RIPE NCC Activity Plan 2004

1) Executive Summary

Following the analysis of RIPE NCC membership growth so far in 2003, a net growth of 6% is projected for the year 2003, as compared with a net growth rate of 5% in 2002.

Conservative growth estimates assume that this growth could decline by 2% over 2004, with a total net increase in membership of 4%.

The total expenses budget for the planned activities in 2004 is 10,263 kEUR. This is an increase of 4.6% from the 2003 budget. This increase will cover the planned activities for improving the RIPE NCC's contact with its membership.

For 2004, it is estimated that the amount of number resource requests received by the RIPE NCC will increase by around 10% while RIPE NCC Hostmaster staff will remain at the 2003 level. The initial response time is expected to remain stable at around one working day, consistent with the level achieved in 2003. Focus in 2004 will move to decreasing the overall time to completion of number resource requests.

Total revenues of 10.8 MEUR will cover all expected expenses and are expected to lead to an approximate surplus of 0.5MEUR to further replenish the RIPE NCC reserves against the loss incurred in 2002.

2) Focus Points 2004

In 2004, the RIPE NCC will focus on continuing to improve the quality of service it provides to the membership and will develop channels to enable quicker, easier and more efficient interaction with individual members.

In addition, the RIPE NCC will build on its position as a neutral, credible and authoritative source to foster open forum discussions and to supply timely and accurate network and Internet-related information to the Internet community.

Quality of service

Focusing on the quality of its core services, the RIPE NCC will improve the process of providing Internet resource distribution to members. This will include streamlining the registration of these resources and simplifying the procedures and the documentation.

The RIPE NCC will build on the success of the initiatives in 2003 to reduce response times and to offer more services through a customised web interface. A primary goal for 2004 will be to reduce the time to completion for Internet resource requests and to increase member access to RIPE NCC services.

Membership support

As a result of the feedback received from the 2002 RIPE NCC Membership and Stakeholders Survey, the RIPE NCC will continue to develop mechanisms providing members with secure, efficient, and simplified access to the RIPE NCC's core services. A service will be developed that enables members to resolve queries and problems through direct telephone contact with the RIPE NCC staff. There will also be efforts to provide assistance to members in specific areas of the service region and to offer them advice on issues of relevance at a local level. This will be combined with a continued commitment to maintaining the high standard of training courses. We plan to develop training formats that take into account the diverse geographical, cultural and logistical factors of our member base.

The RIPE NCC will focus on communication channels that provide relevant information to the appropriate audience as a response to one of the primary member suggestions expressed in the membership survey. These channels include RIPE NCC web pages, mailing lists and printed publications, such as the Member Update, designed to update RIPE NCC members on RIPE NCC services and policy development issues.

Qualitative and accessible information supply

In 2004, the RIPE NCC will improve the quality, range and accessibility of the data it provides. This includes specific focus on public registration data, such as the routing registry and IP address allocation information stored in the RIPE Database. The RIPE NCC will also improve the access to, and quality of, its operational statistics.

The RIPE NCC will continue to increase the quality of the public data sets it produces by adapting collection methods and cross-checking with other RIRs. Collection and storage methods will be reviewed and adapted where necessary. The RIPE NCC will also develop a consistent form of presentation with concise information about what the data is, why and how it is collected, as well as its usefulness and limitations.

The RIPE NCC will discontinue TTM as a closed user group service. This service will be incorporated into the RIPE NCC publicly available Information Services, as outlined in Section 5 of this document. Therefore the activities that used to be covered by TTM in Membership Services have moved to Information Services.

3) Membership Services

Improving member service and increasing contact with members

The primary membership service activity will continue to be serving members' requests for Internet resources in the RIPE NCC service region. The goal for 2004 will be to reduce the overall time it takes for members to receive the resources they requested and to maintain the current low response times.

For 2004, it is estimated that the number of Internet resource requests received by the RIPE NCC will increase by around 10% while RIPE NCC Hostmaster staff will remain at the 2003 level. Through sustaining the efficient levels of performance achieved in 2003, the initial response time is expected to remain stable at around one working day, consistent with the level achieved in 2003.

Building on the service improvements made in 2003, the RIPE NCC will continue to support, strengthen and facilitate further improvements to membership services by focusing on:

- creating effective communication channels to enable more direct contact with members
- introducing easy to use web-interfaces for accessing RIPE NCC services, such as the LIR Portal
- renewing resource management software
- simplifying procedures and documentation

In addition, the RIPE NCC will be proactive in advising the RIPE community on the operational impact of policy proposals as well as co-ordinating the implementation of new policy with RIPE NCC members and the RIPE community.

Membership training

The RIPE NCC will continue to spread training courses throughout the service region. Apart from the educational benefit of the training courses, they also act as a valuable communication channel for receiving feedback from RIPE NCC members. To fulfil the differing requirements of the membership, the RIPE NCC will initiate the development of new training formats in order to reach a broader cross-section of the membership. Teacher-based courses will remain the main training method in 2004.

As a result of the positive reactions received in 2003, the RIPE NCC will continue with the development of the advanced courses on Routing Registry and DNSSec. However, the number of these training courses will not be increased in 2004.

Creating new member feedback channels

Feedback from the membership survey highlighted a consistent need for a more direct form of communication and membership service flexibility when contacting the RIPE NCC. To address this need, the RIPE NCC will develop the Talk NCC project, which aims to provide telephone support for both existing and prospective members. This will aid in reducing the completion time of requests by improving the support given to members.

In order to strengthen membership interaction, the RIPE NCC will develop the role of the Membership Liaison Officer (MLO). The MLO is responsible for managing liaison

activities and regional support to all members throughout the RIPE NCC service region. 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 include establishing close contact with the RIPE NCC Services Working Group and following a more focused approach to industry related meetings and events that are attended. This will make it easier to continuously evaluate and address the changing needs of RIPE NCC members.

The MLO will also co-ordinate regional support activities that will enable the RIPE NCC to establish and maintain direct contact with members across its entire service region by:

- educating and supporting members
- encouraging member input and participation in the activities of the RIPE NCC
- monitoring the effect of procedural and policy changes on members

4) RIPE NCC Co-ordination Activities

RIPE Database

The RIPE Database will continue to be developed to provide a fast, reliable service supported by maintenance from the RIPE NCC Database Department. To ensure a consistently high level of user satisfaction, the RIPE Database service will be enhanced by providing better training, documentation and simplified interaction with the database.

There will be a comprehensive review of the messages that users see at each point where they interact with the Database and all documentation associated with the RIPE Database service. One of the results of this will be a web interface structured with searches and wizards to help users solve their problems.

Regular projects will be continued in 2004 to ensure the quality of service offered to users. The primary aim of these projects will be to deliver ongoing improvement to the data quality in the database and software developments to meet changing user needs. Database improvements will include the addition of an organisation object to track holders of resources in a more natural way and the implementation of cross-registry routing authorisation checks. The provision of reverse delegation requests and maintenance will be redesigned to ensure simple, correct, reverse DNS. An off-site database server will be developed as a back-up system.

RIPE Meetings

The RIPE NCC will organise three RIPE Meetings in 2004, providing all administrative and technical support. The RIPE Meetings enable attendees to participate in Internet policy-making discussions and to meet industry players, business partners and organisations from the RIPE region and beyond. Additionally, various tutorials of interest to network operators and administrators are provided.

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 essential to the stable operation of the RIPE NCC as guidance and advice from the RIPE Working Groups are invaluable to the RIPE NCC in:

- developing IP address policies in the RIPE NCC service region
- defining its annual activity plan

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

Reporting on RIPE NCC and RIPE developments

The RIPE NCC will extend 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 distribution of the annual report, including financial statements, the Member Update, and email reporting to RIPE NCC members and interested parties.

The Member Update publication provides information on the RIPE NCC and the development and performance of its services to the membership. It also provides updates on IP policy development. This project furthers the RIPE NCC's efforts to communicate more effectively with its membership and stakeholders, and to increase participation in RIPE.

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.

A primary goal for 2004 will be to restructure the RIPE NCC's web site to offer simplified navigation, increased focus on the needs of members and improved access to

documents. The redevelopment of the web site will also help to clarify the different roles of RIPE and the RIPE NCC.

Co-ordinating the 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 main focus at the moment is on DNSSec. Based on the adoption of DNSSec standards by the IETF, it is expected that the first in-addr.arpa zones under RIPE NCC management can be signed early in 2004. By mid-2004, this will have become a production service. The RIPE NCC will continue to offer courses on the subject and to develop them as DNSSec, and its deployment, progresses.

At the same time, there will be continuous monitoring of the development of other security-relevant technologies that need to be deployed in the Internet infrastructure or need to be centrally co-ordinated. The RIPE NCC will keep the community informed about these technologies and start a deployment support effort as soon as it is necessary and practical. In 2004 there will be particular attention given to developments in the area of securing BGP.

The RIPE NCC supports the operation of one of the root DNS servers - k.root-servers.net. The RIPE NCC will ensure adequate performance and responsiveness of the service as well as its resilience against DoS attacks. Based on successful deployment of two anycast clusters located at the LINX in London and the AMS-IX in Amsterdam, new anycast instances of k.root-servers.net will be deployed. The service will be provided using nsd, a high performance authoritative DNS name server software that NLnet Labs have developed in co-operation with the RIPE NCC.

RIPE NCC External Relations

Following the feedback received from the membership survey, the RIPE NCC will continue its external relations activities to ensure that the RIPE NCC represents its members in the appropriate industry and government forums. 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.

The goal of the external relations and liaison efforts is to ensure that the open structures and processes in which RIPE and the RIPE NCC operate will be promoted to new and existing players. This will help to represent the RIPE membership and RIPE community to new industry players and governments showing an interest in Internet administration. A primary objective is to ensure that the RIPE NCC continues to play an effective role in the further formalisation of Internet administration.

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.

Underlying all external relations activities will be a continued commitment to strengthening the open, bottom-up, self-regulatory structure established in RIPE.

RIR Co-ordination

In 2004 the RIPE NCC will continue to actively participate in inter-RIR co-ordination both on policy and engineering matters.

At the level of global Internet administration, the RIPE NCC will liaise, communicate and co-ordinate activities with other RIRs. An important activity will be the continuation of the ERX project, which involves transferring early registration data to the appropriate RIR responsible for the address range. This project will provide LIRs with easier management of their resources within the appropriate region.

The RIPE NCC will also continue to offer its support to the African Internet community in their development of the emerging RIR for Africa (AfriNIC).

5) Information services

In 2004 the RIPE NCC will develop simpler and ready-to-use information services. The challenge will be to develop information services that are simple, meaningful and that also maintain scientific credibility. One area that will be developed is the provision of simplified measurements for the Internet in general: for example, measurement of global or regional routing stability across all providers. A Network Operation Centre (NOC) could use such measurements to determine quickly whether any instability is local to its responsibility or is more widespread. Another area that will be developed is to create personalised views on the data such as the "myAS" service that provides user configurable history data and alarms based on the RIS measurements and various registration databases.

The following services will be developed during 2004:

Routing Information Service (RIS)

The RIS will continue to provide an integrated view of 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. During 2004, the RIPE NCC will continue to develop the "myAS" interface to the RIS.

Active Measurement Service (AMS)

The closed user group for TTM measurement data will be discontinued.
The deployed measurement network is a unique resource. The RIPE NCC will continue to operate this network at those locations that agree to the open publication policy proposed in RIPE 271 ("RIPE NCC Hostcount in the 21st Century") as well as at additional locations. This network will be used to provide the new Active Measurement Service (AMS). In 2004, the highly accurate one-way-delay and loss measurements will be publicly available along with the periodic path data. A new part of this service will provide data about the service quality of DNS servers at high levels in the DNS tree. The AMS network can accommodate additional active measurements.

Statistics Collection Service (SCS)

The RIPE NCC Hostcount will be thoroughly analysed and revised to ensure its continued usefulness as well as keeping intact the substantial time series that has been collected. Wherever possible other statistics gathered will be incorporated into this service in order to improve cross-checks, cross reference and to unify the presentation and improve accessibility.

Incident Response Service (IRS)

Procedures will be set up to quickly provide RIPE NCC members, the Internet community and the general public with authoritative data about unusual events on the Internet, such as DDoS on the RIPE NCC.

6) New Activities

New activities are either entirely unforeseen at the time of writing this 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.

7) Vision and strategy

Supporting the RIPE community

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.

Independence, reinforced by community support, has always been a cornerstone of the RIPE NCC operations. The RIPE NCC will continue to operate under its principles of openness, transparency, neutrality and impartiality.

The activities of the RIPE NCC will be dominated by a focused effort to proactively encourage feedback from RIPE NCC members and the RIPE community. There will be an increase in the support provided for those unable to attend RIPE Meetings.

Facilitating Internet co-ordination

The RIPE NCC will focus Internet co-ordination efforts on:

- establishing regular reports including general statistical and measurement information about the Internet
- promoting the RIPE NCC as a credible reference point for reliable, scientifically derived, easily accessible and understandable information
- developing strong liaison activities with public, policy forming bodies

The RIPE NCC will continue efforts to co-ordinate activities and policies with other RIRs.

Improving Internet stability and security

Over the course of 2004, the RIPE NCC will improve Internet stability and security by promoting and co-ordinating the deployment of security measures with ISPs such as securing the reverse delegation DNS tree employing DNSSec.

The RIPE NCC will build on this previously established knowledge to prepare for services that further secure Internet reliability, such as authenticating resource holdership, and supporting secure Internet routing mechanisms. These services will help counter practices such as the hijacking of Internet address space for spamming purposes, and the unauthorised injection of bogus routes into the Internet routing tables.

Building on its position as a neutral and credible source for information about the Internet infrastructure, the RIPE NCC will develop its information supply service to become one of the key sources for accessible and ready-to-use data on Internet measurements and usage.