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RIPE Network Coordination Centre

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Member Update

Information bulletin for RIPE NCC members

The RIPE NCC Member Update is intended for LIR contacts.

If you are not the right person to receive this update, please forward it to the appropriate colleague.

RIPE Community Resolution on IPv4 Depletion and Deployment of IPv6

During the Closing Plenary at the RIPE 55 Meeting in Amsterdam, the RIPE community agreed to issue the following statement on IPv4 depletion and the deployment of IPv6:

“Growth and innovation on the Internet depends on the continued availability of IP address space. The remaining pool of unallocated IPv4 address space is likely to be fully allocated within two to four years. IPv6 provides the necessary address space for future growth. We therefore need to facilitate the wider deployment of IPv6 addresses.

While the existing IPv4 Internet will continue to function as it currently does, the deployment of IPv6 is necessary for the development of future IP networks. The RIPE community has well-established, open and widely supported mechanisms for Internet resource

management. The RIPE community is confident that its Policy Development Process meets and will continue to meet the needs of all Internet stakeholders through the period of IPv4 exhaustion and IPv6 deployment.

We recommend that service providers make their services available over IPv6. We urge those who will need significant new address resources to deploy IPv6. We encourage governments to play their part in the deployment of IPv6 and in particular to ensure that all citizens will be able to participate in the future information society. We urge that the widespread deployment of IPv6 be made a high priority by all stakeholders.

The original version of this statement is available at:

www.ripe.net/ripe/meetings/ripe-55/presentations/steffan-resolution.pdf •

RIPE NCC Makes Increased Number of IPv6 Allocations

The months of October and November 2007 saw an increase in the number of IPv6 allocations made in a single month by the RIPE NCC. There were 24 allocations made to RIPE NCC members in October, a record immediately broken by the 31 allocations made in November. The previous peak was 19 allocations in a single month, which was achieved on three separate occasions in 2003, 2004 and 2007.

This surge in demand for IPv6 address space follows recent changes in the IPv6 allocation

policy, which made it easier to get IPv6 allocations. The increase also comes in the wake of the publication of the RIPE Community Resolution on IPv4 Depletion and Deployment of IPv6. This statement, released immediately after the RIPE 55 meeting in Amsterdam in October, urged all Internet industry stakeholders, including ISPs, governments and regulators, to take steps to foster the accelerating deployment of IPv6.

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This publication is available online at:
www.ripe.net/membership/newsletter

If you have any feedback about this publication, please contact:
feedback@ripe.net

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RIPE NCC Government Liaison Activities

The RIPE NCC has continued to develop its relationship with governments over the course of 2007 and the early part of 2008. As a result of participation in the Internet Governance Forum (IGF) and other government workshops and roundtables, the RIPE NCC has built successful relationships with the Organisation for Economic Co-operation and Development (OECD), the European Union (EU) and with local government representatives involved in Internet governance.

Capitalising on these successes, the RIPE NCC will continue to meet with its established government contacts, while also developing new relationships at a governmental level. Underpinning these activities will be a continued commitment to enhancing the cooperation between the public and private sector. Throughout 2008, this commitment to enhanced co-operation will remain a priority for the RIPE NCC. Additionally, it will be a continued area of focus for the RIPE community,

which established a task force in 2007 to advise on issues of enhanced cooperation between the RIPE community and relevant stakeholders, particularly governments and regulators.

The articles that follow (pages 2-4) provide an overview of the RIPE NCC's recent government liaison activities and cover the following topics:

1. Internet Governance Forum, Rio de Janeiro 2007
2. RIPE NCC Participating in OECD Working Party on IP Addresses
3. RIPE NCC Chief Scientist Invited to Participate in European Commission Workshop on Internet Security
4. RIPE NCC Roundtables for Governments and Regulators

1. Internet Governance Forum, Rio de Janeiro 2007

Following on from the first United Nations Internet Governance Forum (IGF), held in Athens in October 2006, the second IGF took place in Rio de Janeiro, Brazil, from 12-15 November 2007. The week-long event brought together more than 2,000 representatives from business, civil society, national governments and the technical community to discuss issues around the management and governance of the Internet.

Initiated in 2005 as an outcome of the World Summit on the Information Society (WSIS), the IGF is the first ever forum to bring together such diverse stakeholders at this global level of public policy discussion. Although instigated by an international government agency, this forum does not employ the usual bureaucratic structure common to governmental affairs. Instead, the IGF is designed to encourage multi-stakeholder participation by granting governments, Non-Governmental Organisations (NGOs), the technical community and the business sector an equal status. The aim is to encourage honest and open discussion of Internet-related issues without the pressure of producing recommendations or calls for action.

The first IGF, held in Athens in 2006, attracted more than 1,200 participants and focused on the overarching issues tied to the future of information and communications technologies. This included control over Internet architecture, the Internet numbering and naming system, security, intellectual property, openness, connectivity, cost and multilingualism. The second IGF meeting built on most of these themes but also included new ones, such as the management of Critical Internet Resources, access and diversity.

The RIPE NCC has actively participated in the WSIS process since the latter's inception in 2003 and continues, along with its fellow Regional Internet Registries (RIRs) as part of the Number Resource Organization, to contribute to each IGF meeting. The 2007 event was especially important to the RIRs, with the addition of the extra theme of Critical Internet Resources to the agenda. Although they have not been specifically defined, these resources are generally accepted as including elements of the Internet infrastructure such as IP addresses and domain names. The increasing interest from government agencies in the internal processes of the organisations that manage these Critical Internet Resources has led to the further development of working relationships between governments and the technical Internet community.

"As we are responsible for Internet number resources, including IPv4 and IPv6 address space and Autonomous System Numbers, it is very important that the RIRs contribute to the discussions around what is effective Internet Governance," explained Axel Pawlik, Managing Director of the RIPE NCC. "We want to ensure that our members continue to operate and grow their businesses in the self-regulated environment that has proved so crucial to the success of the Internet. Our goal is to protect the way our community functions, but at the same time to support governments and provide them with all the information they need to make informed decisions about the Internet. Using high-profile forums, such as the IGF, is a perfect way to educate national governments on how IP address distribution occurs."

The IGF has come under some criticism for its non-binding approach and its susceptibility to political grandstanding. However, it is also acknowledged that the meetings have allowed important technical issues such as IPv4 allocation and IPv6 deployment to gain international visibility and consideration by business and governments alike. One of the outcomes of the WSIS process was the recognition that the continued growth and long-term sustainability of the Internet requires coordination between many players with

differing needs. The IGF is just the beginning of this process and its supporters remain committed to its ability to bring people together to share knowledge and experiences and to build productive relationships between the public and private sectors.

The third IGF meeting will take place in Hyderabad, India, from 3-6 December 2008. For more information visit:

www.intgovforum.org •

2. RIPE NCC Participating in OECD Working Party on IP Addresses

The RIPE NCC has been invited by the Organisation for Economic Cooperation and Development (OECD) to participate in studies conducted by their Committee for Information, Computer and Communications Policy (ICCP). These studies, which will be used to help governments understand the future of the Internet economy, are an important example of how the RIPE NCC's unique role in the Internet landscape enables it to provide valued contributions to governments and government-related organisations.

The RIPE NCC has presented the ICCP-run Working Party on Communication and Information Services Policy (CISP) with an overview of the RIPE community's position on IPv4 depletion, IPv6 deployment and other key issues in the current Internet landscape. In addition, the RIPE NCC has been helping the working party to formulate a paper on the future of the Internet economy that will support high-level ministerial consultation.

"This is a very important contribution in helping governments develop an informed understanding about the future of the Internet economy," said Paul Rendek, Head of External Relations and Communications at the RIPE NCC. "We are looking forward to continuing our relationship with the OECD and providing them with all the necessary Regional Internet Registry and technical input relating to IP address space distribution."

The findings from the ICCP studies will be presented to governments at an important ministerial meeting in June 2008. The meeting, to be held by the OECD, will take place in Seoul, Korea from 17-18 June 2008. The RIPE NCC will attend as part of a delegation representing the Internet technical community.

More information about this meeting is available at:

www.oecdministerialseoul2008.org/en •

3. RIPE NCC Chief Scientist Invited to Participate in European Commission Workshop on Internet Security

Daniel Karrenberg, the RIPE NCC Chief Scientist, was invited by the European Commission to give a presentation on Internet security at the commission's workshop, 'Learning From Recent Large Scale Attacks on the Internet'. The workshop, held in January 2008, aimed to help policymakers learn from recent large-scale Internet attacks as part of an overall strategy to ensure the protective security and resilience of critical information infrastructure throughout the European Union.

Mr. Karrenberg's presentation, which focused on DNS root server security, was delivered to an audience mainly composed of EU and Member States' policymakers. The aim of the presentation was to provide the relevant

operational and technical details to enable European policymakers to make informed decisions about Internet security.

The RIPE NCC operates K-root, one of the 13 root servers forming a crucial part of DNS infrastructure. The RIPE NCC's pioneering deployment of anycast instances of root servers began in 2003. Since then, the RIPE NCC has deployed four local and 12 global anycast instances of the K-root server. This deployment has helped to isolate the impact of external Denial of Service (DoS) attacks, to localise the impact of local DoS attacks and to improve the overall resiliency, efficiency, security and quality of the K-root service. •



4. RIPE NCC Roundtables for Governments and Regulators

The RIPE NCC facilitates Roundtable Meetings to discuss Internet management issues relevant to governments and regulators. These meetings provide a chance for attendees to learn more about how to participate in IP address management policy-making. High-level discussions of topics such as IP address space management and root server operations also provide attendees with an overview of the main elements involved in the technical coordination of the Internet.

The RIPE NCC held two Roundtable Meetings in 2007. These meetings attracted 70 attendees from more than 35 countries. They were well received and will lead to more targeted outreach toward government representatives during 2008.

More information about RIPE NCC Roundtable Meetings is available at:
www.ripe.net/meetings/roundtable •

ASO AC Elections: Hans Petter Holen Elected

During the plenary session at RIPE 55, Hans Petter Holen was selected by the RIPE community to take the vacant seat on the Address Supporting Organization (ASO) Address Council (AC). He will serve a three-year term.

More information about the ASO AC is available at:
<http://aso.icann.org/ac> •



Number Resource Organization Report: “Continuing Cooperation”

In November 2007, the Number Resource Organization (NRO) released a report entitled “Continuing Cooperation – The NRO’s Role in Internet Governance”. Illustrating the many efforts the Regional Internet Registries undertake to maintain and develop the Internet and its unique characteristics, the report also focused on the major themes of the Internet Governance Forum (IGF) for 2007: Access,

Diversity, Openness, Security and Critical Internet Infrastructure.

The report is available on the NRO website at:
www.nro.net/archive/news/continuing-cooperation.html •

NRO and ICANN Reaffirm Commitment to Relationship

In December 2007, the Number Resource Organization (NRO) and the Internet Corporation for Assigned Names and Numbers (ICANN) exchanged letters reaffirming their commitment to formalising the legal relationship between them.

The NRO letter, jointly signed by the executives of the five Regional Internet Registries, stated the NRO’s commitment to supporting ICANN, sought ICANN’s acknowledgement of certain aspects of the role of the NRO and committed to a deadline of one year for formalising legal arrangements between the two organisations.

In the letter sent by ICANN to the NRO, Dr. Paul Twomey, President/CEO of ICANN, identified ICANN’s commitments to the NRO and re-acknowledged the roles of the Address Supporting Organization (ASO), the NRO and the RIRs as described in the ASO Memorandum of Understanding (MoU). Dr. Twomey also committed ICANN to working with the NRO to finalise the legal arrangements between the two organisations within the one-year timeframe.

The letters are available from the NRO website at:
www.nro.net/archive/news/nro-icann-reaffirm.html •



RIPE Meetings

RIPE 55

The RIPE 55 Meeting took place at the Grand Hotel Krasnapolsky, Amsterdam, the Netherlands from 22-26 October 2007.

The RIPE 55 Meeting Report, including a summary of the action points and highlights from all working group sessions, is available at: www.ripe.net/ripe/meetings/ripe-55/report.html

Minutes and presentations from the RIPE 55 plenary and working group sessions are available from: www.ripe.net/ripe/meetings/ripe-55/presentations

RIPE 56

RIPE 56 takes place at the Hotel Palace, Berlin, Germany from 5-9 May 2008.

More information is available at: www.ripe.net/ripe/meetings/ripe-56

RIPE 57

RIPE 57 takes place at the JW Marriott Hotel, Dubai, United Arab Emirates from 26-30 October 2008.

More information is available at: www.ripe.net/ripe/meetings/ripe-57 •

RIPE NCC General Meetings

RIPE NCC General Meeting October 2007

The RIPE NCC General Meeting October 2007 was held on Wednesday, 24 October 2007, adjacent to the RIPE 55 Meeting at the Krasnapolsky Hotel in Amsterdam, the Netherlands.

The RIPE NCC members unanimously approved the Charging Scheme 2008.

This document is available at: www.ripe.net/ripe/docs/ripe-420.html

The minutes from this meeting are available at: www.ripe.net/membership/gm/gm-october2007/minutes.html

More information about the RIPE NCC General Meeting is available at: www.ripe.net/membership/gm

Members can discuss membership issues prior to the General Meeting by using the RIPE NCC Membership Discussion List. RIPE NCC Members with an LIR Portal account can subscribe to this list at: <https://lirportal.ripe.net>

Archived messages from this list are publicly available at: www.ripe.net/maillists/ncc-archives/members-discuss •

Upcoming RIPE NCC General Meeting: May 2008

The next RIPE NCC General Meeting will be held on Wednesday, 7 May 2008. All members of the RIPE NCC are encouraged to attend. You must register prior to the meeting.



RIPE NCC Executive Board
From left: János Zsakó, Nigel Titley, Kees Neggers, Jim Reid and Dmitry Burkov

The Middle East Network Operators Group

The purpose of the Middle East Network Operators Group (MENOG) is to establish a forum for dialogue on specific issues affecting the Internet industry in the Middle East.

MENOG 2: November 2007

The RIPE NCC provided administrative and logistic support to MENOG 2, the second MENOG meeting, which was held in Doha, Qatar from 19-21 November 2007.



Attracting around 150 attendees from more than 20 countries, MENOG 2 was a successful event bringing together regional network operators, vendors, ISPs and technical groups.

More information about MENOG 2 is available from the MENOG website at:

www.menog.net/meetings/menog2

MENOG 3: April 2008

MENOG 3 will take place in combination with the RIPE NCC Regional Meeting from 15-17 April 2008 in Salmiya, Kuwait.

More information is available from the MENOG website at:

www.menog.net/meetings/menog3 •

RIPE NCC Makes Increased Number of IPv6 Allocations

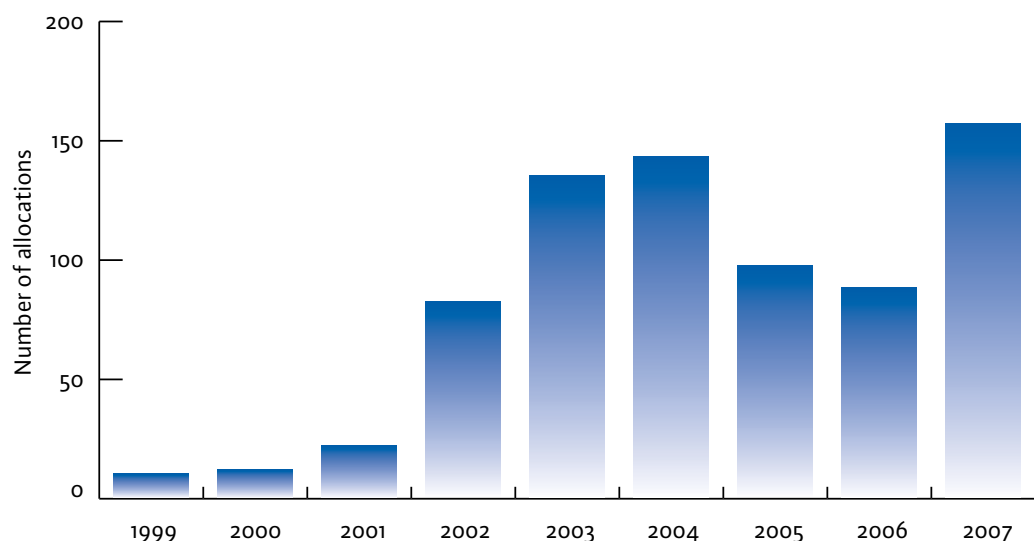
→ continued from page 1

The text of this resolution can be found at:
www.ripe.net/news/community-statement.html

The graph below shows the number of IPv6 allocations made by the RIPE NCC per year. Although the RIPE NCC began allocating IPv6 address space in 1999, the allocation rate did not start to take off until 2003. Since then, the RIPE NCC has allocated IPv6 address space at an average rate of about 10 allocations per month.

The increased rate of IPv6 allocation seen at the end of 2007 continued into 2008, with 26 and 34 allocations in January and February 2008, respectively.

“We hope to see the number of IPv6 allocations continue to increase.” said Paul Rendeck, Head of External Relations and Communications of the RIPE NCC. “I would urge service providers and governments to heed the advice of the RIPE community and its statement on the importance of widespread IPv6 deployment.” •



■ IPv6 Allocations per Year

Certification of Internet Number Resources

Introduction

The next five years will see a significant change in the global Internet landscape, and in particular in the Internet registry systems as the remaining IPv4 address space is allocated.

The RIPE NCC has been preparing for changes in the industry that will take place once the remaining IPv4 address space has been completely allocated. The primary concern will be to continue providing a stable and secure registry function where registry data is maintained with a high level of accuracy. In addition, in view of the changing Internet landscape, the RIPE NCC needs to ensure that its registration services are capable of handling new requirements, such as the transfer of Internet resources, should these be required by RIPE NCC members and the RIPE community.

This article focuses on one of these possible new requirements – the certification of Internet number resources. The purpose of the article is to provide a brief overview of certification, the RIPE NCC's recent certification-related activities and an outline of what to expect in 2008.

The certification of Internet number resources is an issue that affects technical, administrative and procedural elements in all of the Regional Internet Registry (RIR) service regions. As a membership-based organisation where policies specifying the requirements for allocating Internet number resources are developed by community consensus, the RIPE NCC's efforts regarding certification remain led by its members and the RIPE community. RIPE Meetings, working group mailing lists and the RIPE Certification Task Force all provide ways for the RIPE community to provide their feedback on certification.

Certification of Resources

The certification of Internet number resources provides a reliable mechanism for establishing the association between resource holders (RIRs, LIRs, ISPs and end entities) and Internet resources (such as IPv4 and IPv6 address blocks as well as AS Numbers). Certification offers a range of potential benefits for RIPE NCC members and the Internet community in general:

- Resource holders will have proof that they hold a certain Internet resource (a factor that will become increasingly important if a transparent mechanism for resource transfers is needed)
- Resource certificates could be used in securing routing information (either through the Internet Routing Registry (IRR), Border Gateway Protocol (BGP) or other means)
- Resource certificates could be used for automated provisioning, which would provide improvements in efficiency for the provisioner

Certification of Resources: RIPE NCC Activities 2007-2008

During 2007, the RIPE NCC focused its efforts on preparing for the implementation of a resource certification system that would make “right of use” of Internet number resources more secure. It is vital to have this enhanced security in place as the industry moves into an era when trust relationships become increasingly important.

Over 2008, the RIPE NCC will continue to prepare for the possibility of issuing certificates for Internet number resources. The RIPE NCC's certification activities, led by Chief Operations Officer Andrew de la Haye, will focus on investigating the technological, administrative and procedural elements necessary to certify Internet number resources. The RIPE NCC will also continue to respond to, and incorporate, any relevant policy-based developments.

In addition, the RIPE NCC will continue its work with the RIPE Certification Task Force. This task force was formed at RIPE 53 (October 2006) to advise, review and provide feedback about a system for certifying Internet number resources. The RIPE NCC's Science Group, headed by Chief Scientist Daniel Karrenberg, has provided the task force with a series of White Papers that examine the range of benefits and potential applications for resource certificates. The RIPE NCC has built interactive demonstrations of key use cases that support and complement the theoretical content of the White Papers. The purpose of these White Papers and interactive demonstrations is to assess the impact that certification could have on Local Internet Registry (LIR) business processes. The aim is to develop a certification system that provides cost benefits and fits, as far as is possible, with current LIR business processes.

Certification Timeline: 2008

- January 2008: First draft of White Papers from the RIPE NCC Science Group
- March 2008: The RIPE NCC presents the RIPE Certification Task Force with White Papers and interactive demonstrations regarding certification. This material is used to assess potential benefits, policy impacts and applications related to resource certificates
- April 2008: The RIPE NCC presents the latest certification developments to the RIPE Certification Task Force
- May 2008 (RIPE 56, Berlin): The RIPE Certification Task Force report their findings to the RIPE Community
- May 2008: The RIPE NCC launches a production-ready version of a certification system containing major functionality •

IANA Update

IANA 2.0

The last few months have been very busy in the IANA offices. The most visible change is the new IANA website, which was launched in February 2008. It should make it much easier to find information about IANA services and registries.



New and Old

It is now also possible to find answers to DNS queries without resorting to IPv4. In February 2008, IANA put IPv6 AAAA records for the A, F, H, J, K and M root servers into the root zone. Despite this progress in IPv6 deployment, IPv4 address free-pool depletion is still an urgent issue and in January 2008 IANA and the 50 companies holding the addresses completed work on reclaiming Net-14 (14.0.0.0/8). The 16 million addresses in Net-14 are now available for allocation to a Regional Internet Registry (RIR) and IANA will publish a new RFC showing this change, replacing RFC 3330 (Special-Use IPv4 Addresses).



Stock Check

IANA is aware that some unallocated /8s are used in private networks and this could cause a number of problems when they are allocated to RIRs, Local Internet Registries (LIRs) and assigned to End Users. Unfortunately, it is not easy to find out who is using these addresses but IANA has been trying to determine



what it can. IANA has worked with some root zone operators, including the RIPE NCC, to measure queries received at root DNS servers for unallocated IPv4 addresses. This should help give a better understanding of where networks are using unallocated IPv4 address space on the Internet. Presentations on IANA findings are being shared at network operator group and RIR meetings.

Interface Improvements

IANA is also reviewing its support for the IPv4 and IPv6 Multicast address registries and is working with Marshall Eubanks, the IESG Designated Expert, on improved request forms and an updated RFC to replace RFC 3171 (IANA Guidelines for IPv4 Multicast Address Assignments).

TLD administrators have been helping IANA beta test a new web-based interface for root zone management. The new system will make it much easier to submit change requests and will link up with our EPP back-end system to feed root zone edits to VeriSign for publication.

Making Sure It's Done...

A huge amount of the work IANA does comes from the IETF, through the 'IANA Considerations' sections of RFCs. Unfortunately, some early RFCs did not include 'IANA Considerations' sections and so IANA has been working on a project to inventory all published RFCs and identify where there are IANA work items that have not been completed. IANA has just completed the first phase of this project: the inventory. In the next phase, IANA will check that these work items are still necessary and do those that are.

...Smoothly

IANA has also begun working on some behind-the-scenes automation. Together with the RIRs, IANA is developing a "self-service" system to allow RIRs to update the DNS delegations in in-addr.arpa and ip6.arpa automatically for the address space they manage. •

ARIN Update

ARIN and the Legacy Registration Services Agreement

For some time, there has been discussion in the ARIN community regarding the relationship between ARIN and Internet number resource holders who received resources prior to ARIN's inception in December 1997. For some, it has been a question of fairness. ARIN has provided services to these legacy resource holders for ten

years without assessing any service fees. Others have suggested that, in the face of a rapidly diminishing IPv4 address pool, ARIN should create opportunities for legacy resource holders to return any unused portions of address blocks, perhaps even providing incentives for returns. As Internet number resource stewards, and in order to be responsive to the voices of our community, ARIN recently took a proactive approach.

After presenting a draft version for community input at the ARIN Public Policy and Member Meeting in Albuquerque, New Mexico, on 31 October 2007 ARIN released a publicly available version of the Legacy Registration Services Agreement that incorporated community suggestions. The agreement defined a legacy number resource as an IPv4 address or Autonomous System Number that was issued by an Internet Registry (InterNIC or its predecessors) prior to ARIN's inception on 22 December 1997.

Under the new agreement, legacy holders who sign the Legacy RSA are guaranteed the same services afforded to organisations that sign the standard Registration Services Agreement (RSA), along with a commitment from ARIN not to make efforts to reclaim unutilised address space. If a legacy holder chooses not to sign the Legacy RSA, ARIN has no plans to revoke their legacy resources. This Legacy RSA also contractually promises that ARIN Internet number resource policies adopted after the contract is signed will not lessen the Legacy RSA address holder's

contract rights.

ARIN is executing a program to contact Legacy resource holders regarding the availability of the Legacy Registration Services Agreement (RSA). Additionally, Legacy resource holders are also learning about the Legacy RSA when they contact ARIN to arrange a resource transfer. When they hear about the benefits of signing the Legacy RSA, they are eager to apply. Resource Analysts have been facilitating the application process to ensure accuracy in original applications. This has resulted in a reasonable acceptance rate for Legacy RSA requests. As of 30 January 2008, there have been a total of 38 Legacy RSA requests, 16 have been completed and 19 are pending. Twenty-five of these requests have been generated through the resource transfer process.

By formalising their relationship with ARIN, legacy space holders will be protecting themselves from future community action that might seek to reclaim their unused address space, or otherwise limit their rights and access to WHOIS and IN-ADDR services. •



APNIC Update

BGP Research Node

In August 2007, APNIC deployed a Border Gateway Protocol (BGP) research node in Japan. At least one IPv4 and IPv6 prefix each will be announced from this node; however, no services will be hosted on these addresses and no experiments will rely on connectivity via these experimental prefix announcements.

The main objectives of this service are to provide a neutral BGP peer that other entities can connect to directly and via EBGPP multihop; to provide a four-byte AS Number 'beacon' that can be used to announce and withdraw prefixes in a predictable and well-understood manner; to provide another measurement and data collection point for ongoing research into routing behaviour and the scaling properties of the routing system; and to demonstrate that BGP using four-byte AS Numbers is a well-understood and safe technology that can be deployed at any time, by any ISP.

Can You Help Us?

APNIC requires support for this activity, and we are seeking expressions of interest from ISPs who can offer full BGP route feeds in IPv4 and IPv6, and those who are willing to advertise data-less transit for a small set of APNIC research prefixes originating from this location. If you are interested, please contact research@apnic.net.

Root Name Servers in the Asia Pacific region

During 2007, APNIC continued to support root server deployments in the Asia Pacific region, deploying two more mirror root DNS name servers – an I-root server in Manila, Philippines and an F-root server in Suva, Fiji. This brings the total number of root servers in the Asia Pacific region to 35. In 2008, APNIC will be supporting the deployment of a root server in Sri Lanka.

Reverse DNS Management

APNIC has upgraded its reverse DNS management system to use dynamic DNS and an XML/REST update model. REST is a simplified model of managing data via the World Wide Web. APNIC members can now submit secure updates for their APNIC zones using XML encoded changes via a REST API sent over HTTPS. This allows the delegation to appear in the public zone within two minutes. The new system allows members to automate their reverse delegation submissions to APNIC and integrate change control into their IP address management systems.

Previously, APNIC members submitted delegations via the online portal, MyAPNIC, or via cleartext email to the APNIC Whois Database. Both of these older processes had a much longer turnaround time of two hours.

Next APNIC Meeting

APNIC's next meeting will be APNIC 26, held in Christchurch, New Zealand in August 2008. We hope to see you there! •

RIPE NCC Membership Statistics 2007

Total number of members at 31 December 2007:

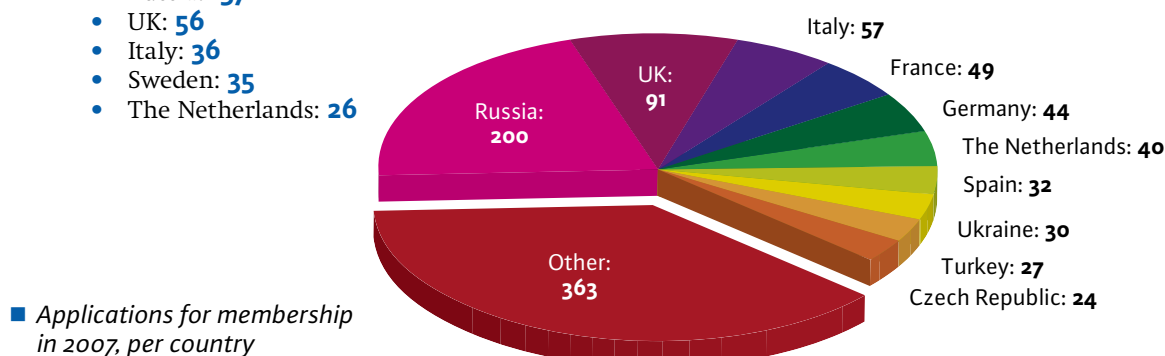
5,369 members,
an increase of **14%** on 2006

Total number of applications in 2007: **957**

Net membership growth: **647** members
(as a result of mergers and closures)

Five countries with most new members (net growth):

- Russia: **137**
- UK: **56**
- Italy: **36**
- Sweden: **35**
- The Netherlands: **26**



RIPE Policy Development Process: September 2007–February 2008

Submitted Proposals

From September 2007 to February 2008, five new proposals were submitted.

1. End Policy for IANA IPv4 Allocations to RIRs, 2007-07

Proposed by Toshiyuki Hosaka.

This proposal was to distribute a single /8 to each RIR at the point when the IANA free pool is left with 5 /8s. During RIPE 55, this proposal was discussed with another similar proposal (2007-06, Global Policy for the Allocation of the Remaining IPv4 Address Space) and the community advised the authors to come up with a joint proposal instead of having two similar proposals in the PDP at the same time. The authors followed up on this recommendation and withdrew these proposals and authored a new joint proposal (2008-03) in March 2008. As a result, 2007-07 is now archived and can be found at: www.ripe.net/ripe/policies/proposals/2007-07.html

2. Enabling Methods for Reallocation of IPv4 Resources, 2007-08

Proposed by Nigel Titley and Remco van Mook.

This proposal outlines a framework to migrate previously allocated IPv4 resources from one Local Internet Registry (LIR) to another LIR within the RIPE NCC service region. The proposal argues that once the IANA resources run out, and the RIRs are no longer able to supply LIRs with fresh IPv4 allocations, a new mechanism needs to be in place to cope with that situation. With this proposal, a framework is created to enable usage of the “probably significant pool” of “allocated but unused” IPv4 resources. The details of the proposal can be found at:

www.ripe.net/ripe/policies/proposals/2007-08.html

3. Cooperative distribution of the end of the IPv4 free pool, 2007-09

Proposed by Tony Hain.

This proposal suggests establishing a mechanism for the allocation of IPv4 address blocks between RIRs after the IANA pool has been depleted. The proposed process is for a RIR-to-RIR redistribution of the tail-end of the IPv4 pool. The details of the proposal can be found at:

www.ripe.net/ripe/policies/proposals/2007-09.html

4. *Assigning IPv6 PI to Every Inetnum Holder, 2008-01*
Proposed by Lutz Donnerhacke.

This proposal suggests that the RIPE NCC should conduct a one-time operation to assign a /56 IPv6 PI prefix to all End Users with an IPv4 assignment registered in the RIPE Database. The details of this proposal can be found at:
www.ripe.net/ripe/policies/proposals/2008-01.html

5. *Assigning IPv6 PA to Every LIR, 2008-02*
Proposed by Lutz Donnerhacke.

This proposal suggests that the RIPE NCC should conduct a one-time operation to allocate an IPv6 block to every LIR that does not have any existing IPv6 holdings. The details of this proposal can be found at:
www.ripe.net/ripe/policies/proposals/2008-02.html

The two proposals described above (2008-01 and 2008-02) argue that such one-time operations would help to speed up the IPv6 deployment process in the RIPE NCC service region.

Concluded Proposals

Three proposals were concluded in the period September 2007-February 2008.

1. *Proposal to Amend the IPv6 Assignment and Utilisation Requirement Policy, 2005-08*
Proposed by Kurtis Lindqvist and Geoff Huston.

This proposal was concluded with consensus in November 2007. Due to this proposal, the IPv6 assignment size is now an ISP/LIR decision, the unit of utilisation to measure End Site allocation efficiency is set to a /56 and an HD-Ratio of 0.94 is adopted. These changes are documented in:
www.ripe.net/ripe/docs/ipv6-policy.html

The details of the proposal are archived and can be found at:
www.ripe.net/ripe/policies/proposals/2005-08.html

2. *IPv4 Countdown Policy, 2007-03*
Proposed by Maemura Akinori and Co-authors.

This proposal suggested four general principles that were considered necessary to accomplish the smooth termination of IPv4 address allocation. In October 2007, the authors decided to withdraw the proposal and make a new proposal (see 2007-07 above).

The details of the proposal are archived and can be found at:
www.ripe.net/ripe/policies/proposals/2007-03.html

3. *IANA Policy for Allocation of ASN Blocks to RIRs,*

2007-04
Proposed by the Regional Internet Registries (RIRs).

This proposal documented a global policy for the RIRs to receive blocks of Autonomous System Numbers (ASNs) from the Internet Assigned Numbers Authority (IANA). It was concluded with consensus in September 2007 and is available at:
www.ripe.net/ripe/docs/ripe-416.html

Note that this is a global policy and will therefore come into effect only after it has been accepted as a policy in all other RIR regions and then ratified by ICANN.

Archived proposals (either withdrawn or concluded) are stored at:
www.ripe.net/ripe/policies/proposals/archive

Some other news about the RIPE Policy Development Process (PDP)

The document “Policy Development Process in RIPE” was updated in February 2008. The text in the document has been improved and it now contains a section about the “RIPE Policy Development Dispute Resolution” as presented and announced at the RIPE 55 Meeting. The new document can be found at:
www.ripe.net/ripe/docs/pdp.html

Further Information

You can find the full list of current proposals at:
www.ripe.net/ripe/policies/proposals

Conference Calendar

Conferences and meetings that may be of interest to RIPE NCC members

6-9 April 2008

ARIN XXI

Denver, USA

www.arin.net/ARIN-XXI

13-14 April 2008

AfriNIC IPv6 Training

Cairo, Egypt

www.afrinic.org/training

15-17 April 2008

MENOG 3/RIPE NCC Regional Meeting

Salamiya, Kuwait

www.menog.net

29-30 April 2008

PAM 2008

Cleveland, USA

<http://pam2008.cs.wpi.edu>

5-9 May 2008

RIPE 56

Berlin, Germany

www.ripe.net/ripe/meetings/ripe-56

12-15 May 2008

ITU Telecom Africa 2008

Cairo, Egypt

www.itu.int/AFRICA2008

13-15 May 2008

ISPCON

Chicago, USA

www.ispcon.com

19-20 May 2008

LINX

London, UK

<https://www.linx.net>

26-30 May 2008

LACNIC XI

Salvador/Bahia, Brazil

www.lacnic.net/en/eventos

31 May-3 June 2008

AfNOG 2008

Rabat, Morocco

www.afnog.org

1-4 June 2008

NANOG 43

New York, USA

www.nanog.org/future.html

4-6 June 2008

AfriNIC 8

Rabat, Morocco

www.afrinic.net/meeting

22-27 June 2008

ICANN Meeting

Paris, France

www.icann.org/meetings

27 July-1 August 2008

IETF 72

Europe, TBD

www.ietf.org/meetings/0mtg-sites.txt

6-14 August 2008

SANOG 12

Kathmandu, Nepal

www.sanog.org

17-22 August 2008

SIGCOMM 2008

Seattle, USA

www.sigcomm.org/sigcomm2008

18-19 August 2008

LINX

London, UK

[https://www.linx.net/](https://www.linx.net)

25-29 August 2008

APNIC 26

Christchurch, New Zealand

www.apnic.net/meetings/upcoming

RIPE NCC Training Courses

LIR Training Courses

Frankfurt, Germany
Friday, 4 April 2008

Valletta, Malta
Friday, 11 April 2008

Moscow, Russian Federation
Wednesday, 16 April 2008

Bucharest, Romania
Friday, 25 April 2008

Amsterdam, The Netherlands
Friday, 2 May 2008

Zagreb, Croatia
Friday, 16 May 2008

London, United Kingdom
Thursday, 22 May 2008

Helsinki, Finland
Friday, 30 May 2008

Muscat, Oman
Monday, 9 June 2008

Baku, Azerbaijan
Friday, 13 June 2008

Brussels, Belgium
Friday, 20 June 2008

Paris, France
Friday, 27 June 2008

DNS for LIRs Training Courses

Moscow, Russian Federation
Friday, 18 April 2008

Routing Registry Training Courses

Budapest, Hungary
Friday, 4 April 2008

Moscow, Russian Federation
Thursday, 17 April 2008

London, United Kingdom
Friday, 23 May 2008

Athens, Greece
Friday, 6 June 2008

Amsterdam, The Netherlands
Friday, 27 June 2008

RIPE NCC Speakers

To request a RIPE NCC speaker for your event, please contact: speaker@ripe.net

A list of topics that the RIPE NCC can provide speakers for is available at:
www.ripe.net/meetings/ncc-speakers.html

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