181	183	185	187
189 191 193	195 197	199	201	203	205
207 209 211	213 215	217	219	221	223
225 227 229	231 233	235	237	239	241
243 245 247	249 251	253	255	257	

Paris	Bangkok	Mexico	Dakar	Lima	Cairo
259 261 263	265 267	269	271	273	275
277 279 281	283 285	287	289	291	293
295 297 299	301 303	305	307	309	311
313 315 317	319 321	323	325	327	329
331 333 335	337 339	341	343	345	347
349 351 353	355 357	359	361	363	365
367 369 371	373 375	377	379	381	383
385 387 389	391 393	395	397	399	401

Paris	Bangkok	Mexico	Dakar	Lima	Cairo
405 407 409	411 413	415	417	419	421
423 425 427	429 431	433	435	437	439
443 445 447	449 451	453	455	457	459
463 465 467	469 471	473	475	477	479
483 485 487	489 491	493	495	497	499
503 505 507	509 511	513	515	517	519

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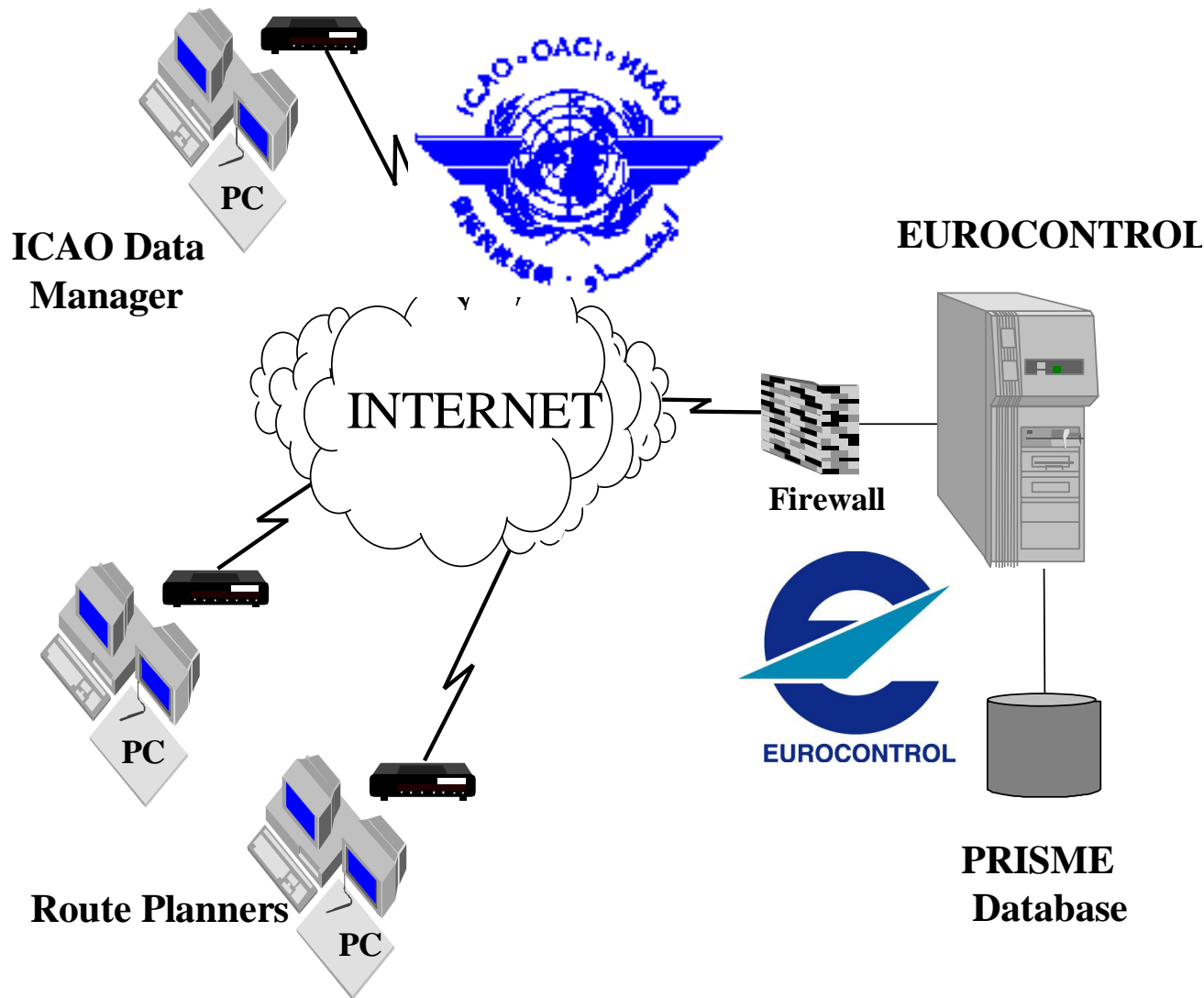
Paris	Bangkok	Mexico	Dakar	Lima	Cairo
63 65 67	69 71	73	75	77	79
81 83 85	87 89	91	93	95	97
99 101 103	105 107	109	111	113	115
117 119 121	123 125	127	129	131	133
135 137 139	141 143	145	147	149	151
153 155 157	159 161	163	165	167	169
171 173 175	177 179	181	183	185	187
189 191 193	195 197	199	201	203	205

5LNC - need for dynamic change

ICARD designed to

- **improve the process of establishment and identification of 5LNCs, in accordance with Annex 11 provisions**
- **Work in a safe environment using a unique and common database**
 - Updating data regionally and globally
 - clearing duplicates,
 - Eliminating non-ICAO codes (5LNCs not originally coordinated with ICAO)

Web-based system developed : 1998

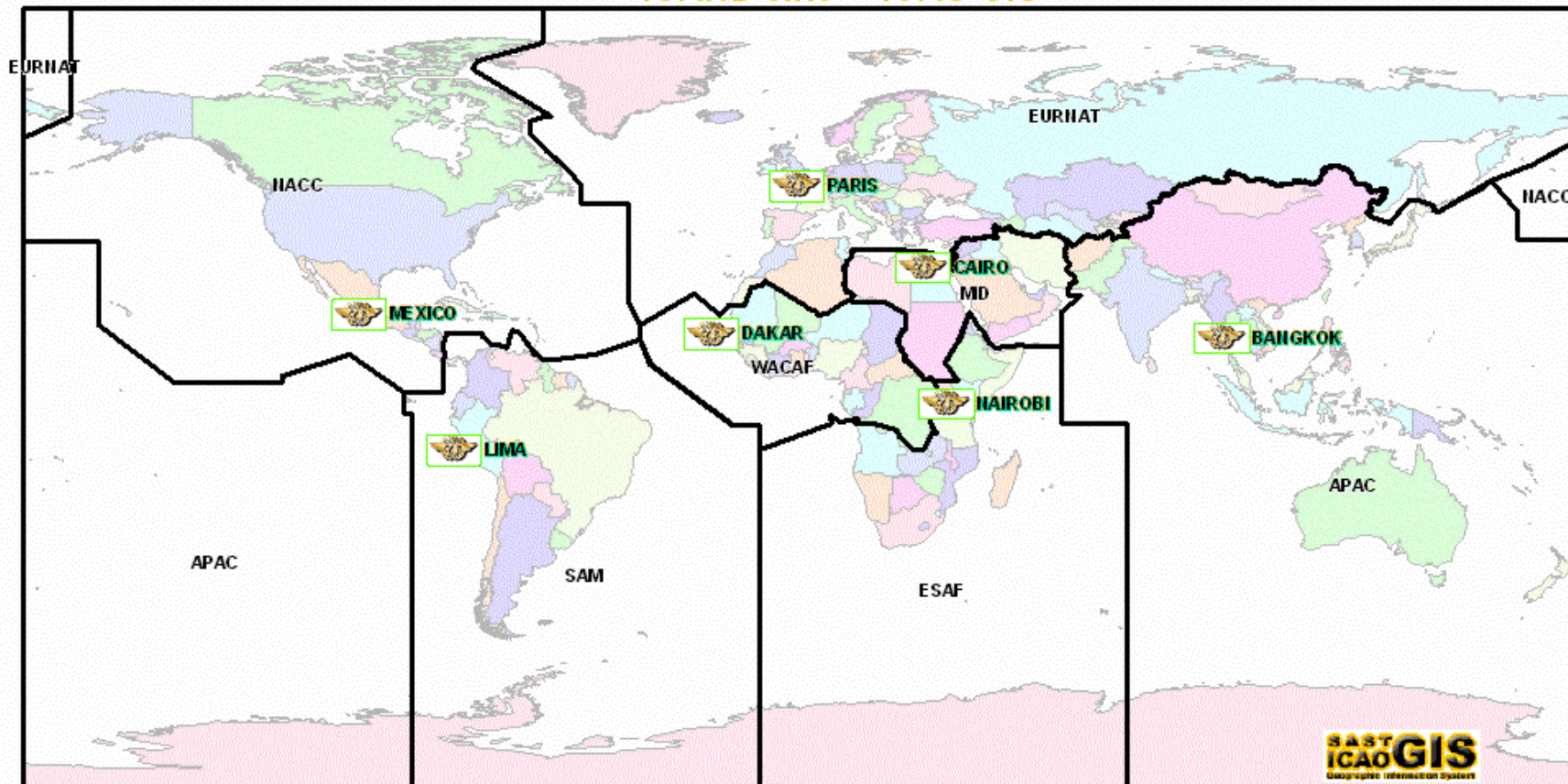


2010 : ICARD Global

➤ **27 August 2010** : full transfer from Eurocontrol to ICAO HQ

➤ **ICARD Database now available in all ICAO Regions**

ICARD 5lnc ICAO GIS



ICARD Application

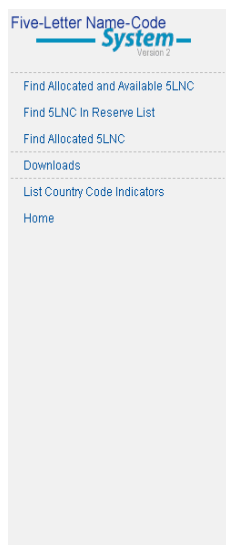
- Public users have access to a limited number of functionalities to query the content of the database maintained by the staff of the ICAO Regional offices.
 - <http://www2.icao.int/en/ICARD/default.aspx>
- Only authorised users can make use of the application for reserving new codes from the reserve list while ensuring worldwide uniqueness. They will receive acknowledgment of their request from the ICAO Regional offices. Updates to the allocated 5LNCs will also be ensured through the following link
 - <http://portal.icao.int/>

ICARD for public users

➤ ICARD direct access :

— <http://www2.icao.int/en/ICARD>

➤ ICARD menu for public users



Five-Letter Name-Code
System -
Version 2

ICARD access for route planners

<https://portal.icao.int>

International Civil Aviation Organization
 ICAO Secure Portal Public Site
 Advanced Search
 Welcome NGOLDSCH, Nikki Profile Site Acti

ICARD
 International Codes and Routes Designators

ICAO Secure Portal > ICARD

ICAO International Codes and Routes Designators (ICARD)

Since October 1995, EUROCONTROL and the ICAO EUR/NAT regional Office have worked together to develop and maintain a common database of facilities and services required for international air navigation within the EUR/NAT region.

In February 1998, the first internet application on the EUROCONTROL website was developed to support the allocation process of five-letter name-codes used for the identification of significant points (for ATS routes) not marked by the site of a radio navigation aid and Designators for ATS Routes. This application was named ICARD.

In September 2008, the application was updated to support ICAO process in the maintenance of the European ATS Route Network in the Air Navigation Plan.

The database is also loaded with ICAO designators and indicators issued by ICAO Headquarters.

ICARD Application Access

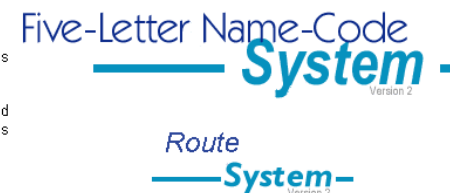
- 5LNC : Allocation of unique names for designated points (Annex 11 Appendix 2)
- Routes : Allocation of unique names for ATS Routes (Annex 11 Appendix 1) and Description of Routes in terms of Segments.

Announcements

5LNC Duplicate Resolution 12/04/2010 2:12 PM
 by Guevin, Jerome

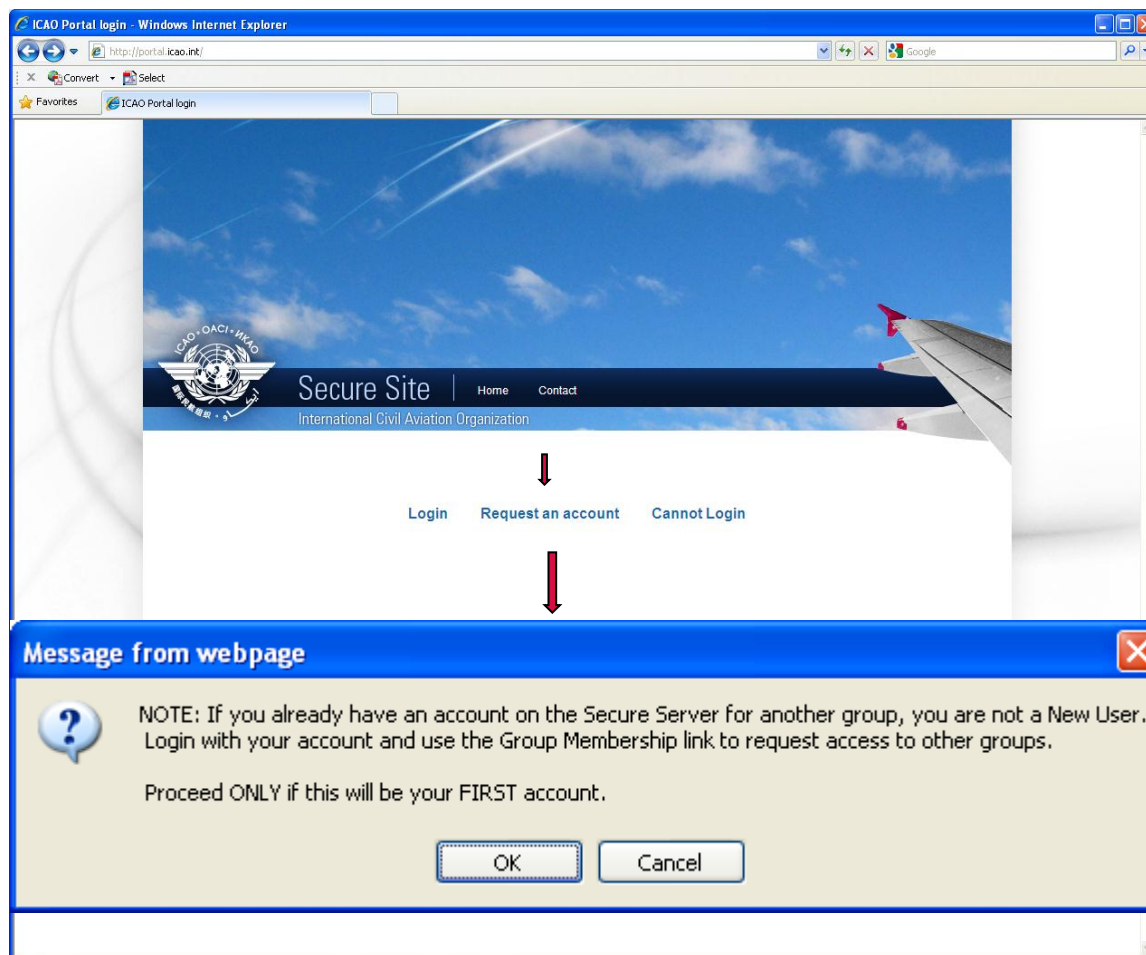
Dear ICARD colleagues,

Please note that in mid-March 2010, EUROCONTROL applied a script for cleaning the false five-letter name-code (5LNC) duplicates in the ICARD database. These "false" duplicates had been created by the initial load...



!! Route planners need prior registration

Creating an ICARD account



The screenshot shows a Windows Internet Explorer browser window displaying the ICAO Portal login page. The page features the ICAO logo and the text "Secure Site" and "International Civil Aviation Organization". Below the logo, there are three links: "Login", "Request an account", and "Cannot Login". A red arrow points from the "Request an account" link to a "Message from webpage" dialog box. The dialog box contains the following text:

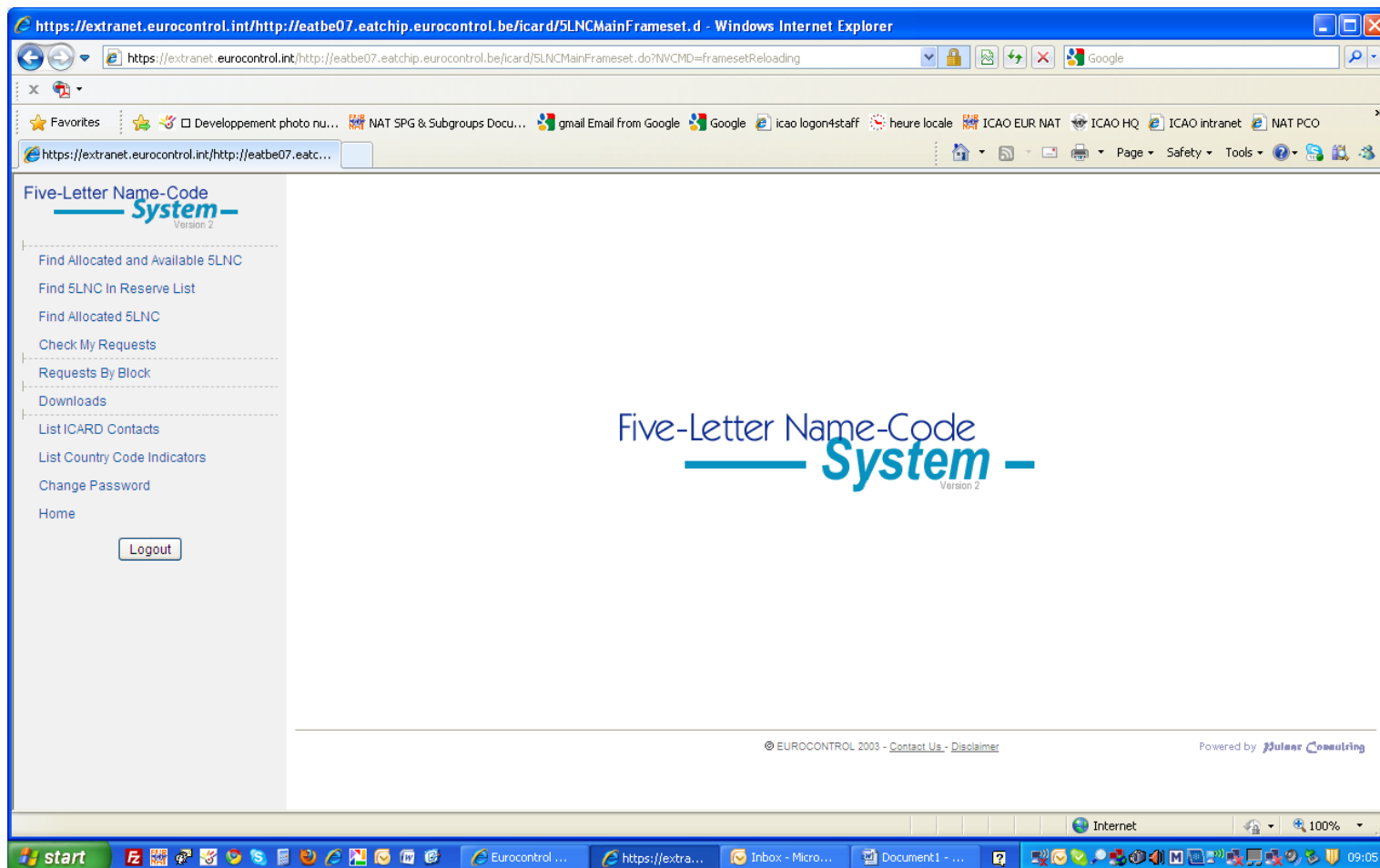
Message from webpage

NOTE: If you already have an account on the Secure Server for another group, you are not a New User. Login with your account and use the Group Membership link to request access to other groups.

Proceed ONLY if this will be your FIRST account.

OK Cancel

ICARD 5LNC authorised user menu



The screenshot shows a web browser window displaying the ICARD 5LNC authorised user menu. The browser's address bar shows the URL: <https://extranet.eurocontrol.int/http://eatbe07.eatchip.eurocontrol.be/icard/5LNCMainFrameset.d>. The page content includes a sidebar with the following menu items: Find Allocated and Available 5LNC, Find 5LNC In Reserve List, Find Allocated 5LNC, Check My Requests, Requests By Block, Downloads, List ICARD Contacts, List Country Code Indicators, Change Password, and Home. A "Logout" button is located at the bottom of the sidebar. The main content area features the "Five-Letter Name-Code System" logo, which includes the text "Version 2". At the bottom of the page, there is a copyright notice: "© EUROCONTROL 2003 - Contact Us - Disclaimer" and a note: "Powered by Julian Consulting". The Windows taskbar at the bottom shows the Start button, several application icons, and the system tray with the time 09:05.

ICARD Focal Points

- <https://portal.icao.int/ICARD/Pages/5LNCContacts.aspx>

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Today's goals

For a successful implementation of ICARD global

- commitment of States to work in close coordination with the accredited ICAO Regional Office
 - **5LNC lists comparison ICARD/AIPs**
 - **Clearing duplicates issues**
 - » at regional level
 - » at global level

ICAO continuous support !

- ***Do not hesitate to contact***
 - ***your ICARD data managers:***
Shane Sumner and Len Wicks,
ICAO Bangkok
- working in team with ICAO HQ and EUR/NAT***

Future goals

Our next challenge

Develop a route designators system

— *Thank you for your attention !*

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