

Supporting
European
Aviation



(New) PENS IPv6 Addressing Considerations

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NETWORK
MANAGER



PENS and IPv6 Addressing

- PENS is IPv6 enabled (dual IPv4/IPv6 stack available)
 - To date IPv6 is primarily used for FMTP following European Regulation
- Each individual PENS User is assigned (upon request) 4x /48 IPv6 public ranges by EUROCONTROL where
 - Two ranges are for operational purposes (OPS)
 - Two ranges are for pre-operation purposes (TST)

Note: The PENS Service Provider is using their own IPv6 address space
- Ranges assigned any give PENS Users are public, specific to the user hence unique (on a global scale)
- Ranges assigned to the PENS Users are therefore decoupled from that of the PENS Service Provider avoiding the need for IP address change/renumbering when changing service provider

IPv6 Address Space Allocation

- IPv6 address space allocation is performed through the “**Network Addresses Management Services (NAMS)**” (Art 7.3 of Commission Implementing Regulation (EU) 2019/123)

(h) develop, organise and provide common network support services related to the network functions that are required by operational stakeholders and which are performed in a central manner for the benefit of the network operational performance and cost-efficiency reasons, i.e.:

(i) the ATM messaging centre;

(ii) the network addresses management service.

For more information:

Liviu POPESCU

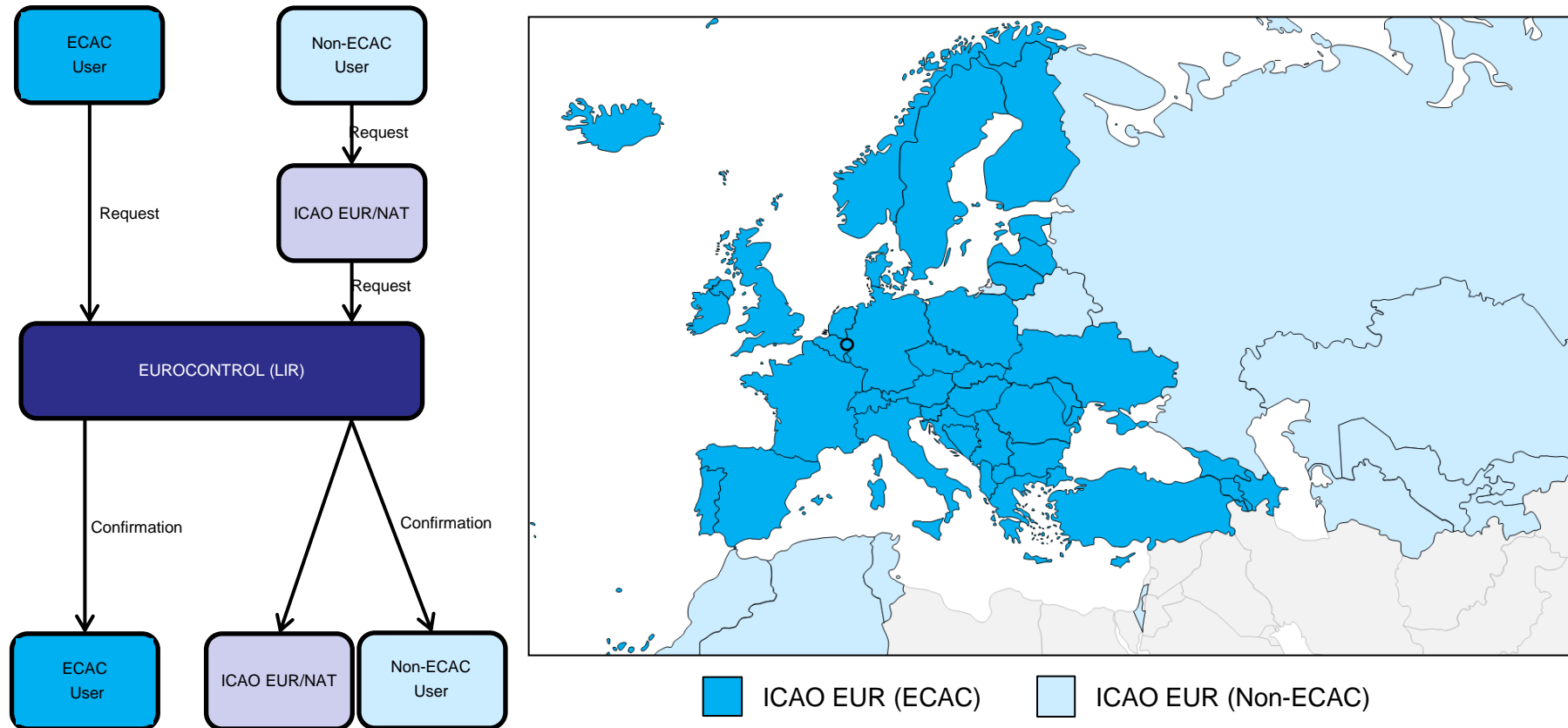
NMD/INF/CNS

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IPv6 Address Space Allocation

NAMS – Area of Applicability and Process

Refer to ICAO EUR DOC 37R available on on [ICAO / European and North Atlantic \(EUR/NAT\) Office / EUR and NAT Documents](#)



Note: Iceland does not belong to ICAO EUR Region. IPv6 Allocation provided in coordination with ICAO EUR/NAT Office