

# **RIPE NCC Activity Planning Support Document**

## **Introduction**

This document is not part of the resolutions that members vote on at RIPE NCC General Meetings.

The purpose of this document, incorporating feedback received during the year, is to provide members with background information for approval of the RIPE NCC Charging Scheme 2005.

The RIPE NCC Executive Board and Management will present the RIPE NCC Activity Plan 2005 later in the year.

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## **1) Executive Summary**

### **Membership Growth and Budget 2005**

Following the analysis of RIPE NCC membership growth so far in 2004 and the feedback from the Membership Growth Survey, a net growth of 9% is projected for the year 2004, as compared with a net growth rate of 7% in 2003.

Conservative growth estimates assume that this growth could increase by 2% over 2005, with a total net increase in membership of 11%.

The total expenses budget for the planned activities in 2005 is 10.7 MEUR. This is an increase of 4% from the 2004 budget.

For 2005, it is estimated that the amount of Internet number resource requests received by the RIPE NCC will increase in line with membership developments while RIPE NCC Registration Services staff will remain at the 2004 level. Higher efficiency of processing resource requests will be achieved by further automation of Hostmaster work where possible, as well as simplifying documentation and procedures.

Total revenues of 11.2 MEUR will cover all expected expenses and are expected to lead to a slight surplus of approximately 0.5 MEUR for 2005.

More information about the RIPE NCC Budget 2005, is available at:  
<http://www.ripe.net/ripe/docs/budget2005.html>

More information about the RIPE NCC Membership Growth Survey can be found at:  
<http://www.ripe.net/ripenncc/mem-services/growth-survey/index.html>

### **RIPE NCC Focus Points**

The RIPE NCC is a Membership Association that follows the direction and input of the RIPE NCC membership when it comes to developing the activities and services it performs. The RIPE NCC focus points for 2005 continue the work started in 2004, and incorporate the feedback received from members over the last year. This allows the RIPE NCC to refine its focus on activities that offer the greatest benefit to RIPE NCC members and the RIPE community.

As in the previous years one of the main focus points for the RIPE NCC remains the quality of services it provides to its members and the Internet community. The core of the RIPE NCC service portfolio offered to members is the distribution of Internet number resources. The initial response time to Internet resource requests received is expected to remain stable at around one working day, consistent with the level maintained in 2004. Focus in 2005 will move to decreasing the overall time to completion of number resource requests.

Continuing the focus on membership support in 2004, the RIPE NCC will give specific attention to establishing a RIPE NCC Member Service Desk. The aim of the RIPE NCC Member Service Desk is to provide members with any additional help necessary to resolve queries involving RIPE NCC Registration Services, the RIPE Database and RIPE NCC billing procedures. The desk will be available through direct e-mail and phone contact.

Following from the focus on qualitative and accessible information supply in 2004, in 2005 the RIPE NCC will give specific focus to accuracy and consistency of public registration data of Internet number resources. In addition, the RIPE NCC will use the information supply infrastructure developed over 2004 to provide simple and ready-to-use information services.

### **RIPE NCC Vision and Strategy**

The RIPE NCC is committed to:

- Strengthening the open, bottom-up, consensus driven policy-making process that has been central to the RIPE community since its inception;
- Developing close relationships with external parties, such as politicians, administrators and the media, to win continued support for the industry self-regulatory structures of the Regional Internet Registries (RIRs) and the existing registry process;

- Improving the quality of service offered to RIPE NCC members and the Internet community.

## **2) Focus Points 2005**

### **Registration Data Accuracy**

A core function of the RIPE NCC is the allocation of Internet number resources to its members.

In 2005, the RIPE NCC will improve the quality, range and accessibility of the data it provides relating to this activity. This includes specific focus on public registration data and its accuracy, integrity and consistency.

### **RIPE NCC Member Service Desk**

Feedback received from RIPE NCC members has revealed a need to further improve the communication channels members can use to contact the RIPE NCC. Recent initiatives have focused on proactively calling members to resolve issues. These have proved successful, and suggest that direct contact is an efficient way to assist members.

The aim of the RIPE NCC Member Service Desk is to provide members with any additional help necessary to resolve queries involving RIPE NCC Registration Services, RIPE Database and RIPE NCC billing procedures.

The RIPE NCC Member Service Desk will provide a single point of contact that RIPE NCC members can use to resolve issues that cannot be resolved satisfactorily by other methods. The RIPE NCC Member Service Desk aims to improve the ease and efficiency with which members can interact with the relevant person at the RIPE NCC. The desk will be available through direct e-mail and phone contact.

The current channels used by members to contact the RIPE NCC will remain available. The RIPE NCC Member Service Desk is intended to support members who have issues that cannot be resolved through these regular channels.

Various interfaces to the RIPE NCC Member Service Desk, such as jabber, PSTN or VoIP, will be investigated and prepared.

Dependent on feedback from RIPE NCC members, the scope of the RIPE NCC Member Service Desk may be expanded in the future, with the long term goal of consolidating the communication channels members can use to contact the RIPE NCC.

### **Information Services**

In 2005, the RIPE NCC will continue the development and rollout of Information Services. Following the development of the infrastructure for this in 2004, the RIPE NCC will focus efforts in 2005 on making the full benefits of these services more evident and accessible.

### **3) New Activities 2005**

Below is a list of new RIPE NCC activities scheduled for 2005 and activities that represent a significant change in resource allotment from 2004.

For each of the new activities listed below, a description is provided as well as an assessment of its financial impact on resources.

The following ranges are used to show the financial impact and relative weight of the proposed new activities.

Fractional	0 - 50 kEUR
Small	50 - 100 kEUR
Moderate	100 - 200 kEUR
Significant	200 - 400 kEUR
Substantial	> 400 kEUR

#### **RIPE NCC Member Service Desk**

Information on the RIPE NCC Member Service Desk can be found in the Focus Points, Section 2, of this document.

This activity includes the capital expenses of telecommunications equipment that will be deployed company-wide.

Financial Impact: Significant (200 - 400 kEUR)  
Section: Membership Services

#### **Further Deployment of Mirror Instances of the K-root Name Server**

The RIPE NCC will continue to deploy mirror instances of the K-root name server. This will further improve the distribution, redundancy and performance of this crucial service as well as its resilience against Denial of Service (DoS) attacks. In 2005 the RIPE NCC will continue deployment of K-root local nodes in the RIPE NCC service region. The cost for each local node will be covered by the relevant local community.

The RIPE NCC will also deploy several (2-3) K-root global nodes in North America and Asia-Pacific. The RIPE NCC will cover most of the costs of global node deployment.

Financial Impact: Significant (200 - 400 kEUR)  
Section: Co-ordination Activities

#### **Improving Data Integrity**

In 2005, the RIPE NCC will focus efforts on improving the accuracy, integrity and consistency of data related to Internet number resources. This will include consolidation and cleaning up internal and external databases. Mechanisms will be established to ensure higher quality data in the long term, decreasing discrepancies thus increasing the speed at which requests can be processed. The improved integrity of data will benefit the

Internet community by increasing the reliability of using registration data in the daily operations of LIRs and ISPs.

Financial Impact: Moderate (100 - 200 kEUR)

Section: Co-ordination Activities

### **Developing New Training Methods**

To adapt the training offered by the RIPE NCC to the differing needs of the audience, new training methods will be developed, particularly focusing on additional training strategies.

The intention is to reach a broader audience, particularly those who are unable to attend RIPE NCC training courses due to geographical, financial, scheduling or other constraints. Offering more accessible training will help members to send better-prepared requests to the RIPE NCC Hostmasters. This aims to ensure a more timely completion of allocation requests.

In addition, the RIPE NCC will develop new forms of training and information dissemination to specifically target non-traditional audiences such as journalists, politicians and administrators. This is a logical progression of the RIPE NCC's outreach efforts developed over previous years. The aim is to encourage well-informed decisions and to win continued support for the existing RIR framework.

Financial Impact: Small (50 - 100 kEUR)

Section: Membership Services

### **Membership Survey**

The RIPE NCC will commission an independent member and stakeholder survey, similar to the survey conducted by KPMG in 2002. Based on the results of this survey and in close interaction with the members and stakeholders, the RIPE NCC will continue to improve its operational quality and organisational structure.

Financial Impact: Small (50 - 100 kEUR)

Section: Membership Services

### **Cross Registry Information Service Protocol (CRISP)**

Responding to requests from the community for a standard, uniform global view of Internet number resources, the RIPE NCC will continue to participate in the IETF process to develop the Cross Registry Information Service Protocol. In 2005, the RIPE NCC will provide server implementation and client tools, while co-ordinating with other server operators, client tool authors, and service providers to encourage use.

Financial Impact: Small (50 - 100 kEUR)

Section: Co-ordination Activities

## **Deployment of Anti-SPAM Measures and SPAM Abuse Policies**

The RIPE NCC will deploy technical facilities to minimise the effect of SPAM towards the RIPE NCC and the mailing lists it provides for members and the RIPE community.

Financial Impact: Fractional (0 - 50 kEUR)

Section: Co-ordination Activities

## **4) Vision and Strategy**

The RIPE NCC will continue to strengthen the open, bottom-up, consensus driven policy-making process that has been central to the RIPE community since its inception. The direction and input of the RIPE community and the RIPE NCC membership will continue to be followed and translated into public and membership services. The RIPE NCC will continue to operate under its principles of openness, transparency, neutrality and impartiality.

Building on its position as a neutral, credible and authoritative organisation, the RIPE NCC will continue to develop relations with a growing community of stakeholders, industry bodies and government representatives. The RIPE NCC will continue its outreach efforts to these groups in order to establish itself as a trusted partner, explain the proven, long-standing industry self-regulatory structures of the Regional Internet Registries (RIRs) and secure continued support for the existing registry process. Not least, the RIPE NCC will use the World Summit on the Information Society (WSIS) process to forge new contacts and communicate the principles of Internet industry self-regulation to policy makers, both in the public and the private sector.

In order to achieve this, the RIPE NCC and the other RIRs will continue to focus efforts through the Number Resource Organization (NRO). The NRO facilitates RIR co-ordination, provides third parties with a convenient single contact point to the RIR system and acts as a body capable of safeguarding the unallocated Internet number resource pool.

The RIPE NCC will continue to pro-actively encourage ongoing consultation with its members in order to assess their changing needs. The RIPE NCC will use feedback received to help make informed decisions and ensure a consistent quality of service to the membership.

## **5) Membership Services**

The key function of the RIPE NCC Membership Services will continue to be the fair distribution of Internet number resource requests to RIPE NCC members.

The number of Internet number resource requests is expected to increase in line with membership growth. The initial response time is expected to remain at around one working day. This was achieved in 2003 and 2004.

Though the number of Internet number resource requests is expected to increase in line with membership growth, the number of Hostmaster staff will remain constant with the

2004 levels. This will be achieved by simplifying user interface and procedures, providing better documentation and further automating processes where possible.

### **Improving Quality of Service and Communication with Members**

The main goal for 2005 is to continue to reduce the overall time it takes members to receive Internet number resources. The RIPE NCC will also focus on improving communication with the members through more direct contact. This will help to resolve issues and requests faster. Building on experience gained in 2003 and 2004, the RIPE NCC will continue to develop the LIR Portal. The LIR Portal enables members to manage their registry data and make queries and updates. The tools provided through this interface help speed the request, evaluation and approval process of Internet number resources.

The RIPE NCC will introduce the RIPE NCC Member Service Desk to provide members with any additional help necessary to resolve queries involving RIPE NCC Registration Services, RIPE Database and RIPE NCC billing procedures.

More information on the RIPE NCC Member Service Desk can be found in the Focus Points, Section 2, of this document.

The RIPE NCC constantly tries to improve and simplify its procedures and documentation. This will continue in 2005. The RIPE NCC will continue to advise the RIPE community on the impact of policy proposals, and co-ordinate the implementation of new policies with the members and the community.

### **Improving RIPE NCC Registration Processes, Efficiency and Interfaces**

The RIPE NCC will begin a systematic consolidation and cleaning up of its internal databases. This effort will improve integrity and consistency of data related to Internet number resources and will allow more accurate planning.

The current Internet resource management software will also be significantly redesigned to enable better tracking of information related to number resources, both immediate and historical, and more efficient support for the registration processes.

In order to provide customers with a consistent service level for all support issues, the RIPE NCC will deploy a company-wide request tracking system. This will enable efficient tracking and transparent handling for all requests inside the company.

The RIPE NCC will continue to develop secure communication channels to ensure members have secure and easy-to-use communication with the RIPE NCC. Along with additional features these channels will include training registration and the RIPE NCC Billing Department.

### **Membership Training**

The RIPE NCC will continue giving training courses throughout its service region.

In addition to training RIPE NCC members, training courses also allow RIPE NCC members to discuss particular issues that affect them directly with RIPE NCC staff. These courses provide a valuable direct communication channel between the RIPE NCC and its members.

As in previous years, teacher-based courses will remain the main training method in 2005. However, to adapt the training offered by the RIPE NCC to the differing needs of the audience, new training methods will be developed, particularly focusing on additional training strategies.

The intention is to reach a broader audience, particularly those who are unable to attend RIPE NCC Training Courses, due to geographical, financial, scheduling or other constraints.

The RIPE NCC has been increasing its outreach to not only RIPE NCC members but also the community as a whole. More training and seminars will be held in 2005 at various meetings, conferences and RIPE NCC Regional Meetings.

The RIPE NCC will develop new forms of outreach to specifically target non-traditional audiences such as journalists, politicians and administrators, progressing from the RIPE NCC's outreach efforts developed over previous years.

### **Regional Support**

The RIPE NCC will continue to develop liaison activities and regional support for members throughout the RIPE NCC service region. Regional support plays a significant role in involving RIPE NCC members, the RIPE community and other stakeholders in the open policy-making process and in defining the activities and services of the RIPE NCC.

RIPE NCC regional support activities will be dominated by a focused effort to proactively encourage feedback from RIPE NCC members and the RIPE community. The primary function of these activities is to ensure that RIPE NCC services meet member needs by developing communication channels for member feedback and increasing the interaction between the RIPE NCC and its members. This will make it easier to continuously evaluate and address the changing needs of RIPE NCC members. To facilitate this, the RIPE NCC will continue to organise RIPE NCC Regional Meetings that promote local contact with members and provide a forum for discussing issues relevant to a specific area of its service region.

In addition, the RIPE NCC will conduct a membership and stakeholders survey in 2005. The focus of this survey will be to give the RIPE NCC membership and stakeholders a formal opportunity to voice their opinions on the services provided by the RIPE NCC. The survey will also help measure the progress that has been achieved since the last survey was conducted in 2002.

### **AfriNIC Support**

The RIPE NCC will continue to support the development of AfriNIC, the emerging Regional Internet Registry for Africa and part of the Indian Ocean.



## **6) RIPE NCC Co-ordination Activities**

### **Improving Data Integrity**

In 2005, the RIPE NCC will focus efforts on improving the accuracy, integrity and consistency of data related to Internet number resources. More information on this activity is available in the Focus Points, Section 2, of this document.

### **RIPE Database**

The RIPE Database will continue to be developed to provide a fast, reliable service that is updated with community-driven changes as they arise. There will be operator-oriented improvements as well as query improvements, including full-text search, uniform hierarchical queries and output formatting.

### **Cross Registry Information Service Protocol (CRISP)**

The Cross Registry Information Service Protocol is being developed within the IETF process. In 2005, the RIPE NCC will provide server implementation and client tools, while co-ordinating with other server operators, client tool authors, and service providers to encourage use.

### **RIPE Meetings and Support**

The goal of these activities is to support the open, bottom-up, industry self-regulatory structure common to all RIR communities in managing Internet number resources.

The RIPE NCC will organise two RIPE Meetings in 2005, providing all administrative and technical support. RIPE Meetings stimulate the participation of the RIPE community in the IP policy-making process and the technical co-ordination of IP networking. These meetings are also essential to the stable operation of the RIPE NCC as guidance and advice from the RIPE Working Groups provide valuable input and feedback on the RIPE NCC Activity Plan.

To increase the awareness and involvement of the RIPE NCC membership and the RIPE community in RIPE Meetings, there will be continued support for those that cannot attend. This will include webcasting and audiocasting of selected sessions, allowing those not able to attend to follow the discussions.

Additionally, the RIPE NCC will continue with trials in collecting feedback from remote participants watching RIPE Meetings via webcast. The mediums used for this will be IRC and Jabber.

The RIPE NCC will also deploy technical facilities to minimise the effect of SPAM on the mailing lists it provides for members and the RIPE community.

### **Deployment of Internet Security Infrastructure (DISI)**

Within DISI, the RIPE NCC supports the RIPE community in the deployment of security-relevant technologies in the Internet infrastructure. The focus is on technologies, the development and deployment of which need to be co-ordinated globally in the Internet infrastructure. This currently consists mostly of Domain Name System Security (DNSSEC).

The RIPE NCC's efforts in the area of DNSSEC deployment include signing the in-addr.arpa zones under RIPE NCC's management, providing input to standardisation efforts by active participation in the IETF DNSEXT and DNSOP working groups, developing and publishing operational procedures, and providing training and software toolkits.

The RIPE NCC monitors the developments in the area of securing BGP. In 2005, reports and recommendations will be presented to, and discussed in, the relevant RIPE Working Groups. During 2005, there will be continuous monitoring of the development of other security-relevant technologies and the RIPE NCC will keep the RIPE community informed about relevant efforts.

### **Domain Name System (DNS) Co-ordination**

The RIPE NCC will continue to provide DNS co-ordination and support activities as well as registrations for IPv4 and IPv6 address space managed by the RIPE NCC.

For reverse mapping address space managed by other RIRs, the RIPE NCC provides a secondary DNS to support the reliability of reverse lookups.

To help ensure simple, correct, reverse DNS, the RIPE NCC will maintain the redesigned system established in 2004 for reverse delegation requests.

The RIPE NCC will also continue to offer a secondary name service and limited support to country code TLD (ccTLD) administrators. Reverse zones are served in a secondary capacity to assist in ensuring the reliability of reverse lookups.

The IAB has an agreement with the RIPE NCC under which it is responsible for providing DNS services in the e164.arpa domain. This domain implements support in the DNS for the ENUM protocol, allowing mapping of telephony services into the Internet. The goal of this activity is to support operations of one of the systems required for the deployment of the ENUM protocol, promoting increased integration between the Internet and services provided through the traditional telephony infrastructure.

The scalability of the DNS infrastructure for secondary, reverse and primary DNS services will continue to be improved based on the requirements specific to each of these services.

In 2005 the RIPE NCC will continue deployment of K-root local nodes in the RIPE NCC service region. The cost for each local node will be covered by the relevant local community.

The RIPE NCC will also deploy several (2-3) K-root global nodes in North America and Asia-Pacific. The RIPE NCC will cover most of the costs of global node deployment.

The main objective of this effort is to improve service performance characteristics, availability and resilience against DoS attacks.

### **Reporting on RIPE NCC and RIPE Developments**

The RIPE NCC will continue its reporting activities in order to provide the RIPE NCC membership and other interested parties with open, detailed information about the ongoing activities of the RIPE NCC and its role in Internet administration. This will be done through the RIPE NCC website, distribution of the annual report, including financial statements, the Member Update newsletter and e-mail reporting to RIPE NCC members and interested parties.

In order to ensure that members and stakeholders are aware of the issues and developments to be discussed at RIPE Meetings, the RIPE NCC will continue to distribute the Member Update to the membership prior to each RIPE Meeting. The Member Update provides information on the RIPE NCC and the development and performance of its services to the membership and encourages participation on the RIPE Working Group mailing lists. This project furthers the RIPE NCC's efforts to communicate more effectively with its membership and stakeholders and to increase participation in RIPE.

### **RIPE NCC External Relations**

To promote the open structures and processes in which RIPE and the RIPE NCC operate, the RIPE NCC will continue its external relations efforts. This will help to represent the RIPE NCC membership and the RIPE community to new and existing industry players and governments showing an interest in Internet administration. A primary objective is to ensure that the RIPE NCC and the RIPE community continue to play an effective role in the further formalisation of Internet administration.

To ensure that the RIPE NCC members are represented in the appropriate industry and government forums the RIPE NCC will target specific industry, government and regulator sectors. The aim of this targeted support is to increase their understanding of, and support for, the long-established, bottom-up industry self-regulatory processes. In addition, developing close contact with these targeted sectors allows the RIPE NCC to effectively address any concerns they might have. For the Internet community as a whole, it is vital that government, industry and regulators have an informed understanding of Internet address space management and distribution.

Underlying all external relations activities will be a continued commitment to strengthening the open, bottom-up, self-regulatory structure established in RIPE (Réseaux IP Européens), the collaborative forum. To this end, the RIPE NCC will participate in inter-RIR co-ordination and in the presentation of a global view of IP address management and the convergence of RIR services and policies.

An important aspect of this RIR co-ordination will continue to be the Number Resource Organization. The NRO facilitates RIR co-ordination, provides third parties with a convenient single point of contact for the RIR system and acts as a body capable of safeguarding the unallocated Internet number resource pool.

The RIPE NCC, in collaboration with the other RIRs and a range of industry partners, will continue to be involved in the public, global debate surrounding the World Summit on the Information Society (WSIS). The outcome of the WSIS could impact seriously on the bottom-up, industry self-regulatory processes that have underpinned the Internet since its inception. It is therefore essential that the RIPE NCC and the other RIRs actively participate in these discussions and work together to represent the needs of their members and the Internet community as a whole.

The RIPE NCC's external relations efforts will be supported by the advice of an international consultancy with proven experience in electronic communications and in developing key contacts within Internet industry organisations and governments in the RIPE NCC service region.

## **7) Information Services**

In 2005, the RIPE NCC will continue the development and rollout of Information Services. The RIPE NCC will focus efforts in 2005 on making the full benefits of Information Services more evident and accessible.

### **Routing Information Service (RIS)**

The RIS will continue to provide an integrated view of Border Gateway Protocol (BGP) routing information collected at multiple locations worldwide. This service is unique in its capability to integrate multiple views and provide information about the routing state at specific times in the past. LIR-targeted monitoring via myASn was added in 2004 and will continue to be offered. There will be further enhancement of the RIS based on data analysis and community feedback.

### **Active Measurements**

The RIPE NCC will continue to operate its active measurement network at the present locations and continue with its efforts to expand it with more sites. The data will be made available to the entire community for both operational and statistical analysis. In 2005, the platform is expected to be used for Test Traffic Measurements (TTM), DNS Monitoring (DNSMon) and additional active measurements:

#### **Test Traffic Measurements (TTM)**

The highly accurate one-way-delay and one-way-loss measurements will continue, along with collecting path data. Derived products such as trend plots, IP Packet Delay Variation (IPDV) and others will continue to be offered. The service fee for the sites using this service will not be changed.

#### **DNS Monitoring (DNSMon)**

The RIPE NCC provides DNS Monitoring as a free service to the Internet community in order to give an objective and up-to-date service overview of DNS root and participating Top-Level Domain (TLD) name servers.

For interested parties, TLD operators in particular, value added services such as monitoring of specific name servers and access to the DNSMon helpdesk will be provided for an additional cost recovery fee.

#### **Additional Active Measurements**

The Active Measurements Network can accommodate additional active measurements. Currently studies in the areas of Bandwidth and VoIP are underway. Results will be presented to the Test Traffic Working Group and further development plans will be discussed there.

### **Reporting and Statistics Collection**

The purpose of reporting and statistics collection is to provide authoritative data and reports relevant to users ranging from network operators, RIPE Working Groups, industry bodies, governments and the media.

Initially, the RIPE NCC's reporting and statistics collection efforts will focus on areas relating to RIPE NCC core services. In 2005, the presentation of the data will be developed so that it more closely meets the needs of its targeted audiences.

Wherever possible other statistics gathered will be incorporated in order to improve crosschecks and cross referencing as well as to unify the presentation of statistics and to improve their accessibility. Collaboration with other efforts in this area, such as the Internet Measurement Data Catalog (IMDC) project by CAIDA, will be increased.

The accuracy and usability of the Hostcount will be studied. A report, with suggestions for improvement, will be presented to the community for discussion and possible implementation.

### **8) Unforeseen Activities**

These activities are entirely unforeseen at the time of writing the activity plan or have started recently and are not at the stage where they can be developed as regular services. A new activity will only be started after thorough analysis of its need, with a clearly communicated project plan, deliverables, budget and timeline. A quick, well-focused reaction to the changing environment and new requirements of the RIPE NCC members and other stakeholders has always been a strong point of the RIPE NCC.