RIPE NCC Charging Scheme 1999

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RIPE NCC

Document: ripe-187
See Also: ripe-186
Updates: ripe-163

1. Scope

This document defines the 1999 RIPE NCC charging scheme. The companion document 'RIPE NCC Activities & Expenditure 1999' (ripe-186) describes the activities and the associated operational costs. The charging scheme is based on the model used in previous years. This model was approved at the 1996 contributors meeting and has met with success. Using the model we have developed the charging scheme presented in section two below. Section three details further steps to implement the scheme. Section four provides details of the reasoning behind this scheme both for the record and those interested.

Status

This version of the document has been produced by the RIPE NCC management. It has been approved by the membership at the Annual General Meeting on October 15th 1998.

2. Charging Scheme

The charges for 1999 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 1st 1998. Registries can be assigned a size category higher than their minimum category upon request. The categories will be published. New local registries established during 1999 will be charged a sign-up fee and 25% of the yearly fee for each quarter that they are a member; their initial minimum size category will be SMALL. Enterprise registries are classed as small registries for charging purposes. The amount of the charges are as follows:

Charge	**1999**	1998	1997	1996
Yearly SMALL	**2650**	2450	2200	1500
Yearly MEDIUM	**3700**	3400	3000	4500
Yearly LARGE	**4900**	4500	4000	8500
Sign-Up	**2100**	2000	1300	2000

Discussion

Due to the inflation and increasing expenditure charges for all registry types will have to rise by approximately 8% in 1999. The increased expenditure is explained in the companion document 'RIPE NCC Activities and Expenditure 1999' (ripe-186). By increasing charges evenly in percentage terms any cross subsidies are prevented.

We used the 1998 charging model algorithm to determine the minimum size category for each registry, based on the address space allocations the registry holds. We still consider this algorithm very fair, because the distribution it generates clearly suggests the three size categories. Also the total number of registries per category is not dramatically different from the current distribution. There is however a trend that registries are growing in size, which is a sign of healthy industry growth. The following table compares the distribution of current size categories with that of the minimum size category determined from allocation data on September 1st 1998:

Category	**New Minimum**	Current
SMALL	**72.4**	77.3
MEDIUM	**21.6**	17.2
LARGE	**6.0**	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	785	73	1
MEDIUM	15	161	15
LARGE	4	6	51

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 1st 1998. Up to this date the minimum size category for all registries based on allocations received before November 1st 1998 can be found at `ftp://ftp.ripe.net/ripe/local-ir/category-Nov` and the allocation data this is based on together with current registry size can be found at `ftp://ftp.ripe.net/ripe/local-ir/allocs-Nov` All registries are encouraged 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. Therefore the 1999 charging scheme follows exactly the same principles. We are confident that this scheme as well as being fair to all contributors will provide adequate stability for the NCC, since it will generate sufficient revenue to cover costs. We consider that surpluses accumulated over the past years are sufficient reserves to provide for stable operation of the NCC in case of unforeseen developments.

3. Steps to Implementation

14 Sep 98
1999 charging scheme published

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

15 Oct 98
RIPE NCC Annual Membership Meeting

1999 Charging Scheme formally approved.

14 Sep - 31 Oct 97
Registries can review preliminary data and request any corrections.

1 Nov 98
Billing procedures (methods of payment and credit management procedures) for 1999 published.

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

15 Nov 98
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 1998.

25-29 Nov 98
Invoices and contracts for services in 1999 sent out.

31 Dec 98
Deadline for receipt of payment of invoice for 1999 services.

1 Jan 99
New charging scheme in effect for new local registries.

All registries are kindly requested to note and abide by the time schedule.

4. Detailed Reasoning of Charging Model

This section aims to describe the reasoning behind the choice of the charging model laid down in section 2. Since section 2 is intended as a stand alone description of the charging scheme itself some degree of repetition is inevitable in this section. It should be noted that the basis document upon which this reasoning is founded is ripe-143. To that end this section should be read in conjunction with ripe-143. The following three sub-sections will expound in turn on the determination of a registry's size, the revenue required for 1999, 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 1998) 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, we could clearly identify three distinct groups of registries. Those with:

$$N(reg) <= 10 \quad (SMALL)$$
$$11 <= N(reg) <= 100 \quad (MEDIUM)$$
$$100 < N(reg) \quad (LARGE)$$

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

4.2. Revenue Required for 1999

The current estimate for the 1998 result is a surplus of 423kECU. Reserves from previous years are 476 kECU with the only significant long term liability being a possible liability corporate taxes over 1997 and before at a maximum of 130kECU. This brings the expected reserves to a minimum of 769kECU. It should be noted that the surplus being realised this year 1998,

will be held in current accounts for the individual members in the clearing house system described in ripe-165

According to the experience of the past years and the expected developments in 1999 we consider this level of reserves to be sufficient. It equals 63% of the budgeted income from new registries. We do not plan to increase this level during 1999. Therefore the revenue required is equal to the budgeted operating expenses (see ripe-186) of 4737kECU.

4.3. Income 1999

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

	New Registries	
365	Startup Fees	766
365	Small	484
	Existing Registries	
828	Small	2194
242	Medium	895
81	Large	397
	Other Income	
450	Ripe Meeting	45
	Total Income	4781

The revenue from new registries is composed of the start up fees plus the small service fee assuming an average service period of 6 months. The RIPE meeting fees are budgeted to remain at 100ECU with a conservative estimate of 150 attendees at three meetings.