



RIPE NCC

RIPE NETWORK COORDINATION CENTRE

Draft RIPE NCC Activity Plan and Budget 2019

Axel Pawlik
Managing Director
RIPE NCC

Activity Plan and Budget 2019



- Our plans for 2019 documented to ensure a high standard of transparency and accountability
 - Key statistics and vital information for each area of activity
 - Financial figures listed for each area of activity



Activity Plan and Budget 2019



- New in this year's document
 - Overview of plans for increased efficiencies in 2019
 - Information boxes - new layout for greater clarity
 - New '2019 at a glance' section summarising key activities

RIPE NCC Activity Plan and Budget | 2019

1.1 Registry Maintenance

1 Status: Expanding

2 FTEs: 39.7

3 Cost: 4,593

4 CAPEX: -

5 Description
We are responsible for assigning and allocating internet number resources (IPv4, IPv6 and AS Numbers) within our service region. A key responsibility is to maintain the accuracy and quality of the RIPE Registry, which contains information about the current holders of these resources. This includes public information available in the RIPE Database as well as other non-public registration information that we hold.

6 Benefits for RIPE NCC members/RIPE community

- Improves the overall accuracy of the data in the RIPE Registry
- Supports members and the RIPE community with their operations and business needs
- Meets the strategic goals of improving registry accuracy and engaging with members to better understand their needs

7 2019 at a Glance

- Regular abuse-c validation, as mandated by a RIPE Policy accepted in June 2018
- Expanding: Hijacking handling
- Expanding: Assisted registry checks

8 Internet number resource records the RIPE NCC is responsible for

2016:	101,000
2017:	110,000 (+8.9%)
2018:	119,000 (+8.1%)

In 2019, we will continue to work to ensure that the RIPE Registry can accurately deal with a high level of IPv4 transfers and a heightened potential for conflicts over address space, both resulting from the growing scarcity of IPv4. There will also be an ongoing focus on protecting resource holders against hijacking of their Internet number resources. We will also continue to respond to any community-driven initiatives to increase the accuracy of registry data.

In 2019, we will continue to improve our service delivery to an increasing membership. In early 2018, an external analysis of the processes and interactions members undergo when dealing with the RIPE NCC was completed and work will commence on addressing issues that were identified.

We will continue our work in partnership with the other RIRs to improve data quality and to make this data readily available to the Internet community. The ongoing processing of inter-RIR transfers means that close ties will need to be maintained among the participating RIRs.

1.1.1 Distribution of IPv4/IPv6 Address Space and Autonomous System (AS) Numbers

Status: Ongoing

Measurable usage: Approximately 8,800 allocations and assignments from 1 July 2017 to 30 June 2018.

We provide fair, impartial and stable distribution of IP addresses and AS Numbers according to policies developed by the RIPE community. In addition to the allocation and assignment of IPv4 and IPv6 address space, we also assign AS Numbers and register these along with their initial associated routing policy. This ensures the uniqueness of AS Numbers and collects data for the RIPE Routing Registry. Since 2007, the RIPE NCC has assigned AS Numbers from both the 16-bit and 32-bit pools.

Strategic Focus in 2019



- Increasing efficiency and ensuring agility to respond to future challenges
- Working towards infrastructural resilience
- Improving registry accuracy
- Increasing accountability and due diligence
- Providing reliable data to be a neutral source of information on Internet resources
- Ensuring high standards of service delivery
- Engaging with a diverse and growing membership to understand their needs and create added value

Focus on Efficiencies



- Unprecedented membership growth with approximately 4,000 new members expected in 2019
- Increase efficiencies and lay groundwork for the future:
 - Simplifying and automating our processes - new LIR applications, billing, transfers
 - Streamlining web content to meet user needs more efficiently
 - Enabling our staff to focus on complex requests and due diligence - redefining trust model
- Evaluating our organisational structure so that we can be more efficient and capable of responding to changes in the industry

Clarification on Figures

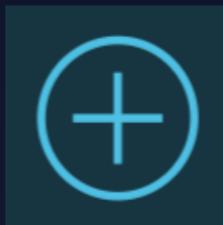


- FTEs (Full Time Equivalents)
 - Total time staff spends on activity
- OPEX (Operational Expenses in kEUR)
 - Direct expenses and personnel expenses (FTEs) that are allocated to an activity; all activities contain sub-activities
- CAPEX (Capital Expenses in kEUR)
 - Capital expenses are all investments that are taken as an asset



Key Activity Areas in 2019

New and Expanding Activities



Registry Maintenance



- **NEW:** We will follow June 2018 mandate to carry out regular abuse-c validation
- More Assisted Registry Checks - reinforce quality of registry data and improve contact with members
- Increasing resources for investigating growing number of disputes and instances of hijacking

FTEs: 42 (+4.1)

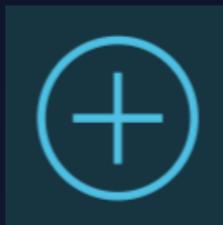
COST: 4,776 (+830)

CAPEX: -

+REGISTRY ACCURACY

+PROVIDING RELIABLE DATA

+ENGAGING WITH MEMBERS



Training



- **NEW:** RIPE NCC Academy credentialing to provide recognised certification on completion of courses
- More flexible, modular approach to online learning available in the RIPE NCC Academy
- More courses and workshops to spread knowledge of our services and processes, best practices, new technologies, and more

FTEs: 12.9 (+2.3)

COST: 2,131 (+629)

CAPEX: -

+ADDED VALUE FOR MEMBERS

+ENGAGING WITH MEMBERS



DNS and K-Root Operations



- Upgrading K-root for increased capacity along with ongoing expansion for better geographical coverage and DDoS resilience
- Ensuring that K-root remains capable of operating independently
- More work to provide secure and reliable reverse DNS services and support for DNSSEC

FTEs: 4.3 (+0.1)

COST: 1,314 (+530)

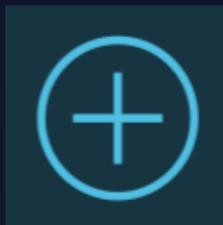
CAPEX: 665 (+515)

+ACCOUNTABILITY AND DUE DILIGENCE

+INFRASTRUCTURAL RESILIENCE

+RECOGNISED SOURCE OF NEUTRAL INFORMATION

+PROVIDING RELIABLE DATA



IT and Information Security



- Increasing ability to handle membership growth
- Implementing framework to measure effectiveness of our information security controls
- Gathering cyberthreat intelligence to prevent potential information security incidents

FTEs: 12.9 (+0.3)

COST: 3,224 (+479)

CAPEX: 670 (+92)

+INFRASTRUCTURAL RESILIENCE

+PROVIDING RELIABLE DATA



Outreach and Engagement



- Broadening engagement with members in specific countries/sectors
- Establishing strategic partnerships with other parties for the benefit of the membership and community
- Safeguarding the influence of the technical community in Internet governance
- Defending the RIR system

FTEs: 19.6 (+1.1)

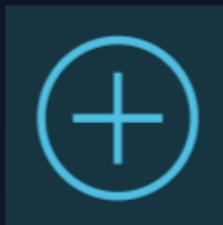
COST: 4,314 (+466)

CAPEX: -

+ENGAGING WITH MEMBERS

+RECOGNISED SOURCE OF NEUTRAL INFORMATION

+ACCOUNTABILITY AND DUE DILIGENCE



Legal



- Ongoing focus on ensuring organisational accountability
- Addressing increasing complexity of requests related to IPv4 address scarcity (e.g. M&A)
- Following legislative developments to ensure our compliance with new legal obligations (e.g. GDPR)

FTEs: 1.9 (+1.1)

COST: 295 (+128)

CAPEX: -

+ACCOUNTABILITY AND DUE DILIGENCE



- Developing a modernised user interface to enhance user experience
- Improving data accuracy and taking steps to provide faster access to RIPEstat data
- Extending data sources available through RIPEstat

FTEs: 8.2 (+2.3)

COST: 956 (+240)

CAPEX: 289 (+141)

+PROVIDING RELIABLE DATA

+RECOGNISED SOURCE OF NEUTRAL INFORMATION

+SERVICE DELIVERY



Data Analysis and Scientific Support



- Initiating a collaborative research project to foster productive engagement with research community
- Ongoing development of prototype tools that are of operational value to membership and community
- Contributing to scientific publications and analyses

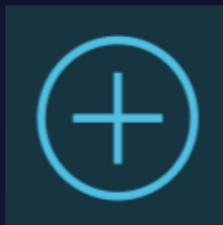
FTEs: 4.4 (+1.2)

COST: 544 (+144)

CAPEX: -

+RECOGNISED SOURCE OF NEUTRAL INFORMATION

+PROVIDING RELIABLE DATA



RIPE Meetings



- Catering for rising number of attendees at RIPE Meetings
- Developing RIPE Networking App and other ways to improve networking opportunities
- Ongoing promotion of inclusivity at RIPE Meetings and continuing support for RIPE Fellowship

FTEs: 6.2 (+0.2)

COST: 2,147 (+365)

CAPEX: 32 (+32)

+ENGAGING WITH MEMBERS

+SERVICE DELIVERY



Management and HR



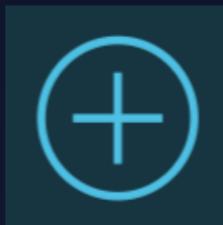
- Reviewing organisational structure to optimise operational efficiency
- Providing additional training and workshops to develop staff and management

FTEs: 9.1 (+0.9)

COST: 2,990 (+364)

CAPEX: -

+ACCOUNTABILITY AND DUE DILIGENCE



Finance and Administration



- More automation of reporting, budget and billing processes for increased efficiency
- Ongoing integrated risk management

FTEs: 9.2 (+1.1)

COST: 1,507 (+456)

CAPEX: -

+ACCOUNTABILITY AND DUE DILIGENCE



Other Areas of Activity 2019

Ongoing and Decreasing Activities



Ongoing Areas of Activity



	FTEs	COST	CAPEX
RIPE Database	7.6 (+0.6)	961 (+51)	-
LIR Portal	2.8 (-1.1)	678 (-52)	-
RIPE Labs	1.8 (-0.3)	316 (-26)	-
RIPE Policy and Community Support	1.5 (-0.1)	187 (+2)	-
Good of the Internet	0.8 (0)	462 (-43)	-



Decreasing Activities



	FTEs	COST	CAPEX
Resource Certification (RPKI)	1.0 (-0.6)	162 (-46)	-
RIPE Atlas and RIS	7.9 (-2.6)	1000 (-209)	360 (+113)
Other Services	2.6 (-0.4)	378 (-63)	-
IPv6 Support	1.2 (-0.4)	118 (-31)	-
ICANN/IANA/IETF/ISOC/RIRs	2.6 (-2.1)	1,066 (-207)	-
Organisational Activities (e.g. General Meetings)	2.0 (-0.1)	286 (-31)	-

Summary of Budget 2019



- Total of 24,000 LIR accounts anticipated by end of 2019
- Forecast income increase of 23% thanks to membership growth
- A budget increase of 15%
- Anticipated surplus of EUR 9.898 million
- Cost per LIR is expected to come down to EUR 1,345 (down from EUR 1,435 in the 2018 Budget)



Questions



axel@ripe.net