RIPE
NCC

MEMBER UPDATE
UPDATE FROM THE RIPE NCC MANAGING DIRECTOR

2012 was a year of change and challenge for the RIPE NCC. It was in September that we reached the final /8 of IPv4 address space from IANA, and a new policy came into effect, prepared in advance by the RIPE community to govern how we will manage this remaining pool. IPv4 exhaustion had long been predicted, and I don't think this took anyone by surprise. We are pleased with the way the transition was handled. The RIPE NCC's staff performed admirably in carrying out their duties under increased pressure, and there was no outcry from our members or the media.

There were also challenges in the realm of Internet governance. Two conferences – The World Telecommunications Standardisation Assembly (WTSA) and the World Conference on International Telecommunications (WCIT) – were seen as attacks on the bottom-up, industry self-regulation that has served the Internet so well since its beginning. The RIPE NCC has been proactive in its outreach efforts, which we see as supporting the interests of our members. We are not alone, either. There has been strong participation from the technical community in the process, with ISOC, ICANN and the other RIRs all represented at these conferences. I attended WCIT myself as part of the German delegation.
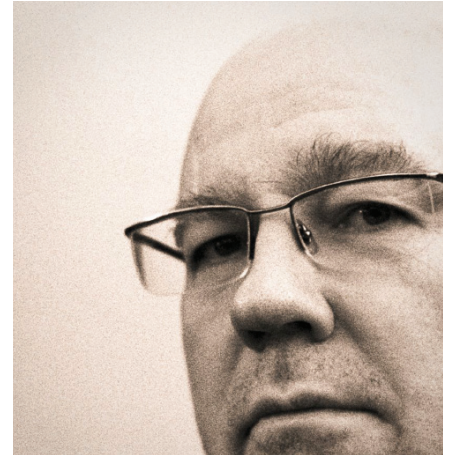
WCIT could have been a major disaster for the Internet community. Instead, it turned out to be a major disaster for the ITU. But while the immediate threat to the multi-stakeholder approach was mitigated at the conference, activity urgently continues for the World Telecommunication Policy Forum (WTPF) in 2013 and the ITU Plenipotentiary in 2014.

In the last year, it has been pleasing to see our members getting more involved in the activities of the RIPE NCC. It was in response to requests from our membership to increase the transparency of our Activity Plan and Budget that we published this in a new format in late 2012. We think this will help our members to better understand the RIPE NCC's activities and priorities for the year ahead.

At RIPE 65 in October, the membership voted on a new Charging Scheme for 2013. This vastly simplifies things by introducing a flat fee for members regardless of their size. In addition, some services that were previously offered for a fee to non-members (such as DNSMON and NRTM) are now member-only. We have informed those currently using these services and will waive the sign-up fee if they would like to become members of the RIPE NCC and continue using them.

This year we will be looking at how we can work more closely with our members and the wider RIPE community. Effective communication is a big part of this. We will also continue to appraise the services we offer our members and introduce improvements wherever we can.

And, of course, this is the year that we look to you to deploy IPv6 on your networks!
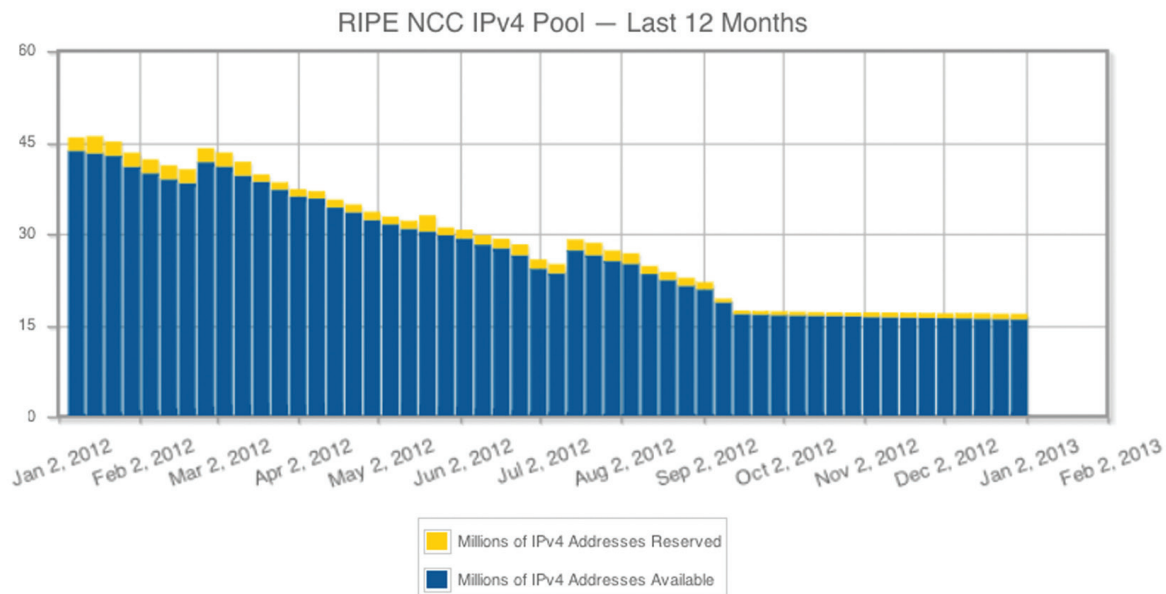
Axel Pawlik
RIPE NCC Managing Director

Contents

Reaching the Last /8

RIPE NCC IPv4 Pool — Last 12 Months

Legend:
- Millions of IPv4 Addresses Reserved
- Millions of IPv4 Addresses Available

The RIPE NCC reached the last /8 of IPv4 address space on Friday, 14 September 2012. This was an event that had long been forecast and is a milestone for the Internet community. The age of readily available IPv4 address space in our service region is over, and network operators now need to deploy IPv6 on their networks.

Managing the Remaining Pool

Under current RIPE Policy, LIRs can now apply for one final /22 IPv4 allocation, provided they have first received IPv6 address space from the RIPE NCC or an upstream LIR.

The RIPE NCC will retain a /16 from the final /8 for assignments to Internet Exchange Points, who may request from a /24 to a /22. Another /16 from the remaining pool has been set aside for unforeseen circumstances, as well as a further /13 for

temporary assignments. More detail can be found in section 5.6 of "IPv4 Address Allocation and Assignment Policies for the RIPE NCC Service Region" at:
https://www.ripe.net/ripe/docs/ripe-553

This approach will ensure the responsible stewardship of the remaining pool of address space. It will also allow new LIRs to access IPv4 and encourage IPv6 adoption.

Fairness, Consistency, Transparency

In the run-up to the final /8, the RIPE NCC's principles of fairness, consistency and transparency were crucial. The RIPE NCC published a regularly updated graph that showed the amount of IPv4 address space remaining in the pool. The RIPE NCC's IP Resource Analysts (IPRAs) began working in pairs, and an artificial delay of one working day was implemented while evaluating IPv4 requests. This helped to

minimise the risk of inconsistencies and ensure that requests were processed strictly in the order they were received.

IPv4 Around the World

The RIPE NCC received the final /8 allocation from IANA on 3 February 2011, when it reached the five final /8s and a global policy was triggered that led to the RIRs each receiving their final allocation.

So far only the RIPE NCC and APNIC have reached this milestone, with APNIC striking its last /8 on 15 April, 2011. As of 15 January 2013, ARIN has 2.67 /8s, LACNIC 2.91 and AFRINIC 3.8, which includes their last /8s from IANA.

More information about IPv6 deployment can be found at:
http://www.ipv6actnow.org

Important Billing Information for RIPE NCC Members

If you have had an outstanding invoice for 60 days or more, we cannot approve any requests for Internet number resources until the outstanding amount has been paid. For more details about billing, please see:
https://www.ripe.net/lir-services/member-support/info/billing/billing-procedure-and-fee-schedule-for-lirs-2013

IPv4 Transfers

Now that the RIPE NCC has reached the last /8 of IPv4 address space, we are seeing an increase in the number of members looking to acquire or dispose of unused address space by arranging a transfer with another organisation.

While the financial details of any such transfers are beyond the RIPE NCC's remit, what we are concerned with is ensuring that current RIPE Policies are followed and that any transfers within the RIPE NCC service region are reflected in the RIPE Registry.

The RIPE NCC has recently published a new section on our website with information on the policies and procedures relating to transfers. For the most part, members wishing to receive a transfer will need to demonstrate a legitimate need for the resources, as with a regular allocation from the RIPE NCC prior to reaching the last /8.

RIPE NCC members can apply for pre-approval prior to finding a party with resources to transfer. This should help members enter into any negotiations with certainty that the transfer can be processed.

More information can be found here:
https://www.ripe.net/lir-services/resource-management/ipv4-transfers

Listing Service

To help our members who may be looking to transfer IPv4 address space, the RIPE NCC has developed a listing service on our website. This allows both parties to list resources that they are offering/seeking to transfer. The RIPE NCC Listing Service can be found here:
https://www.ripe.net/lir-services/resource-management/listing

RIPE Policy Development Update

September 2012 - January 2013

Submitted Policy Proposals

**RIPE NCC Service to Legacy Internet Resource Holders, 2012-07
Proposed by Niall O'Reilly, Bernard Tuy, Dave Wilson, Sander Steffann, Håvard Eidnes, Hank Nussbacher, Carlos Friaças, Randy Bush**

This proposal introduces a framework for the maintenance of registration data and for the delivery of services to legacy Internet resource holders.

The proposal idea was presented at RIPE 64 in Ljubljana and then it was submitted to the RIPE PDP for discussion in the RIPE NCC Services WG mailing list. The large amount of feedback and input received convinced the proposers to work on a new version of the proposal that will be submitted in the future.

The details of the proposal can be found at:
http://www.ripe.net/ripe/policies/proposals/2012-07

**Publication of Sponsoring LIR for Independent Number Resources, 2012-08
Proposed by Nick Hillard**

As per the RIPE Document "Contractual Requirement for Provider Independent Resource Holders in the RIPE NCC Service Region," End Users require a sponsoring organisation – either an LIR or the RIPE NCC itself. Under this proposal, the RIPE NCC would publish the identity of the sponsoring organisation for each independent number resource assigned by the RIPE NCC.

2012-08 would make this link public in order to simplify the mechanism for verification and co-ordination between sponsoring organisations and End Users. It also aims to improve the means to tackle abuse issues.

The details of the proposal can be found at:
http://www.ripe.net/ripe/policies/proposals/2012-08

**Modification of The Limits For Temporary Internet Assignments, 2012-09
Proposed by Nick Hilliard**

During the past year, it was noticed that the limits put on temporary assignments used for events and research (for example) were too short. The proposal aims to extend these limits and introduce some added flexibility.

The proposal was submitted close to the end of 2012 and quickly found strong support. The RIPE NCC is currently performing the impact analysis.

The details of the proposal can be found at:
https://www.ripe.net/ripe/policies/proposals/2012-09

**Extension of IPv6 /32 to /29 on a Per-allocation vs Per-LIR basis, 2012-10
Proposed by Jan Zorz, Mark Townsey, Jordi Palet**

This proposal would allow IPv6 address space holders to extend their subnet from a /32 up to a maximum of /29 without additional documentation.

A previously approved policy proposal by the same authors (2011-04), had already intended to allow for this. However, a strict reading of the policy meant that holders of multiple /32s could extend these to only one /29. The proposal 2012-10 intends to correct this, and would allow each /32 to be extended to a /29.

The proposal has quickly gained support from the community.

The details of the proposal can be found at:
https://www.ripe.net/ripe/policies/proposals/2012-10

Ongoing Proposals

Policy for Inter-RIR Transfers of IPv4 Address Space, 2012-02
Proposed by Sandra Brown

This policy proposal describes how the RIPE NCC would handle transfers of IPv4 address space with LIRs that are outside the RIPE NCC's service region.

The proposal differentiates between transfers to and from the RIPE NCC service region. It also introduces the definition to determine compatibility and coordination between the different RIR policy frameworks.

2012-02 was submitted after being presented at RIPE 64. After an extended Discussion Phase that allowed the community to provide more feedback, the proposal is in Review Phase and open to further community discussion.

The details of the proposal can be found at:
http://www.ripe.net/ripe/policies/proposals/2012-02

Intra-RIR Transfer Policy Proposal, 2012-03
Proposed by Sandra Brown

This policy proposal would modify the current transfer policy as explained in section 5.5 of "IPv4 Address Allocation and Assignment Policies for the RIPE NCC Service Region". It would increase the allocation period when evaluating a transfer request from 3 months to 24 months.

It was considered that in most cases, the IPv4 address resources being transferred would come from a large unused block. It was therefore deemed useful to increase the allocation period of use (for transfers only) in order to better match the quantity that is available and needed from a larger supply.

Like the previous proposal, 2012-03 was presented at RIPE 64 before it was submitted. The proposal is currently in Review Phase and open to further community discussion.

The details of the proposal can be found at:
http://www.ripe.net/ripe/policies/proposals/2012-03

PI Assignments from the last /8, 2012-04
Proposed by Nick Hilliard

This proposal aims to define the rules under which the RIPE NCC will distribute Provider Independent (PI) address space from the last /8 block in the RIPE NCC pool.

Currently section 5.6 of "IPv4 Allocation and Assignment Policies for the RIPE NCC Service Region" only allows for allocation to LIRs and assignments to Internet Exchange Points.

The proposal 2012-04 defines that a minimum of /24 should be assigned to End Users if their request complies with the current criteria to receive IPv4 space and they have received an IPv6 allocation. An End User who is also an LIR would be able to apply for an allocation or an assignment, but not both.

The idea of the proposal was presented at the Address Policy WG at RIPE 64, and the official text was afterwards submitted to the PDP. After a long and lively discussion both on the mailing list and at the RIPE 65 meeting, the proposer decided to re-work the proposal text in line with the input and feedback received.

The details of the proposal can be found at:
http://www.ripe.net/ripe/policies/proposals/2012-04

Concluding Proposals

Transparency in Address Block Transfers, 2012-05
Proposed by Milton Mueller

This proposal aims to increase the transparency surrounding transfers of IPv4 address space, by modifying section 5.5 of "IPv4 Allocation and Assignment Policies for the RIPE NCC Service Region" to require the RIPE NCC to publish a record of all transfers conducted under this policy.

After discussion in the mailing list and at the Address Policy WG meeting at RIPE 65, a version 2.0 of the proposal was published in Review Phase. The new version clarifies which information will be published for approved transfers, and notes that non-approved transfers will be kept anonymous. At the time of writing, the proposal completed the RIPE Last Call phase, and is under final evaluation by the Working Group Chairs Collective.

The details of the proposal can be found at:
http://www.ripe.net/ripe/policies/proposals/2012-05

Revert "Run out Fairly", 2012-06
Proposed by Tore Anderson

This proposal would revert all the changes introduced in the IPv4 policies by 2009-03, "Run Out Fairly". In short, the proposal sets the allocated period to 12 months and the assignment period to 24 months.

After an initial Discussion Phase, the proposal received enough general support to move towards Review Phase, where the RIPE NCC Impact Analysis and Draft Policy were published to facilitate more community discussion. At the time of writing, the proposal completed the RIPE Last Call phase, and is under final evaluation by the Working Group Chairs Collective.

The details of the proposal can be found at:
http://www.ripe.net/ripe/policies/proposals/2012-06

Concluded Proposals

Abuse Contact Management in the RIPE NCC Database, 2011-06
Proposed by Tobias Knecht

This proposal aimed to introduce the new contact attribute "abuse-c:" to be included in the **inetnum**, **inet6num** and **aut-num** database objects.

The policy proposal originated from the work of the Abuse Contact Management Task Force formed after RIPE 61 in 2012. The proposal was not about data accuracy. Instead, it aimed to provide a more efficient way for database object maintainers to organise their provided information and helps to increase accuracy and efficiency in routing abuse reports to the correct network contact.

The proposal discussion took place in the Anti-Abuse WG mailing list at the end of November 2011. The community actively participated in the policy making process and this lead to a final version 3.0 of the proposal text. The textual improvements focused on the scope and purpose of the policy proposal, leaving the technical implementation details to the RIPE Database department.

The details of the proposal can be found at:
http://www.ripe.net/ripe/policies/proposals/2011-06

In September 2012, consensus was declared and the proposal was accepted. The new RIPE Policy document is available at:
http://www.ripe.net/ripe/docs/current-ripe-documents/ripe-563

RIPE Labs and the new Statistics Dashboard

The RIPE Labs website is a platform for the wider technical community to share innovative Internet-related tools, ideas and analysis that can benefit the RIPE community and RIPE NCC members. Now, with the new Statistics Dashboard, it's also the place to get your hands on data published by the RIPE NCC.
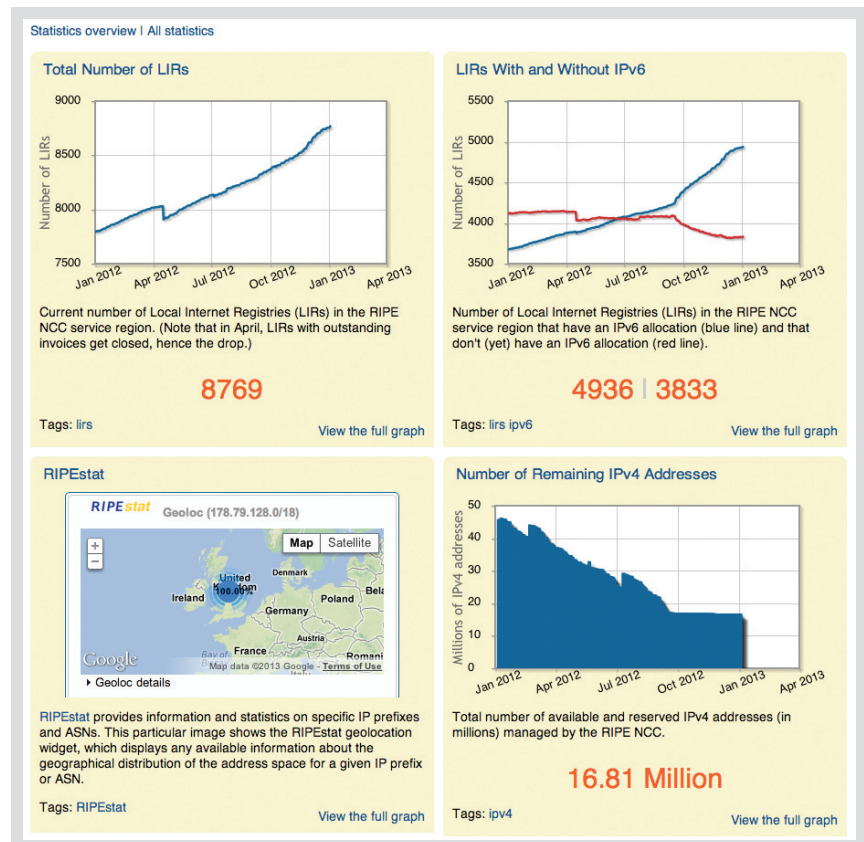
We are often asked by our members and others in the RIPE community to provide various statistics on things like the number of LIRs in the RIPE NCC service region or IPv6 allocations. The Statistics Dashboard simplifies this by bringing together all of these graphs on one page, many of which are dynamic and are updated daily or weekly. We'll also be making more of the historical data the RIPE NCC has collected over the past 20 years available here as well.

You can see the Statistics Dashboard here: https://labs.ripe.net/statistics

Get Involved

RIPE Labs is all about working with the RIPE community and we are actively looking for others to contribute. Specifically, RIPE Labs can host research, content or tools that other organisations or individuals would like to share with the wider technical community and receive feedback on.

We also welcome input from the people who use our data. If you have any comments or would like to suggest additional statistics, please let us know.

Statistics overview | All statistics

Total Number of LIRs — Current number of Local Internet Registries (LIRs) in the RIPE NCC service region. (Note that in April, LIRs with outstanding invoices get closed, hence the drop.) **8769** — Tags: lirs — View the full graph

LIRs With and Without IPv6 — Number of Local Internet Registries (LIRs) in the RIPE NCC service region that have an IPv6 allocation (blue line) and that don't (yet) have an IPv6 allocation (red line). **4936 | 3833** — Tags: lirs ipv6 — View the full graph

RIPEstat — Geoloc (178.79.128.0/18) — RIPEstat provides information and statistics on specific IP prefixes and ASNs. This particular image shows the RIPEstat geolocation widget, which displays any available information about the geographical distribution of the address space for a given IP prefix or ASN. — Tags: RIPEstat — View the full graph

Number of Remaining IPv4 Addresses — Total number of available and reserved IPv4 addresses (in millions) managed by the RIPE NCC. **16.81 Million** — Tags: ipv4 — View the full graph

Training Update

New RIPE Database Training Course

We found through our course surveys that the biggest problem for many was learning how to use the RIPE Database. That's why we are launching a new RIPE Database Training Course for our members in April. The course features a number of hands-on exercises and will be offered once every month.

With less time spent covering the RIPE Database in other courses, we can incorporate more subject detail and hands-on exercises for our members. This is in response to feedback we received from the Membership and Stakeholder Survey 2011 that people would like to see more technical content and practical elements in RIPE NCC courses.

You will hear more about the RIPE Database Training Course in the future. In the meantime, you can view a series of videos on using the RIPE Database here: http://www.ripe.net/lir-services/training/e-learning/ripe-database

Webinars

Since being launched in March 2012, the RIPE NCC's online training webinars have proved to be very popular with our members. In fact, they usually fill up within a day of being announced! Currently we are offering webinars in RIPE Database, Advanced RIPE Database, RPKI, and we will be covering more topics in future. You can find more information about the webinars at: http://www.ripe.net/lir-services/training/e-learning/webinars

The Virtual Classroom

The RIPE NCC has a new IPv6 Virtual Classroom that gives our members a chance to gain practical experience configuring routers and tunnels. The Virtual Classroom is currently included in our IPv6 Training Course and we hope to expand this to other courses in future.

IPv6 Learning Modules

We are currently working on four video modules about transition mechanisms for IPv6, which will be released in Quarter 1, 2013. When the videos are ready they will be available here: http://www.ripe.net/lir-services/training/e-learning/ipv6

External Relations Update: ITU Season

Over the second half of 2012, it was hard to avoid discussing the International Telecommunications Union (ITU), and as December rolled around, all eyes were on Dubai. Stealing most of the spotlight was the World Conference on International Telecommunications (WCIT), convened to negotiate an update of the International Telecommunications Regulations (ITRs), a treaty last revised in 1988. But this meeting was preceded by the World Telecommunication Standards Assembly (WTSA), held every four years to direct the work of the ITU. The RIPE NCC participated in both events, and each produced some interesting outcomes, as well as some indications of what we can expect to see in 2013.

WTSA-12
http://www.itu.int/en/ITU-T/wtsa12/

The WTSA was held on 20-29 of November. Over that period, the ITU membership (including Member States and Sector Members) discussed and agreed on various Resolutions, Recommendations and Opinions, reviewed the work areas of the ITU Study Groups, and elected the Chairs and Vice-Chairs of those Study Groups.

One item of interest was the passage of Recommendation ITU-T Y.2770, "Requirements for Deep Packet Inspection in Next Generation Networks". Noted with concern by various civil society and technical community actors, the Recommendation was adopted by the meeting with the addition of a chapeau (or short preamble) to the effect that anyone implementing the practices detailed in the Recommendation "shall comply with all applicable national and regional laws, regulations and policies."

The item of most concern to many in the technical community was Resolution 64, which discusses IPv6 issues. First drafted at the 2008 WTSA in Johannesburg, the original Resolution was instrumental in the establishment of the ITU IPv6 Group, which concluded its work in June 2012 with the optimistic finding that current IP address allocation arrangements were meeting the needs of all stakeholders. Discussion of the Resolution at WTSA-12 focused on revising and updating the text based on developments in the industry and the ITU itself, and the final draft notes that "many developing countries want ITU-T to become a registry of IP addresses." Numerous other proposals were put forward by Member States during the meeting, however, including:
- That the ITU-T be instructed to begin the application process to become an IP address registry, and
- That the ITU-T conduct a feasibility study to investigate becoming an IP address registry

That neither of these proposals was included in the final text was the result of the very strong position taken by a number of Member States, including the USA, UK and Australia. Issues surrounding the allocation of IP addresses (both IPv4 and IPv6) will continue to be discussed in an ITU context in Study Groups 2 and 3, and given the strong feelings on these issues still held by ITU stakeholders, we see this as the best possible outcome. The RIPE NCC, in coordination with the other RIRs, will be closely following the discussions in these Study Groups – contributing where appropriate, and encouraging those with policy-related concerns to raise them in the appropriate RIR forums.

WCIT-12
http://www.itu.int/en/wcit-12/

No previous ITU conference has had the kind of broad, public attention that WCIT received. In recent months, especially, concerns about the extension of the ITRs into areas of Internet governance and the process by which this might occur have been the basis of stories across a range of media. As the meeting drew to a somewhat confused close, it seems that while Internet governance concerns have been largely averted, events exposed the ITU's claims to be a "multi-stakeholder" organisation as hollow. While Sector Members and other members of the public (including civil society representatives) were allowed to attend, participation was restricted to Member State delegations. While many of the major plenary sessions were made available via webcast and live transcription, much of the significant negotiation took place in closed meetings with only Member States in attendance.

Some of the most controversial proposals going into the meeting (including the proposal from the European Telecommunications Network Operators' Association, or ETNO, regarding charging Internet content producers) did not feature heavily in discussions. Other issues, such as the use of "(Recognised) Operating Agencies" (essentially identifying those subject to the regulations) were resolved through on-site negotiations (resulting in the use of "Authorized Operating Agencies" in the final text). The most wide-ranging proposal concerning the Internet came from the Russian Federation, which initially included the addition of an article relating to the Internet and Member States' rights to manage naming and numbering within their jurisdictions. In the final draft, however, the only explicit reference to the Internet is contained in an attached Resolution, entitled "To foster an enabling environment for the greater growth of the Internet". While agreed on by meeting participants, such Resolutions are not part of the ITRs and do not have the same standing as an international treaty.

As noted in many reports, the final days of the event became somewhat chaotic, with many Member States (around one third of those attending) refusing to sign the new treaty. Some of these States will seek further direction from their governments before signing, while others (notably the US) indicated that they were unlikely to sign the treaty (and associated Resolutions) in its current form. Much of the unhappiness stemmed from disagreements over the conduct of the meeting and whether consensus had actually been reached on specific items. Nonetheless, a final version of the 2012 ITRs has been published at:
http://www.itu.int/en/wcit-12/Documents/final-acts-wcit-12.pdf

The long-term ramifications of WCIT and its outcomes are unclear, though it is obvious that the world's governments are divided on questions of Internet governance and the role of the ITU. The World Telecommunication/Information and Communication Technology Policy Forum (WTPF) will be convened in May 2013 to look specifically at "International Internet-related public policy matters". The divisions that became more evident at WCIT have not been resolved, and the input of the Internet technical community to ongoing discussions in ITU forums is more important than ever.

At the RIPE NCC, we are expecting that 2013 will continue to present many challenges in this area, and we look forward to working with our fellow RIRs and industry partners to ensure that the views and concerns of our community are represented in the ITU.

RIPE NCC General Meeting September 2012

The RIPE NCC General Meeting (GM) was held adjacent to the RIPE 65 Meeting on 26-27 September 2012. There were 124 attendees, not including RIPE NCC staff. The minutes of the proceedings are available at: https://www.ripe.net/lir-services/ncc/gm/september-2012/minutes

RIPE NCC Charging Scheme 2013

At the GM, members voted on a new Charging Scheme for 2013. The approved option has two main features that differ from previous models:

1. There are no more membership categories – all members from 2013 will pay the same flat fee for each LIR that they hold. The annual fee will be EUR 1,800 in 2013 and the sign-up fee for new members remains at EUR 2,000. The EUR 50 fee per PI assignment is also retained for 2013. The RIPE NCC Executive Board reported that it was pleased to see the membership choose a Charging Scheme that offers simplicity and predictability for both members and the RIPE NCC in the years ahead.

2. Direct Assignment Users and non-members who paid fees for some services are required to become RIPE NCC members, paying the same standard fee as other members, by 1 January 2013. In addition, because there are costs associated with running the service, the Executive Board

required that users of the RIPE Database Proxy Service should also become RIPE NCC members. However, after recent mailing list discussions it became apparent that this would require further consideration by the membership and the RIPE community – so for now it will continue to run as in 2012, until these discussions have had a chance to take place.

The RIPE NCC Charging Scheme 2013 is available at:
https://www.ripe.net/ripe/docs/ripe-566

RIPE NCC Activity Plan and Budget 2013

The Draft RIPE NCC Activity Plan and Budget 2013 was also presented to the membership at the GM in September. The Executive Board took note of the feedback from members regarding the Activity Plan and published an updated final version in December.

The new format Activity Plan and Budget combines two previous RIPE NCC organisational documents and was formulated based on requests from the membership to see the link between the activities carried out by the RIPE NCC and their associated costs. The document now provides this in much greater detail, and is designed to allow members to navigate easily from activity descriptions to their costs.

The document is available at:
https://www.ripe.net/ripe/docs/ripe-558

The Executive Board believes that the Activity Plan and Budget offers considerable improvements for members, giving greater transparency into the RIPE NCC's operations. The Board is eager to see the RIPE NCC produce organisational documents that are clear for the membership and provide the required level of detail and usability. If you have any feedback for the Board on how to further improve the Activity Plan and Budget, the Board can be contacted at exec-board@ripe.net

Information on the Executive Board as well the minutes of its meetings can be found at:
https://www.ripe.net/lir-services/ncc/executive-board

Regional Meetings

The Eurasia Network Operators' Group (ENOG)
The Eurasia Network Operators' Group (ENOG) is the regional forum in which experts concerned with the core operational issues of the Internet can share knowledge and expertise on issues unique to the Russian Federation, the Commonwealth of Independent States (CIS), and Eastern Europe. You can learn more about ENOG here:
http://www.enog.org/

ENOG 4
The ENOG 4 Meeting took place from 23-24 October 2012 at the Marriott Hotel in Moscow. Turnout for the meeting was very high, with almost 400 people attending over the two days.

There was a wide variety of presentations, along with panel discussions on areas such as Key Internet Technologies, Connectivity and Infrastructure, Technology and Business, Internet Governance and Regulation, and Cooperation on Fighting Dangerous Elements on the Internet. The presentations from ENOG 4 are available at:
http://www.enog.org/meetings/enog-4/presentations/

Middle East Network Operators Group (MENOG)
The Middle East Network Operators Group (MENOG) is the established international forum that brings together key players in the Middle East's Internet network operations to focus on issues of

relevance to the region. You can find more information on MENOG here:
http://www.menog.org/

RIPE NCC Regional Meeting Amman / MENOG 11
This regional meeting took place alongside the 11th meeting of the Middle East Network Operators Group (MENOG) from 30 September – 9 October 2012. There were 96 attendees from 22 different countries.

The presentations from MENOG 11 are available at:
http://www.menog.org/previous/menog-11/presentations/

RIPEstat's New Look and Features

RIPEstat, the RIPE NCC's comprehensive source for data related to Internet number resources, has a new look and expanded features that make it easier to find the information you want about specific IP addresses, prefixes and AS Numbers.

RIPEstat's new user interface presents query results in a more efficient, organised manner. Widgets are now grouped into

useful categories in a tabbed menu, and the new default view gives a concise "At a Glance" overview when querying an Internet number resource.

Users who want to include RIPEstat data into their own scripts will be pleased to learn that all of the consolidated information RIPEstat offers in its original web-based interface is now available

via the RIPEstat Text Service, designed specifically for users who prefer to use a command-line interface (CLI).

RIPE Atlas data has been incorporated into RIPEstat and you can now see RIPE Atlas probes in every queried IP prefix in its own dedicated widget.

Information about when objects in the RIPE Database were last updated is now displayed in related widgets, and RIPE NCC members can see the history of RIPE Database objects for the past ten years (with built-in protections to avoid the bulk downloading of personal data).

During the late 2012 Internet outage in Syria, we developed a RIPEstat widget that allowed users to monitor the outage and see for themselves in real time when Internet activity started up again in the region. In the future, we plan to expand this functionality for other countries.

Feedback is crucial to the ongoing development of RIPEstat. We encourage users to help guide future improvements by using the feedback feature on the site.

More information about RIPEstat can be found at:
https://stat.ripe.net/
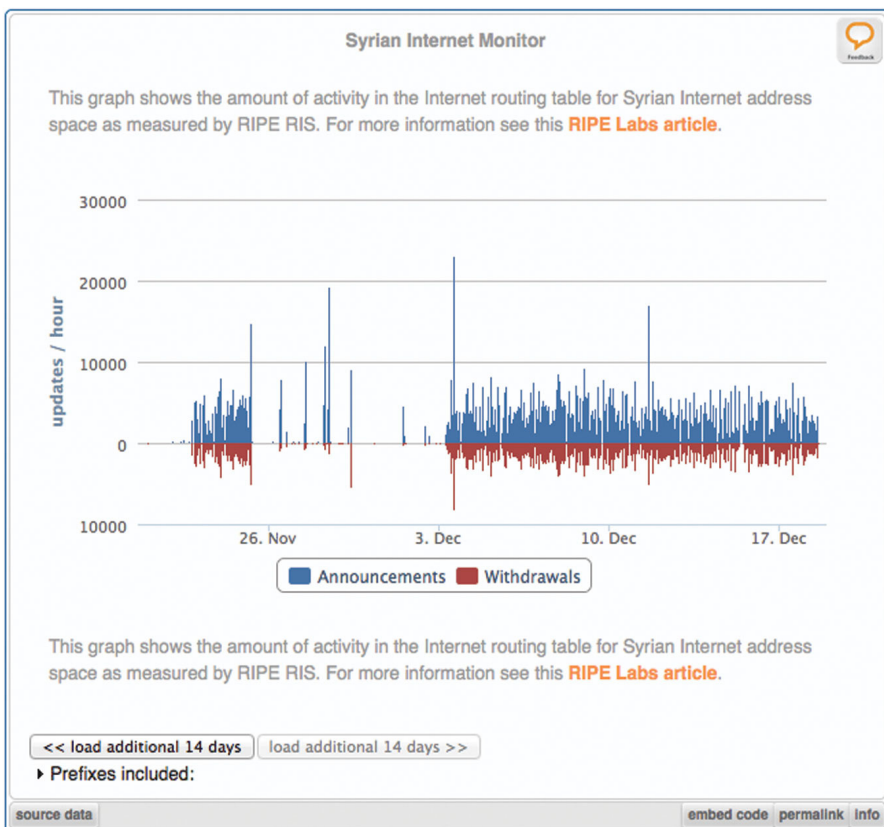
Upcoming Meetings

MENOG 12/RIPE NCC Regional Meeting
Dubai
Tutorials: 5 March 2013
Conference: 6 March 2013
ME Peering and Interconnection Forum (MPF): 7 March 2013
Workshops: 10-14 March 2013

RIPE NCC LEA Meeting
London, UK
14 March 2013

South East Europe (SEE 2)/ RIPE NCC Regional Meeting
Skopje, Macedonia
22 - 23 Apr 2013

RIPE 66
Dublin, Ireland
13 - 17 May 2013

ENOG 5
St. Petersburg, Russia
27-28 May 2013

MENOG 13, TBD
Workshops: 15-19 September 2013
Conference: 22-23 September 2013
Tutorials: 24 September 2013