

To: ITU-T Study Group 2
Source: RIPE NCC
For action

Your Reference: SG2-LS231 (document SG2-TD1521R1/GEN)

Dear colleagues,

The RIPE NCC operates the global tier 0 registry for e164.arpa (ENUM) under an agreement between TSB and the Internet Architecture Board (IAB). As requested in your Liaison Statement, we would like to provide you with a brief overview of the status of the currently registered domains within the e164.arpa zone.

We kindly request the Study Group to take note of these and urge member states to ensure contact details for their respective assignments are correct and verify the underlying technical infrastructure is functioning in a stable and secure manner.

The RIPE NCC is happy to work with the individual registrants to maintain an accurate registry and keep operational details up to date. If a registrant requires assistance or corrections need to be made, they can contact the RIPE NCC directly via enum-request@ripe.net.

When assignments are unmaintained and abandoned, they start to form a threat to the stability and security of the Internet as a whole and to the ENUM system in particular. We therefore urge registrants to inform us when an assignment is no longer in use and follow the published procedure¹ to deregister such assignments.

We will provide a more detailed overview of individual assignments in annex 1.

At the moment there are:

- 59 assignments in total
- 35 are fully functional; the name servers are registered and functioning
- 19 are broken; the registered name servers do not respond or are not authoritative (in technical terms, these are “lame delegations”)
- 5 delegations are listed by the TSB as assigned, but not registered in the RIPE Database and lack the technical provisioning to be operational

Two of the delegations were assigned on a temporary basis and the terms for those have expired.

We recommend that registrants of broken (“lame”) delegations look into this as soon as possible, as these pose a security risk to both the registrant as well as the wider system.

For the five registrants who have not completed the technical provisioning steps, we kindly urge them to finalise this or, alternatively, follow the documented procedure to deregister

¹ <https://www.ripe.net/manage-ips-and-asns/dns/enum/iab-instructions>

those assignments. As the registry operator, we are committed to maintaining an accurate registry and these delegations do not meet the operational requirements of an accurate registration.

Finally, we would appreciate an answer from Study Group 2 regarding the two expired temporary assignments and whether to either extend the temporary delegation to some date in the future, or make those delegations permanent, or deregister those delegations in accordance with the agreed and published procedures.

We would like to point out that the deregistration of non-functional delegations does not pose a risk with regard to future delegations. Any member state can always restart the delegation process if they wish to restore ENUM functionality in the future. The ENUM domain delegations follow those of recommendation E.164 and there is no need to “reserve” the delegation in e164.arpa itself, when there is no technical need for it.

Finally, as we appreciate Study Group 2 and the ITU’s commitment to maintaining accurate resource registrations, we suggest that you ask TSB to reach out to the respective member states and urge them to verify that all contact and technical details as registered both with TSB and within the RIPE Database are correct and the underlying technical infrastructure is functioning in a secure and stable manner. If they require assistance or corrections need to be made, they can contact the RIPE NCC directly via enum-request@ripe.net.

Regards,

Suzanne Taylor
RIPE NCC

Status of E.164 Delegations as of 1 December 2021

1. Delegations expired in the ITU-T TSB list

The list of delegations published by the ITU-T TSB at <https://www.itu.int/en/ITU-T/inr/enum/Pages/default.aspx> contains the following expired delegations:

| E.164 Code | DNS zone | Country, Geographical area or Global service | Comment |
|------------|-----------------|--|--------------------------------|
| 86 | 6.8.e164.arpa | China | "will end on 30 June 2013" |
| 370 | 0.7.3.e164.arpa | Lithuania | "is valid until 15 April 2020" |

2. Delegations present in the ITU-T TSB list but not registered in the RIPE DB

A delegation can be present in the ITU-T TSB list but not registered in the RIPE DB (which means that corresponding DNS zone is not delegated) in the following two cases:

- delegation was never created in the RIPE DB as delegee was no (longer) interested in this,
- delegation was created in the RIPE DB and later deleted by delegee.

| E.164 Code | DNS zone | Country, Geographical area or Global service |
|------------|----------|--|
| | | |

| | | |
|-----|-----------------|---------------|
| 258 | 8.5.2.e164.arpa | Mozambique |
| 350 | 0.5.3.e164.arpa | Gibraltar |
| 353 | 3.5.3.e164.arpa | Ireland |
| 41 | 1.4.e164.arpa | Switzerland |
| 423 | 3.2.4.e164.arpa | Liechtenstein |

3. Delegations present in the ITU-T TSB list and registered in the RIPE DB but without reachable DNS servers

The RIPE NCC only creates operational delegations. This means that all mentioned delegations were working at the time when they were created. However, currently the delegations are completely technically dysfunctional ("no servers can be reached").

| E.164 Code | DNS zone | Country, Geographical area or Global service |
|------------|-----------------|--|
| 358 | 8.5.3.e164.arpa | Finland |
| 374 | 4.7.3.e164.arpa | Armenia |
| 380 | 0.8.3.e164.arpa | Ukraine |
| 386 | 6.8.3.e164.arpa | Slovenia |
| 39 | 9.3.e164.arpa | Italy |

| | | |
|---------|-------------------------|----------------------------------|
| 40 | 0.4.e164.arpa | Romania |
| 44 | 4.4.e164.arpa | UK |
| 60 | 0.6.e164.arpa | Malaysia |
| 62 | 2.6.e164.arpa | Indonesia |
| 65 | 5.6.e164.arpa | Singapore |
| 66 | 6.6.e164.arpa | Thailand |
| 82 | 2.8.e164.arpa | Korea (Republic of) |
| 84 | 4.8.e164.arpa | Vietnam |
| 87810 | 0.1.8.7.8.e164.arpa | Universal Personal Telephony |
| 88234 | 4.3.2.8.8.e164.arpa | Identification code for networks |
| 8835100 | 0.0.1.5.3.8.8.e164.arpa | Voxbone |
| 886 | 6.8.8.e164.arpa | Taiwan, China |
| 888 | 8.8.8.e164.arpa | UN OCHA |
| 962 | 2.6.9.e164.arpa | Jordan |

4. Delegations present in the ITU-T TSB, registered in the RIPE DB, DNS servers are reachable.

The mentioned delegations are established and functioning on E.164 top delegation level, their DNS servers work. (This does not confirm whether the delegation contains any number of number mappings.)

| E.164 Code | DNS zone | Country, Geographical area or Global service |
|------------|-----------------|--|
| 246 | 6.4.2.e164.arpa | Diego Garcia |
| 247 | 7.4.2.e164.arpa | Ascension |
| 255 | 5.5.2.e164.arpa | Tanzania |
| 262 | 2.6.2.e164.arpa | France de l'Océan Indien |
| 290 | 0.9.2.e164.arpa | Saint Helena |
| 30 | 0.3.e164.arpa | Greece |
| 31 | 1.3.e164.arpa | Netherlands |
| 33 | 3.3.e164.arpa | France |
| 351 | 1.5.3.e164.arpa | Portugal |
| 354 | 4.5.3.e164.arpa | Iceland |
| 359 | 9.5.3.e164.arpa | Bulgaria |
| 36 | 6.3.e164.arpa | Hungary |
| 370 | 0.7.3.e164.arpa | Lithuania |
| 420 | 0.2.4.e164.arpa | Czech Republic |
| 421 | 1.2.4.e164.arpa | Slovak Republic |
| 43 | 3.4.e164.arpa | Austria |

| | | |
|-----|-----------------|--------------------------|
| 46 | 6.4.e164.arpa | Sweden |
| 47 | 7.4.e164.arpa | Norway |
| 48 | 8.4.e164.arpa | Poland |
| 49 | 9.4.e164.arpa | Germany |
| 508 | 8.0.5.e164.arpa | Saint-Pierre et Miquelon |
| 55 | 5.5.e164.arpa | Brazil |
| 590 | 0.9.5.e164.arpa | Guadeloupe |
| 594 | 4.9.5.e164.arpa | Guyane |
| 596 | 6.9.5.e164.arpa | Martinique |
| 61 | 1.6.e164.arpa | Australia |
| 63 | 3.6.e164.arpa | Philippines |
| 81 | 1.8.e164.arpa | Japan |
| 86 | 6.8.e164.arpa | China |
| 971 | 1.7.9.e164.arpa | United Arab Emirates |
| 974 | 4.7.9.e164.arpa | Qatar |
| 994 | 4.9.9.e164.arpa | Azerbaijan |
| 371 | 1.7.3.e164.arpa | Latvia |