



Question(s): Q1/2

[Amsterdam, 22-01-2026]

CONTRIBUTION

Source: The Reseaux IP Europeens Network Coordination Centre (RIPE NCC)

Title: Request for guidance from ITU-T SG2 on ENUM (e164.arpa) implementation in RDAP

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Abstract

This contribution informs ITU-T Study Group 2 of recent discussions within the RIPE NCC Database Working Group concerning the handling of ENUM (e164.arpa) in the Registration Data Access Protocol (RDAP). While technical work is being considered to ensure feature parity between RDAP and legacy Whois services, the RIPE NCC seeks guidance from SG2 on whether and how such implementation should proceed, given SG2's role in ENUM governance. The contribution solicits SG2's views on the future status of ENUM, expectations regarding continued support, and the appropriate process for any implementation requests.

1. Background and context

ENUM, defined in coordination between the ITU-T and the IAB, provides a mechanism for mapping E.164 numbers into the DNS under the e164.arpa domain. Historically, the RIPE NCC has operated e164.arpa in accordance with ITU-T guidance and based on requests from national authorities.

Over the past decade, however, there has been no new delegation activity recorded for ENUM under e164.arpa. Public ENUM deployment has largely stalled, primarily due to non-technical and policy considerations, despite the protocol remaining defined and referenced in existing standards.

At the same time, operational systems at the RIPE NCC continue to observe a non-negligible level of technical queries for e164.arpa domains, indicating that the domain is not entirely dormant from a usage perspective.

2. RDAP-related discussions

Within the RIPE Database Working Group, an issue was recently identified whereby RDAP queries for ENUM domains return errors. This behaviour stems from RDAP specifications originally focusing on reverse DNS domains associated with IP address space, and not explicitly covering e164.arpa.

To ensure consistency and feature parity between RDAP and the legacy Whois service, the RIPE NCC Database team has discussed extending RDAP support to include e164.arpa domains and documenting this extension through the appropriate IETF processes.

During these discussions, it was also noted that any changes related to ENUM may have broader implications beyond purely technical implementation, given the existing formal liaison between ITU-T SG2, the IAB, and other stakeholders regarding ENUM.

3. Need for guidance from ITU-T SG2

Given SG2's role and responsibility in matters related to E.164 numbering and ENUM, the RIPE NCC considers it essential that direction on any implementation or future handling with e164.arpa should come from ITU-T.

In particular, the RIPE NCC seeks SG2's guidance on the following points:

1. Whether ENUM (e164.arpa) should continue to be considered an active protocol requiring ongoing operational support.
2. Whether implementation of e164.arpa in RDAP is desirable at this stage, given current deployment realities.
3. Whether SG2 considers deprecation or reduced support appropriate.

4. Proposed next steps

The RIPE NCC proposes to await SG2's views before proceeding with any further implementation work related to ENUM in RDAP.

The RIPE NCC remains available to provide any additional technical or operational background required.
