

Proposed Policy for RIPE NCC Services to Legacy Internet Resource Holders

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Summary of Proposal:

A framework is proposed as the basis for rigorous maintenance of registration data and for delivery of services to legacy Internet resource holders in the RIPE NCC service region.

Abstract:

This proposed framework establishes the principles to be applied by the RIPE community in offering and implementing services for legacy Internet resource holders. The importance of maintaining accurate records in the RIPE database is recognised as principal. The community of legacy Internet resource holders is defined. Some rights of members of this community are described, as are the principles governing the manner in which the RIPE NCC should engage with and provide services to this community.

1. Introduction and Definitions

The principal purpose of the RIPE NCC is to maintain an accurate registry of Internet IP number and AS resources in the RIPE service region: Europe, the Middle East, and Central Asia. To this end, the RIPE NCC maintains a registry (the 'RIPE database') of resources held by both members and legacy resource holders.

Members are those local Internet registries (LIRs) who have signed a contract for services and pay recurring fees to the RIPE NCC for those services.

Legacy resource holders are those (natural or formal persons) who hold Internet resources assigned before the creation of the RIPE NCC; these have not signed contracts for services for those resources and have not paid corresponding fees.

The RIPE NCC maintains accurate registry data for both member resources and legacy resources. In respect of these data, it provides as **basic services**: the means for resource holders to maintain the registry data relating to their resources; publication, via *whois* and related services, of this data; and the provisioning of relevant delegation records in the reverse DNS.

In addition, the RIPE NCC provides, or may provide, **additional services** complementing these basic services.

Legacy resource holders are willing to contribute to the costs of the services which they use. In addition, provision of new services, such as certification of legacy resources is a desirable goal, and it is understood that such services will have costs.

This proposal outlines a framework under which legacy resource holders may become first class citizens of the family which they founded in the distant past, and pay the reasonable costs of the

services which they use.

2. Legacy Internet Resources and the RIPE Database

2.1 RIPE NCC as RIR

The registry function of RIPE NCC was originally defined in RIPE-19 [2]:

"The RIPE NCC will function as a 'Delegated Registry' for IP numbers in Europe, as anticipated and defined in RFC 1174."

2.2 Responsibility of RIR to maintain registry

The responsibility of RIPE NCC to maintain a registry of internet resources, both for resources allocated by RIPE NCC itself and legacy resources, is acknowledged in RIPE-508 [3]:

"The responsibility for record keeping covers Internet number resources allocated to the RIPE NCC by the IANA, as well as Internet number resources that were distributed in the RIPE NCC region by the IANA prior to the RIPE NCC's existence. These resources are known as Early Registration Transfers (ERX), or legacy space."

2.3 Benefit of this registry not only to resource holder but to community

The maintenance and publication of accurate registry data for each Internet resource provide necessary information for a number of essential network-management activities, including technical troubleshooting and response to incidents of abuse. Availability of this data is thus of benefit to the Internet community as a whole, and not just to the holder of the resource.

In view of this benefit, neither deliberate removal of nor refusal to allow legitimate updates to registry data should be considered.

2.4 Joint responsibility between RIR and resource holder for quality of data

The joint responsibility for keeping the registry data correct and up to date is recognised in RIPE-508 [3]:

"The RIPE NCC has the responsibility for keeping the Registry comprehensive, correct and up-to-date. To do this, the RIPE NCC relies on Resource Holders to supply data that pertains specifically to the Resource Holder, as documented in the RIPE NCC Standard Services Agreement [ripe-435] and/or the Independent Assignment Request and Maintenance Agreement [ripe-462]. For holders of legacy resources this responsibility is derived from the original allocation by the IANA Internet Registry."

2.5 Requirement on RIR not to obstruct application of updates by holder

The RIR must not obstruct the application of legitimate updates to legacy resource data. It must continue to provide means to authenticate access to legacy resource data by or on behalf of the holder, and so protect against abusive updates.

3. Rights and Obligations of Legacy Internet Resource Holders

3.1 Rights pre-date formation of RIRs

Legacy Internet resources were assigned directly to their original holders either by IANA itself or by a global Internet registry acting under IANA's delegated authority prior to the formation of any of the regional Internet registries. The rights and obligations of the current holder of any such resource are restricted only by the terms of the original direct assignment, except in case the resource holder for the time being has freely exercised the right to surrender the resource.

The following subsections (3.2 — 3.7) identify, but not exhaustively, those rights which must be understood, in the absence of contemporary documentation relating to the original assignment, to be enjoyed by legacy Internet resource holders with respect to the legacy resources which they hold.

In case such documentation is available, the conditions therein specified as to the rights and obligations of the resource holder shall have force. In case the originally specified conditions make provision for the conditions to be amended and amendments have been made according to such provision, the most recently amended version of the conditions as to rights and obligations shall have force.

3.2 Right to use

Unless otherwise specified in the documentation (if any) mentioned in subsection 3.1 above, legacy Internet resources may be used as their holders see fit. This includes, but is not restricted to their use as end-point and routing identifiers on the global public Internet.

3.3 Right to exercise responsibility for quality of data

In any case, the holder of a legacy resource shall have the right to exercise the responsibility mentioned in subsection 2.4 above.

3.4 Right of succession

Unless otherwise specified in the documentation (if any) mentioned in subsection 3.1 above, legacy Internet resources may be inherited and assigned.

A legacy Internet resource holder may be subject to merger, acquisition, or change in legal personality. A legacy Internet resource holder who is a natural person will sooner or later suffer death.

In such an event, that holder's heir, successor, or assign (as the case may be) shall immediately after the event enjoy the same rights and be subject to the same obligations with regard to each legacy Internet resource involved as the prior holder enjoyed or was subject to immediately before the event.

3.5 Right of transfer

Unless otherwise specified in the documentation (if any) mentioned in subsection 3.1 above, the holder for the time being of a legacy Internet resource may transfer or sell that resource.

In such an event, the recipient of the resource shall immediately after the event enjoy the same rights and be subject to the same obligations with regard to each legacy Internet resource involved as the prior holder enjoyed or was subject to immediately before the event.

3.6 Right of surrender

Unless otherwise specified in the documentation (if any) mentioned in subsection 3.1 above, the holder for the time being of any legacy Internet resource is free to surrender the resource irrevocably at any time and at the holder's sole discretion either directly to IANA or to the Regional Internet Registry of the holder's choice.

3.7 Freedom from obligations

Unless otherwise specified in the documentation (if any) mentioned in subsection 3.1 above, the holder for the time being of a legacy Internet resource is not subject to any obligations in relation to the resource.

4. Engagement with Holders of Legacy Internet Resources

When engaging with the holders of legacy internet resources, communications from the RIPE NCC should be transparent, so that all parties understand the full situation, and should have respect for any existing relationships between legacy resource holders and NCC members so that the most appropriate contact channel can be used (be that directly or via an existing LIR.)

4.1 Transparency:

4.1.1 acknowledgement of rights

RIPE NCC acknowledges that it has no authority to curtail or modify the rights or obligations of the holder of any legacy resource with regard to that resource.

4.1.2 disclosure of options

All options available to the legacy resource holder should be disclosed in the initial communication, including those specified in section 5.

Any difference from the services currently provided to a legacy resource holder should be described. Charges for each option and corresponding services should be clearly described.

4.1.3 offer of additional services

Additional services, if any, offered by an RIR only to a member or through a member as intermediary, and which have not historically been available available to non-members, may also be described and offered.

4.2 Respect:

4.2.1 no coercion

Legacy Resource Holders may not be rushed or coerced into a quick decision because of urgent operational needs.

In particular, when the holder of legacy Internet resource requires the data for that resource to be updated for pressing operational reasons, the RIR must not seek to impose the conclusion of a (direct or indirect) contractual relationship as a precondition to accepting the update.

Each legacy resource holder who has agreed to terms with the RIPE NCC prior to the adoption of this policy must be individually contacted and offered terms consistent with this policy, without the establishment of any deadline to produce a decision.

4.2.2 contact via LIR using apparent existing relationships

The objective of reliable registration data is most likely to be met if the RIPE NCC uses the help of its existing members to contact legacy resource holders with whom there is an apparent relationship.

A phased procedure should be followed similar to that followed in the implementation of RIPE-452. Existing members who contact their legacy holder customers should be given adequate information to describe the available options to their customers, and offer the appropriate services (such as registration through a sponsoring LIR) where preferred.

4.2.3 contact directly only in last resort

Consistent with phase 3 of the implementation of RIPE-452 for Provider-Independent space holders, the holders of legacy resources that cannot be associated with a likely sponsoring LIR should be contacted directly by the RIPE NCC.

5. *Services for Legacy Internet Resource Holders*

5.1 Reasonable conditions

5.1.1 Maintenance of rights

No offer by the NCC of service to the holder of any legacy Internet resource, whether directly or through a sponsoring LIR, may be subject to a condition of waiver or surrender of any of the holder's rights in respect of that resource.

5.1.2 Protection against abuse of RIR monopoly

No basic service which is required to support the effective use of a legacy Internet resource may be withdrawn or withheld from the holder of that resource unless an equivalent service is available at a cost which is reasonably justifiable by reference to current market availability of comparable services.

5.2 Option to engage via sponsoring LIR

The holder of a legacy Internet Resource shall have the option of obtaining NCC services in respect of that resource via a sponsoring LIR. This option will require the signing of a contract between the sponsoring LIR and the holder of the resource, describing which services will be provided. The contract must explicitly acknowledge that the rights and obligations of the legacy Internet resource holder with regard to the legacy resources involved remain unchanged as they were prior to conclusion of the contract.

The sponsoring LIR will be responsible for declaring the existence of each such contract concluded with a legacy Internet resource holder to the RIPE NCC and also for giving sight of the contract to the RIPE NCC if so requested.

5.3 Option to become a RIPE NCC member

The holder of a legacy Internet resource shall have the option of becoming a member of the RIPE NCC. The contract for membership and service must explicitly acknowledge that the rights and obligations of the legacy Internet resource holder with regard to each legacy resource involved remain unchanged as they were prior to conclusion of the contract.

5.5 Recommendations as to charging for services

Current market prices for a comparable service must be taken as a point of reference in identifying the reasonable cost of a service offered by the RIPE NCC in respect of a legacy Internet resource.

It is noted that, as of August 2012, commercial domain-name registrars are able to provide services comparable to the basic services defined above at a tax-inclusive retail price of about twenty euro.

In the case that the holder of a legacy Internet resource opts to engage via a sponsoring LIR and wishes to avail only of **basic services** as defined above, assessment of the billing category of the sponsoring LIR should take account of the legacy resource using a score or rate **less than** that applicable for a corresponding PI resource.

In the case that the holder of a legacy Internet resource opts to engage via a sponsoring LIR and wishes to avail of **additional services** as defined above, assessment of the billing category of the sponsoring LIR should take account of the legacy resource using a score **no greater than** that applicable for a corresponding PI resource.

Legacy Internet Resource Holders that choose to become RIPE NCC Members shall be charged fees, and enjoy services, in accordance with their RIPE NCC Membership agreement.

6. *Revisions and Extensions to this Policy*

6.1 RIPE NCC may not act in "policy-free zone"

The RIPE NCC can develop activities and services for the Internet Community or the RIPE NCC Members without this activity or service being defined in a policy. The management of resources however is a task entrusted to the RIPE NCC by the Internet community. The Memorandum of Understanding with ICANN [5] and specifically the Criteria for Establishment of New Regional Internet Registries [6] state that an RIR must have a "bottom-up self-governance structure for setting local policies".

The policies as implemented by the RIPE NCC are developed in the bottom-up Policy Development Process [4]. The RIPE NCC has decided to try to make Legacy Resource Holders sign documents that force them to comply with RIPE policies. While there is no policy that forbids RIPE NCC from doing this, there is also no policy that states that this must be done. RIPE NCC is currently acting in a "policy-free zone" which is following a top-down approach instead of the required bottom-up Policy Development Process.

6.2 Revised or additional policy required for action not covered by present policy

This document proposes a framework for future policies. As soon as there is consensus within the RIPE community on this framework any future policy development must be done within the bounds of this framework.

6.3 Revision by normal RIPE PDP process

As for any RIPE policy this framework is also subject to revision by the RIPE Policy Development Process [5]. However, such future revisions must never restrict the rights of Legacy Resource Holders to their legacy resources.

Rationale:

Since RIPE 63 (Vienna, Oct-Nov 2011), the RIPE NCC has been approaching legacy resource holders and offering them the opportunity to have the data held by the NCC in relation to their legacy resource holdings updated to ensure accuracy of the records, on terms opportunistically imposed by the NCC. There was as yet no RIPE policy in place to support this initiative. Furthermore, the NCC began the activity without first engaging in consultation with the affected resource holders. Consequently, the activity was perceived by many of those affected as inappropriate and leading to a "destruction of trust".

This policy proposal is made in an attempt to recover the unfortunate situation which has arisen and in the hope that it will help prevent such a situation arising again.

Although IPv4 addressing resources were not originally intended to be object of any kind of trade, practice showed otherwise during the last years [1]. The implicit acceptance of trade practices over IPv4 addresses sets the background for any organisation to consider their legacy Internet resources as an asset, which can be potentially traded.

Arguments Supporting the proposal:

[as may be received during discussion phase]

Arguments Opposing the proposal:

[as may be received during discussion phase]

References:

- [1] **Microsoft spends \$7.5m on net addresses**
<http://www.bbc.com/news/technology-12859585>
- [2] **RIPE Network Coordination Centre**
<https://www.ripe.net/ripe/docs/ripe-019>

- [3] **The RIPE Registry**
<http://www.ripe.net/ripe/docs/ripe-508>
- [4] **Policy Development Process in RIPE**
<http://www.ripe.net/ripe/docs/ripe-500>
- [5] **ICANN Address Supporting Organization (ASO) MoU**
<http://aso.icann.org/documents/memorandum-of-understanding/>
- [6] **ICP-2: Criteria for Establishment of New Regional Internet Registries**
<http://www.icann.org/en/news/in-focus/global-addressing/new-rirs-criteria>

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