

Annual Report

RIPE Network Coordination Centre



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1. Foreword

The RIPE Network Coordination Centre (RIPE NCC) started operation as the first Regional Internet Registry (RIR) in the world in April 1992 and was incorporated as a not-for-profit association in November 1997. Under Daniel Karrenberg's leadership the RIPE NCC grew from three people in 1992 to 59 staff representing 20 nationalities in 1999. At the same time the number of Local Internet Registries (LIR) supported by the RIPE NCC increased from 26 to just under 1,700 in 1999. After more than seven years of service, Daniel has stepped down as General Manager of the RIPE NCC for personal reasons. During these years the RIPE NCC was a showcase to the world. Neutrality and impartiality in its operations, an international composition of staff and service orientation were among the guiding principles in the development of the RIPE NCC. We are very happy that Daniel is still with us as Chief Scientist and I would like to use this opportunity to thank him and his staff for bringing the RIPE NCC to where it is today. Axel Pawlik has been appointed as the new Managing Director of the RIPE NCC and we are confident that he will develop the RIPE NCC even further.

In addition to the changes internally, the RIPE NCC has experienced many changes externally. During 1999 major steps were taken in the process to formalise the Internet administration on the basis of self-governance. The Internet Corporation for Assigned Names and Numbers (ICANN) and the three RIRs signed a Memorandum of Understanding (MoU) to create the Address Supporting Organisation (ASO). The RIRs are the members of the ASO. Policy will be developed within the existing open processes in the regions. As such, the open forum RIPE is also fully integrated in the ASO. The selection of the regional representatives for the Address Council is organised within the open processes of RIPE. From the RIPE NCC service region three persons were appointed as members of the Address Council: Sabine Jaume, Hans Petter Holen and Wilfried Wöber. Finally, Rob Blokzijl was appointed as member of the ICANN Board.

Many thanks to the three RIRs and all organisations and individuals who participated in this process. We have secured a clear and qualified presence from the RIPE NCC service region in the ICANN governance structure and now have a good basis from which to participate in its further evolution.

Kees Neggers



Chairman of the Board

2. Outlook for 2000

2000 will mark eight years since the idea of the RIPE NCC was realised. During these years one factor has remained stable: exponential growth. The RIPE NCC anticipates even more new and exciting developments, including greater penetration of the Internet into daily life, the increasing deployment of “always-on” Internet access and the introduction of new mobile Internet services. These new applications will also demand continued flexibility; a key challenge this year will be to identify these needs and integrate them into the well established RIPE and RIPE NCC framework.

The RIPE NCC will rise to the challenge and is already preparing a carefully planned expansion of facilities and staff to accommodate the growing demand. Particular attention will, as always, be given to registration services as they are the backbone of the RIPE NCC operations.

At the Annual General Meeting held on 19 October 1999 in Amsterdam, the RIPE NCC Activities and Expenditure Plan 2000 was unanimously approved by the membership. Based on this plan, the RIPE NCC will continue to develop new activities and services that are requested by the membership and the RIPE community and that require co-ordination in the common framework of the association. During 2000, the Test Traffic Project will be transformed into a service that will be charged as a membership service in 2001. The Routing Information Service will be launched and more focus will be placed on the routing registry consistency. It is planned to investigate how to support the deployment of secure DNS. New training courses geared towards the more experienced LIRs will be developed to supplement the popular LIR training courses currently offered.

In the area of Internet governance the RIPE NCC has seen the ICANN set-up near completion. With the ICANN Address Supporting Organisation now in place, the Regional Internet Registries are committed to support its work. It is in this spirit that the RIPE NCC will organise the ASO open meeting in 2000, taking place after the RIPE 36 meeting in Budapest. During the coming year the RIPE NCC will continue to monitor and play an influential role in ICANN activities.

The year will see the RIPE NCC focus on strengthening existing ties and fostering relations with new and non-traditional players. As advised by the RIPE NCC Executive Board and membership, the RIPE NCC will create the position of “External Relations” to take on this demanding task.

The RIPE NCC strongly continues to support the efforts of emerging RIRs in all areas, while carefully respecting the autonomy and authority of local communities.

We look forward to another year full of challenges that the RIPE NCC will tackle together with the other RIRs and its partners in the industry.

3. RIPE NCC Information and Overview

The RIPE Network Coordination Centre is an association of 1,696 members, primarily comprised of Internet Service Providers (ISP), representing 109 countries in its service region. The RIPE NCC services and co-ordination activities support the operation of the Internet infrastructure. The infrastructure itself however, is not operated by the RIPE NCC; this falls within the realm of the activities of its membership, among others.

The mission of the RIPE NCC is to perform activities for the benefit of the membership; primarily activities that the members need to organise as a group, although they may be competing with each other in other areas. While an activity may result in services being provided to an individual member, performing the activity as a whole must benefit the RIPE NCC membership as a group. Membership is open to anyone using the RIPE NCC services.

As the Internet grew, a need for a bottom-up industry self-regulatory entity for operational co-ordination was identified. The RIPE NCC emerged from RIPE (section 5) and started operations in April 1992. Since 1 January 1998, the RIPE NCC has been operating as a not-for-profit association. 1999 marks the second year of independent operation for the association. RIPE however, continues to play an influential role in the further development and formalisation of Internet administration in the RIPE NCC service region.

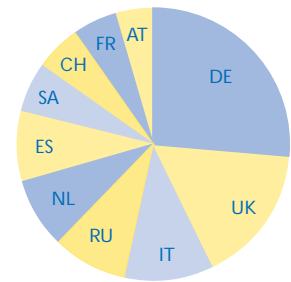
The RIPE NCC is one of three existing Regional Internet Registries and its service region incorporates Europe, The Middle East, Central Asia and African countries located north of the equator (see map - p.5). The other RIRs are APNIC, serving the Asia Pacific Region, and ARIN, serving North and South America, the Caribbean and African countries located south of the equator. The RIPE NCC's organisational structure consists of:

- Members, who vote on issues during the Annual General Meeting and provide general input through participation at open RIPE meetings
- An Executive Board, appointed by the RIPE NCC membership
- RIPE NCC staff

The RIPE NCC Executive Board was formed in November 1997 prior to RIPE NCC's establishment as an independent association. The Executive Board includes persons with expertise in the Internet community and represents the various interests of the members and the RIPE NCC service region as a whole. The RIPE NCC Executive Board members in 1999 were: Keith Mitchell (Chairman - until November), Kees Neggers (Chairman - since November 1999), Wim Vink (Treasurer), Mike Norris (Secretary), Frode Greisen (ASO Liaison) and Nigel Titley (since October 1999).

The activities and services of the RIPE NCC are defined, performed, discussed and evaluated in an open manner. New activities are mainly suggested by the RIPE community and results of activities are made available to the public. Budgets as well as actual income and expenditures are published. All data submitted by its members, however, are kept in strict confidence.

Top Ten New LIRs
Per Country 1999 *



Germany	111
UK	69
Italy	45
Russia	37
Netherlands	35
Spain	35
Saudi Arabia	25
Switzerland	23
France	22
Austria	19

* This graph shows the countries in the RIPE NCC Service Region with the highest growth in new members.

APNIC: <http://www.apnic.net>

ARIN: <http://www.arin.net>

One of the core activities of the RIPE NCC is to act as the Regional Internet Registry in its service region. The most prominent services are the assignment and allocation of IP address space, inter-domain routing identifiers (currently BGP autonomous system numbers) and the management of reverse domain name space (currently in-addr.arpa and ipv6.int). These areas of activity also include auditing and quality control of IP requests, training of LIRs and producing the documentation related to registration activities. The services provided ensure the fair distribution of global Internet resources required for the stable and reliable operation of the Internet.

The RIPE NCC also provides services for the benefit of the Internet community at large, including development and maintenance of the RIPE database. The database provides information about address space, domain objects, routing policy and contact information. Other activities include the administrative support for the RIPE community and the research and co-ordination of new projects. All activities and projects are described in the annual activity plan and budget that are approved by the membership. The RIPE NCC Activities & Expenditure 1999 can be found at:

<http://www.ripe.net/ripe/docs/ripe-186.html>

New Countries Served in the RIPE NCC Region *	
ISO code	Country
PS	Palestinian Territory, Occupied
UG	Uganda
TN	Tunisia
QA	Qatar
LY	Libyan Arab Jamahiriya
LI	Liechtenstein
FO	Faroe Islands

* Countries are shown as found in the ISO 3166 code list

In all of its activities the RIPE NCC observes strict neutrality and impartiality with respect to individual members. In particular it refrains from activities that are clearly in the domain of the ISPs themselves.

The RIPE NCC currently provides services for members in 83 countries. The map below depicts the three Regional Internet Registry regions. A detailed map of the RIR service regions can be found at:

<http://www.ripe.net/region-maps>

RIR Service Regions



RIPE NCC Actual and Projected Membership

	1998	1999	2000
	Actual	Actual	Projected *
Small	935	1,257	1,800
Medium	253	346	285
Large	75	93	85
Total	1,263	1,696	2,170

* The projection is as of September 1999

At the end of 1999 the RIPE NCC membership consisted of 1,696 Local Internet Registries (LIRs). In 1999, 433 new members joined the RIPE NCC. Countries in the RIPE NCC region that experienced the highest growth in new members were: Germany, United Kingdom, Italy, Russia, The Netherlands, Spain, Saudi Arabia and Switzerland. The chart (left) illustrates the actual membership figures of small, medium and large LIRs for the past two years as well as the projected membership for 2000. More information about the RIPE NCC is available at:

<http://www.ripe.net/>

4. RIPE NCC Services and Projects

The RIPE NCC is committed to providing high quality services and support to its members and the RIPE community. Input and feedback are therefore essential.

A member survey was conducted through an online questionnaire at the end of 1998 by the RIPE NCC. The results of the survey were published both online and at the RIPE 32 meeting in January 1999, highlighting key areas of attention and providing valuable input for the RIPE NCC to consider in its ongoing operations and future planning.

The outcome has led to several improvements and modifications to services and projects during the 1999 operating period. Possibly the most visible change occurred with the restructuring of the RIPE NCC Website with emphasis placed on better navigation, improved information architecture and a clear definition of the activities of the RIPE NCC and RIPE. Improvements and achievements in services and projects are outlined further in this section.

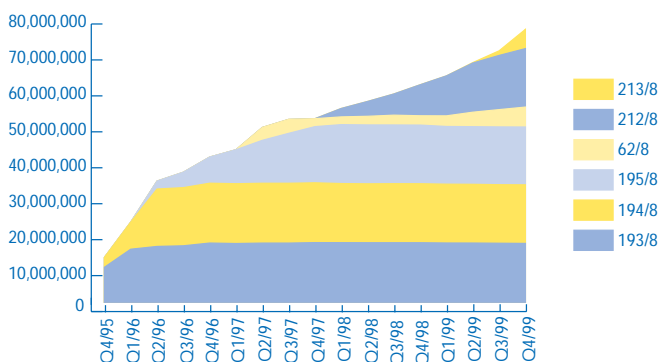
Registration Services

As a Regional Internet Registry, one of the main activities of the RIPE NCC is to provide registration services to its members. The overall goal of this activity is to provide fair, impartial and stable distribution of Internet numbers, particularly IP address space and Autonomous System numbers in the RIPE NCC service region.

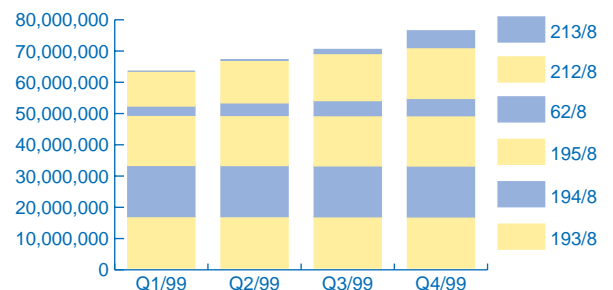
The tasks performed also include training, auditing and quality control necessary to ensure fair and expedient distribution of the resources. These criteria are further applied when members, acting as LIRs, provide registration services to their customers.

6

IPv4 Address Space Usage 1995-1999



Total IPv4 Allocations 1999



In the past year, the RIPE NCC has allocated circa 15,400,000 addresses. A total of 16,092 requests were processed.

In the auditing activity, 191 LIRs were audited to ensure compliance with the address assignment and allocation policies and procedures. For further

information about the audit activity please refer to the RIPE NCC Consistency & Auditing Activity document at:

<http://www.ripe.net/ripe/docs/ripe-170.html>

<http://www.ripe.net/ripencc/mem-services/registration/audit/>

As an important part of the support extended to the LIRs the RIPE NCC also provides training courses for the membership. In 1999, the RIPE NCC conducted 34 LIR Training Courses in 20 different countries. The countries covered are shown in the map below. New training course material was developed during the year covering new topics and containing practical hands-on sections. Further information about the Local Internet Registries Training Courses can be found at:

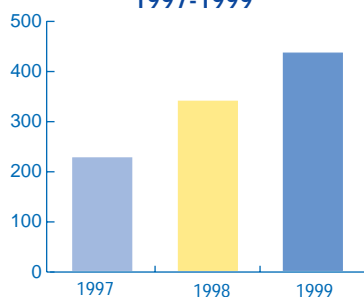
<http://www.ripe.net/ripencc/mem-services/training/>

Countries where LIR Training Courses were held in 1999



During 1999, The RIPE NCC gave courses in: Amsterdam , Athens , Barcelona , Berlin , Birmingham , Bratislava , Brussels , Budapest , Glasgow , Helsinki , Istanbul , Lisbon , Milan , Moscow , Munich , Oslo , Prague , Riyadh , Sofia , Strasbourg , Vienna and Warsaw.

Membership Growth 1997-1999



As the graph (left) clearly demonstrates, a significant growth of new Local Internet Registries was experienced in 1999. The number of new members established in 1999 was 433 representing a notable increase when compared to the 356 members established in 1998. The set-up process of new LIRs has been further improved through enhanced automation and additional, comprehensive documentation, flowcharts and Frequently Asked Questions. This information is located in the "New Members" section at:

<http://www.ripe.net/ripencc/new-mem/>

Another important activity is the co-ordination of services and policies with the other Regional Internet Registries. The close and productive co-operation between the Regional Internet Registries in 1999 resulted in significant

achievements. As in previous years, RIR staff members continued to participate actively in each other's meetings resulting in a successful exchange of information and experiences. In addition, the RIPE NCC provided staff resources to APNIC for a period of one month, constructively contributing to the excellent relations between the RIRs.

Significant to all of the RIRs and to the user community is the roll-out of IPv6. The co-operation between the Regional Registries and the user community intensified during the development of the "Provisional IPv6 Assignment and Allocation Policy Document". This document can be found at:

<http://www.ripe.net/ripe/docs/ripe-196.html>

A total of eleven IPv6 Allocations were made to members in the RIPE NCC service region in 1999. Allocations in the other regions consisted of two IPv6 allocations in the ARIN service region and seven IPv6 allocations in the APNIC service region.

Based on the feedback received from the membership survey at the start of the 1999 operating year, a web interface for the IP request form "European IP Address Space Request Syntax Checker" has been implemented. The form can be found at:

<http://www.ripe.net/cgi-bin/web141/web141.pl.cgi>

In addition, the source code of the automatic syntax check for IP request forms has been publicly released to enhance the service provided to the RIPE NCC members. More information about Registration Services can be found at:

<http://www.ripe.net/ripenncc/mem-services/registration/>

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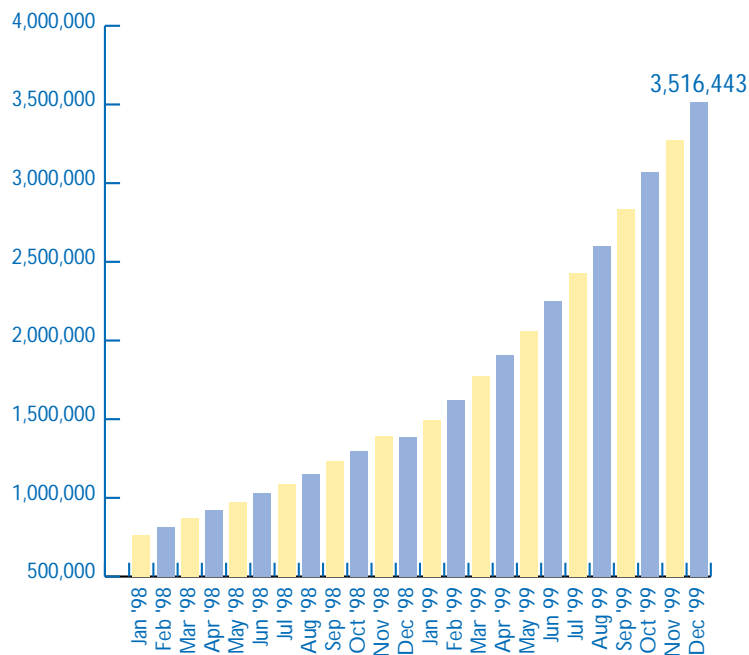
Database Services

Another prominent activity of the RIPE NCC is the operation and maintenance of the RIPE Whois database and the implementation of new database functionality requested by the membership. The RIPE Whois database is located at:

[whois -h whois.ripe.net](http://www.ripe.net/db/whois.html) or <http://www.ripe.net/db/whois.html>

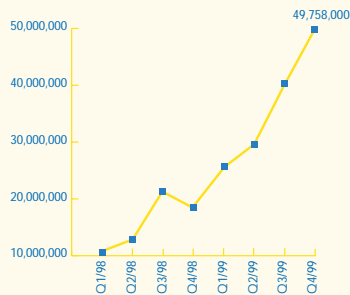
During 1999, the number of objects in the database more than doubled from 1,390,040 to more than 3,500,000. The following graph illustrates the growth in the number of objects over the past two years.

Objects in the RIPE Database 1998-1999



In 1999, the RIPE NCC experienced a significant increase in the number of queries serviced by the database. By the year end, the database was answering roughly 50 million queries per quarter, up from 25 million queries during the first quarter of 1999. At the same time the number of updates has increased from almost 196,000 per month to approximately 485,000 per month.

Whois Queries 1998-1999



To meet the demands of this explosive growth and maintain the highest standard of service the RIPE NCC has worked on two efforts in parallel. A short-term solution to increase the performance of the current database software was realised in the form of releases 2.3 and 2.3.1. Several functionality enhancements were also extended. Most of the effort, however, has been in a long-term undertaking to completely rewrite the database software to better support the rate of growth and facilitate the maintenance and further development of the database functionality. This project is scheduled to deliver a complete new set of code in 2000.

In addition to these developments the RIPE NCC continues to provide user support and to monitor the data quality in the database. This activity has provided beneficial information to users in order to maintain current data in the database. In addition to the reports the RIPE NCC provides suggestions as to possible fixes to the data wherever possible.

Training has also been a part of the database support activities. An RPSL tutorial was delivered at the RIPE 32 meeting held in Amsterdam in January 1999, and at the RIPE 33 meeting held in Vienna in May 1999. Database training is also a part of the LIR Training Courses. More information about Database Services can be found at:

<http://www.ripe.net/ripencncc/pub-services/db/>

DNS Services

Associated with the assignment of address space is the setting up of the appropriate entries in the DNS to enable the reverse mapping of the addresses. This remains the primary DNS activity carried out by the RIPE NCC.

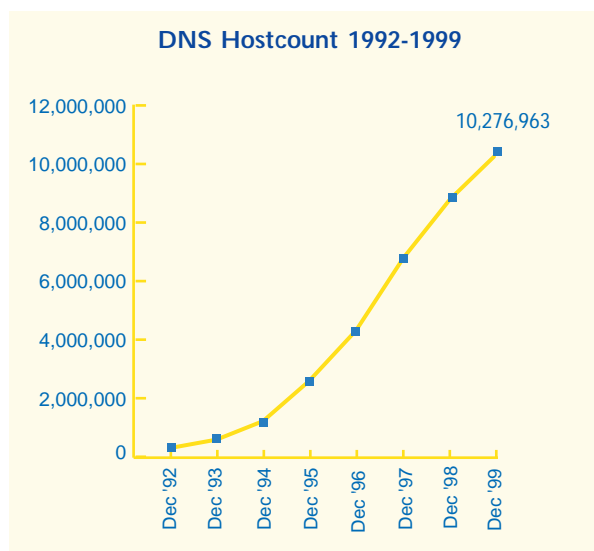
The automatic software that handles related requests from LIRs was completely rewritten in 1999 to improve the request process both for the LIRs and the RIPE NCC. The new software will be installed early in 2000. More information about reverse delegation and the RIPE NCC is available at:

<http://www.ripe.net/ripencc/pub-services/stats/revdns/>

In 1999, the RIPE NCC provided a stable and professional secondary DNS name service to 81 country code top-level domains, continuing its policy of providing the service to any ccTLD upon request.

The RIPE NCC is also responsible for the operation of one of the DNS root name servers which is physically located at and operated in co-operation with the London Internet Exchange (LINX).

Since 1992, the RIPE NCC also reports on the growth of the European Internet via the monthly RIPE Region Hostcount. All of the DNS zones under the Country Code Top Level Domains (ccTLDs) in the RIPE Region are examined. The RIPE NCC publishes summary statistics derived from this data. During 1999, the number of hosts registered in the DNS for the RIPE Region increased by 2,405,046 to 10,276,963.



More information about the Hostcount is available at:

<http://www.ripe.net/ripencc/pub-services/stats/hostcount/>

Test Traffic Project

The Test Traffic Measurements project is designed to reliably and impartially measure performance characteristics of the inter-provider Internet. This is achieved by installing so-called "test-boxes" at participating ISPs. These test-boxes send measurement traffic to each other. From this traffic, packet-losses and network delays are determined according to the metrics developed by the IETF IP Performance Metrics Working Group (IPPM). As the RIPE NCC has an established track record of neutrality and impartiality it is an ideal organisation to perform such measurements in a trusted way.

During 1999, the size of the measurement network more than doubled, from 20 test-boxes in January to 46 test-boxes in 19 countries in December. Data collection as well as the first analysis are largely automated. Preparations have started to double the size of the measurement network again in 2000.

As well as the installation of an increased number of test-boxes, the data are analysed at the RIPE NCC. Services based on the data are being developed in close collaboration with the RIPE Test Traffic Working Group (TT-WG).

Early in 1999, the data of the Test Traffic Project was compared with the data from a similar project conducted outside the RIPE NCC in order to verify the results from both projects. The study showed that both projects correctly measure the network delays and packet losses.

In September a network alarm service was introduced. This informs the sites hosting the boxes when network delays, either to or from their site, rise above the expected value. Judging from the feedback from the sites participating in the project, this is considered to be a useful service. Efforts to integrate it further with existing network monitoring systems will commence in 2000.

Several other analytic studies were initiated and include long-term trend analysis on the data and the development of a metric to summarise and rank network performance. Results from these studies are expected over the course of 2000. More information about the Test Traffic Measurements project is available at:

<http://www.ripe.net/ripenncc/mem-services/ttm/>

Routing Information Service (RIS)

The Routing Information Service (RIS) has been established to collect inter-provider routing information at interesting points in the Internet infrastructure in near real time, time-stamp the information and store it in a database. The information produced by the RIS will be a major improvement over the current "looking glass" technology and will support ISPs in their operations. At a later stage, the information will be compared against the information from the Internet Routing Registry (IRR).

In 1999, a prototype RIS has been deployed and a project plan was published. The "Routing Information Service, design note" can be found at:

<http://www.ripe.net/ripenncc/pub-services/np/Notes/ripe-200/>

It is expected that the first alpha version of the RIS will be presented at the RIPE 35 meeting in February 2000 in Amsterdam, The Netherlands. Further information about the Routing Information Service can be found at:

<http://www.ripe.net/ripenncc/pub-services/np/ris-index.html>

5. RIPE

RIPE (Réseaux IP Européens) is a collaborative organisation open to all parties interested in wide area IP networks. The objective of RIPE is to ensure the administrative and technical co-ordination necessary to enable the operation of a pan-European IP network. There are no membership requirements for participation in RIPE and activities are performed on a voluntary basis.

The RIPE community is an important source of public input for the RIPE NCC. RIPE also plays an influential role in setting the annual activity plan of the RIPE NCC. The staff of the RIPE NCC regularly report at RIPE meetings and ask for feedback from participants about the RIPE NCC services and projects and issues relevant to the RIPE community.

The RIPE NCC facilitates the organisation of meetings for the RIPE community. The main purpose of the RIPE meetings is to discuss technical and policy issues affecting Internet administration and operation in the RIPE NCC service region and beyond. These meetings are held three times per year and are open to the public. The RIPE NCC co-ordinates venues, connectivity, the publication of minutes and presentations as well as the general administration of RIPE meetings. The RIPE NCC also provides operational and administrative support for the Working Group chairs.

In each meeting, discussions take place in Working Groups. These discussions range from technical matters such as DNS, routing, and databases to policy issues affecting Internet administration such as IP assignments and allocation policies. To further support the RIPE community, the RIPE NCC administers RIPE Working Group mailing lists and Web pages to allow for open public debate on relevant Internet issues important to the RIPE community.

In 1999, RIPE proved to be an invaluable forum for policy discussions and resolutions regarding the establishment of the ICANN Address Supporting Organisation (ASO). Utilising the long-standing open processes that exist in the RIPE NCC service region, RIPE was seen as the ideal platform for the selection of ASO Address Council members representing the RIPE NCC service region.

The following RIPE Meetings were held in 1999:

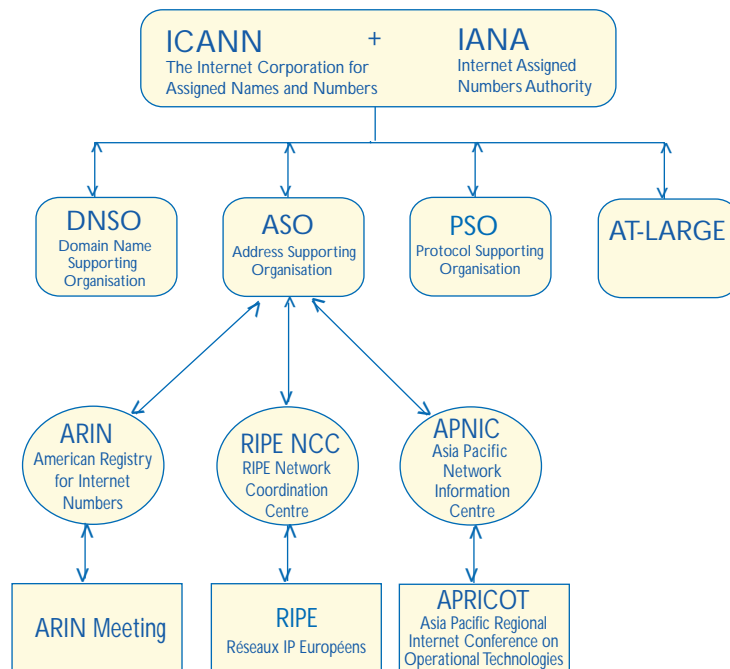
1999 RIPE Meetings		
RIPE 32, 26-29 January	Amsterdam, The Netherlands	289 Attendees
RIPE 33, 4-7 May	Vienna, Austria	270 Attendees
RIPE 34, 21-24 September	Amsterdam, The Netherlands	298 Attendees

More information about RIPE is available at:

<http://www.ripe.net/>

6. ICANN and the ASO

In 1999, the set-up of a not-for-profit organisation finalised the transition from the Internet Assigned Numbers Authority (IANA) to The Internet Corporation for Assigned Names and Numbers (ICANN). The RIPE NCC was heavily involved with the ongoing developments surrounding ICANN. The ICANN structure is shown in the graph below.



The RIPE NCC was instrumental in developing a formal process for the formation of the Address Supporting Organisation (ASO). Together with the other RIRs and the RIPE community the RIPE NCC developed and established the structure for the ASO. The structure was approved by the ICANN Board during the ICANN Santiago meeting in August. In the formal structure RIRs

serve as members of the ASO, while policies are developed within the existing open processes in the various regions. A Memorandum of Understanding (ASO MoU) was jointly developed by the RIRs and signed at the ICANN Los Angeles meeting in November.

The appointment of RIPE NCC service region representatives to the ASO Address Council was carried out in RIPE. The RIPE LIR-WG, the open forum for IP policy issues in RIPE, proposed a selection procedure to the RIPE 34 Meeting participants. The final selection was performed by a secret ballot and the result of this ballot was confirmed by consensus support from the RIPE 34 meeting participants. The three persons from the RIPE NCC Service Region appointed to the Address Council were: Sabine Jaume (RENATER), Hans Petter Holen (SOL System), and Wilfried Wöber (Vienna University and former member of the RIPE NCC Executive Board from September 1997 to October 1998). Appointments of ASO representatives to the ICANN Board were conducted by the Address Council members. From the RIPE NCC Service Region Rob Blokzijl (NIKHEF) was appointed as a member of the ICANN Board.

In order to defend the interests of its members and the RIPE community the RIPE NCC was present at all relevant forums and used the opportunity to initiate dialogue with other parties.

More information about ICANN and ASO is available at:

<http://www.aso.icann.org/>

7. Financial Report 1999

AUDITOR'S REPORT

Introduction

We have audited the 1999 financial statements of Réseaux IP Européens Network Coordination Centre (RIPE NCC). These statements are the responsibility of the management of the association. Our responsibility is to express an opinion on these financial statements based on our audit.

Scope

We conducted our audit in accordance with auditing standards generally accepted in the Netherlands. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

Opinion

In our opinion the financial statements give a true and fair view of the financial position of the association as at 31 December 1999 and of the result for the year ended in accordance with accounting principles generally accepted in the Netherlands.

Amsterdam, February 10, 2000

Horlings, Brouwer & Horlings
Registeraccountants

BALANCE SHEET (in k EUR)

ASSETS	12/31/99		12/31/98	
Fixed Assets				
Computers	299		200	
Infrastructure	174		448	
Office Furniture	<u>75</u>		<u>74</u>	
Total Fixed assets		548		722
Long Term Receivables		0		60
Current Assets				
Receivables	3,324		2,745	
Prepays	<u>230</u>		<u>72</u>	
		3,554		2,817
Cash & payments in transit		3,803		1,576
		<u>7,905</u>		<u>5,175</u>
LIABILITIES				
Capital				
Reserves	447		447	
Clearinghouse	732		0	
Surplus	<u>1,516</u>		<u>732</u>	
		2,725		1,209
Current Liabilities				
Creditors	118		169	
Unearned revenues	4,391		3,186	
VAT payable	19		-11	
Personnel fund payable	333		368	
Miscellaneous payable	<u>319</u>		<u>254</u>	
		5,180		3,966
		<u>7,905</u>		<u>5,175</u>

STATEMENT OF INCOME AND EXPENDITURES (in k EUR)

	1999		1998
INCOME			
Fees	5,718		3,996
Other Income	<u>122</u>		<u>97</u>
Total Income	5,840		4,093
EXPENDITURES			
Operating expenses	3,650		2,680
Depreciation expense	<u>343</u>		<u>249</u>
Total Expenses	3,993		2,929
Surplus before miscellaneous costs	1,847		1,164
Miscellaneous costs			
Doubtful debts	0		322
Personnel fund	<u>332</u>		<u>152</u>
Total miscellaneous costs	332		474
Financial expenses			
Banking expenses	25		15
Bank interest	-32		-29
Exchange rate differences	<u>6</u>		<u>-28</u>
Total financial expenses	-1		-42
NET SURPLUS	<u>1,516</u>		<u>732</u>

Notes to the RIPE NCC Balance Sheet as per December 31, 1999

GENERAL INFORMATION

All amounts are expressed in kEUR and all currencies participating in the European Monetary Union are translated at the official rate as set by the European Central Bank on December 31, 1998. Historic costs have been used throughout unless otherwise stated.

Some figures from 1998 have been reclassified to correspond with the current presentation.

FIXED ASSETS	12/31/1999	12/31/1998
Computers		
Purchase costs	460	244
Less: Depreciation	-161	-44
Book value 31-12	<u>299</u>	<u>200</u>
Infrastructre		
Purchase costs	633	699
Less: Depreciation	-459	-251
Book value 31-12	<u>174</u>	<u>448</u>
Office Furniture & Equipment		
Purchase costs	99	80
Less: Depreciation	-24	-6
Book value 31-12	<u>75</u>	<u>74</u>
Total Fixed Assets at book value	<u>548</u>	<u>722</u>

Assets are valued at historical costs and are depreciated on a straight-line basis, starting in the month after acquisition. Infrastructure and computers are written off in three years, office furniture and equipment in five. All items under 1,000 EUR are expensed.

CURRENT ASSETS	12/31/1999	12/31/1998
Receivables		
Receivables December 31	3,374	3,270
Less: Bad debts/Credit notes	-50	-525
	<u>3,324</u>	<u>2,745</u>

The doubtful debts for 1998 includes amounts that were erroneously invoiced to members in 1997 and 1998 who were no longer in business.

	12/31/1999	12/31/1998
Prepaid rent & other expenses	53	24
Prepaid pensions & health	177	48
Prepays	<u>230</u>	<u>72</u>

CAPITAL

The Reserves are the accumulated surpluses of previous years. They are not earmarked for any specific purpose.

The surplus of 1998 has been allocated to the Clearinghouse by a decision of the Executive Board. This amount may be redistributed to members if so decided by the Executive Board. The tax ruling between the RIPE NCC and the Dutch tax authorities allows the RIPE NCC to accumulate up to a maximum of three times the members' annual contributions in the Clearinghouse account. The first year of operation of the Clearinghouse was in 1998.

CURRENT LIABILITIES

Unearned revenues

The Unearned revenues consists of invoices sent in the current calendar year but pertaining to the following accounting year. These will be recognised as income during the next accounting year.

Personnel Fund

The Personnel Fund expense was calculated using the number of people with employment contracts of indeterminate time working at the RIPE NCC as at December 31, 1999. The amount includes allowances for vacation pay, the pension and year end payment as well as the employer's part of social premiums payable. The 1999 contribution to the fund was 332,741 EUR.

Miscellaneous payables	12/31/99	12/31/98
Accruals	165	34
Accrued vacation	79	65
Wage taxes & social premiums	75	155
	<u>319</u>	<u>254</u>

CENTR Project

In May 1999 CENTR left the RIPE NCC to set up independent operations in the United Kingdom.

Items not shown on the Balance Sheet

The RIPE NCC rents office space in two buildings and has two separate rental agreements for these. One contract runs from January 1, 1997 for a period of five years. This contract will be automatically renewed for a further five years if notice of intent to vacate has not been given to the owner. The other contract runs from December 1, 1997 for a period of five years with a renewal option of an additional five years.

Two bank guarantees have been issued, both to cover the rent of the Amsterdam office space. The guarantees are valid for the length of the lease agreements plus three months.

Negotiations are currently underway to secure approximately 250 m² of additional office space in the adjoining building.

Notes to the RIPE NCC Statement of Income and Expenditures

All amounts are expressed in kEUR and all currencies participating in the European Monetary Union are translated at the official rate as set by the European Central Bank on December 31, 1998.

The RIPE NCC had 59 employees as at December 31, 1999. Along with temporary personnel, this represents 53.8 FTE's (Full Time Equivalent). Salary and related costs account for more than 65% of Operating Expenses.

Revenues are higher than were budgeted because the rate of growth of Local Internet Registries (LIR) was higher than estimated. Interest revenues come from short-term deposits of working capital. Other income is primarily the RIPE meeting plus service charges and interest on outstanding accounts receivable.

The number of LIRs increased by just under 1.25 per calendar day in 1999, as opposed to the budgeted increase of one per calendar day. At the end of 1999 there were 1,696 Local Internet Registries as compared to 1,263 in 1998.

The Personnel Fund expense was calculated using the number of people with employment contracts of indeterminate time working at the RIPE NCC as at December 31, 1999. The amount includes allowances for vacation pay, the pension and year end payment as well as the employer's part of social premiums payable.

RIPE Network Coordination Centre

<http://www.ripe.net>