RIPE NCC Charging Scheme 2000

Kees van Draanen
Mirjam Kuehne

Version 1.0

RIPE NCC

Document: ripe-198
See Also: ripe-197
Updates: ripe-187

1. Scope

This document defines the 2000 RIPE NCC charging scheme and the companion document 'RIPE NCC Activities & Expenditure 2000' (ripe-197) describes the activities and the associated operational costs. The charging scheme is based on the model that was approved at the 1996 contributors' meeting and that has been used in previous years. Section two outlines the charging scheme and section three details further steps to implement the scheme. Details of the reasoning behind this scheme are provided in section four.

Status

This version of the document has been produced by the RIPE NCC management and with the particular input and assistance of Maldwyn Morris. It has been submitted to the membership for approval at the Annual General Meeting on October 19,1999.

2. Charging Scheme

The charges for 2000 will be fixed annual charges to be paid in advance and based on the size category of a local registry. A minimum size category will be determined based on address space allocations held by the registry on November 1,1999 and will be published. New local registries established during 2000 will be charged a sign-up fee and 25% of the yearly fee for each quarter that they are members. Their initial minimum size category will be SMALL. Enterprise registries are classed as small registries for charging purposes. The charges for 2000 are as follows:

Charge	**2000**	1999	1998	1997
Yearly SMALL	**2400**	2650	2450	2200
Yearly MEDIUM	**3350**	3700	3400	3000
Yearly LARGE	**4400**	4900	4500	4000
Sign-Up	**2100**	2100	2000	1300

Discussion

Registry charges will decrease by approximately 11% in 2000 and drop to just below their 1998 levels. This is in spite of the increased expenses as outlined in the 'RIPE NCC Activities and Expenditures 2000' (ripe-197) as the costs are not expected to increase as rapidly as the number of registries. By decreasing charges evenly (in percentage terms) any cross subsidies are prevented.

The 1998 charging model algorithm was used to determine the minimum size category for each registry, based on the address space allocations held by the registry. As the distribution generated by the algorithm clearly suggests the three size categories it can still be considered fair. Further, the total number of registries per category is not dramatically different from the current distribution.

The following table compares the distribution of current size categories with that of the minimum size category determined from allocation data on September 1, 1999.

Category	**New Minimum**	Current
SMALL	**72.6**	77.3
MEDIUM	**21.7**	17.2
LARGE	**5.5**	5.5

While the distributions themselves suggest that few changes are happening, the breakdown of changes below shows the changes in detail:

From \ To	SMALL	MEDIUM	LARGE
SMALL	1069	94	3
MEDIUM	18	221	14
LARGE	1	11	65

The minimum size category for each registry, for the purpose of charging, will be determined based on the address space allocations held by that registry on November 1, 1999. Up to this date the minimum size category for all registries based on allocations received before November 1, 1999 can be found at and the allocation data this is based on, together with current registry size, can be found at All registries are expected to check this data and report any inconsistencies to `<billing@ripe.net>`.

Conclusion

We strongly believe that the charging model used in previous years is still fair, equitable and practical and the 2000 charging scheme will therefore follow exactly the same principles. The charging scheme will generate sufficient revenues to cover budgeted costs, ensuring stability for the RIPE NCC. The reserves accumulated in prior years are considered adequate to provide for the reliable operation of the RIPE NCC in case of unexpected developments.

3. Steps to Implementation

8 Sep 1999

2000 charging scheme published

Preliminary allocation listing per registry published.
Preliminary minimum size category listing published.

19 Oct 1999

RIPE NCC Annual Membership Meeting

2000 Charging Scheme formally approved.

8 Sep - 31 Oct 1999

Registries can review preliminary data and request any corrections.

1 Nov 1999

Billing procedures (methods of payment and credit management procedures) for 2000 published.

Definite allocation listing per registry published.
Definite minimum size category listing published.

15 Nov 1999

Deadline for registries requesting to be moved to a larger category. If no response is received it will be assumed that a registry wishes to be in the minimum category allocated on 1 November 1999.

21-26 Nov 1999

Invoices and contracts for services in 2000 sent out.

31 Dec 1999

Deadline for receipt of payment of invoice for 2000 services.

1 Jan 2000

New charging scheme in effect for new local registries.

4. Detailed Reasoning of Charging Model

Section 4 describes the reasoning behind the choice of the charging model laid down in section 2. Some degree of repitition is inevitable here as section 2 is intended as a stand-alone description of the charging scheme itself. This section should be read in conjunction with ripe-143 as it is the base document on which this reasoning is founded. The following three sub-sections will describe the determination of a registry's size, the revenue required for 2000, and the mechanics of the charging model.

4.1. Determination of Minimum Registry Size

To determine a registry's size, we have defined a measure N(reg) which produces a value in the range {0,1,2,...,100}. N(reg) is a simplification of the charging measure discussed in Appendix C of ripe-143, and is described briefly below.

Let k(reg,i) be the number of addresses allocated to the registry "reg" in year i.

Let w(i) = i - 1992.

Define use(reg) = sum(i in 1993 to 1999) k(reg,i) * w(i).

Let MAX = max{use(reg)} be the maximum use measured for all registries.

The normalised usage for a registry "reg" is then defined as:

$$N(reg) = (use(reg) * 1000) / MAX$$

Based on this measure rounded to the nearest integer, three distinct groups of registries could be clearly identified. Those with:

N(reg) <= 10 (SMALL)
11 <= N(reg) <= 102 (MEDIUM)
102 < N(reg) (LARGE)

This algorithm provides a distribution quite similar to the current distribution of size categories.

4.2. Revenue Required for 2000

Reserves from previous years are 477 kEUR with the only significant long-term liability being possible corporate taxes for 1997 and earlier. These are estimated to be a maximum of 130kEUR. Based on the experience of the past years and the expected developments in 2000 this level of reserves is considered to be sufficient. It equals just under 33% of the budgeted income from new registries. There are no plans to increase this level during 2000 but, due to the rounding off of the service fee to a multiple of 50 EUR, the budgeted revenue is 73,000 EUR (1.2%) over the budgeted operating expenses (see ripe-197) of 6,210 kEUR.

4.3. Income 2000

The income generated according to this scheme is budgeted to be composed as follows (in kEUR):

	New Registries	
450	Startup Fees	945
450	Small	540
	Existing Registries	
1233	Small	2959
366	Medium	1226
97	Large	427
	Other Income	
750	Ripe Meeting	186
	Total Income	6283

The revenue from new registries is composed of the start up fees plus the small service fee and assumes an average service period of 6 months. The RIPE meeting and dinner fees are budgeted to increase to 270 EUR with a conservative estimate of 250 delegates attending three meetings. Only 2/3 of the attendees are expected to go to the RIPE dinner.