RIPE NCC Charging Scheme 2010

Introduction

The purpose of the RIPE NCC Charging Scheme is to define the annual service fee charged to Members, to set the sign-up fee for new Members and to define the administration and maintenance fee for Direct Assignment Users. As Internet number resources do not have a value in themselves, the RIPE NCC charges an annual service fee based on the services that a Member or Direct Assignment User receives from the RIPE NCC. These services are related to the distribution of Internet number resources to the Member or Direct Assignment User. The annual service fee charged to each Member or Direct Assignment User is related to the workload involved in providing the services requested by that member or Direct Assignment User.

Direct Assignment Users can request independent Internet number resources from a sponsoring LIR. In such a case, the sponsoring LIR must pay the RIPE NCC fee for the independent Internet number resources.

Definitions

Members: Contributors that pay an annual service fee that allows them to request Internet number resources, for their own infrastructure and customer networks, and receive further services from the RIPE NCC.

Direct Assignment Users: End Users who sign a contract directly with the RIPE NCC and pay an annual maintenance fee that allows them to request independent Internet number resources for their own infrastructure only. They do not receive any further services from the RIPE NCC.

Independent Internet Number Resources: Independent Internet number resources such as IPv4 and IPv6 PI assignments, AS numbers, Anycasting and IPv6 IXP assignments.

Aggregatable Internet Number Resources: Aggregatable Internet number resources such as IPv4 and IPv6 PA allocations.

RIPE NCC Charging Scheme 2010

For 2010, the Charging Scheme structure and the Billing Score Algorithm for defining billing categories have changed considerably in comparison with the Charging Scheme 2009 due to the implementation of Policy Proposal 2007-01, "Direct Internet Resource Assignments to End Users from the RIPE NCC".

The changes to the Charging Scheme 2010 are the following:
- The service fee will be calculated based on two components:
    - the billing category which will be determined on the basis of Aggregatable Internet Number Resources over time

o   a charge of EUR 50 for each independent Internet number resource
- Appendix 2 of the Charging Scheme 2010 outlines the fees for Direct Assignment Users, which are line with changes made to the Charging Scheme for members.

RIPE NCC Annual Service Fees 2010

The service fees for 2010 are annual charges for the RIPE NCC membership. The service fee for 2010, unlike in previous years, will consist of an annual fee for the billing category plus a set fee of EUR 50 for each Independent Internet Number Resource assignment registered to the member on 30 September 2009. For the 2010 service fees, and for a comparison with the service fees since 2006, see the following table:

Annual service fee (in EUR)	2006	2007	2008	2009	2010
Extra Small	1,500	1,300	1,300	1,300	1,300 + 50 per independent resource assignment
Small	2,000	1,800	1,800	1,800	1,800 + 50 per independent resource assignment
Medium	2,750	2,550	2,550	2,550	2,550 + 50 per independent resource assignment
Large	4,250	4,100	4,100	4,100	4,100 + 50 per independent resource assignment
Extra Large	5,750	5,500	5,500	5,500	5,500 + 50 per independent resource assignment
Sign-up fee	2,000	2,000	2,000	2,000	2,000

Each member receives a score according to the Billing Score Algorithm (see Appendix 1). All members are ranked in ascending order. Members with the same score get identical rankings. The billing categories are defined using the following cumulative boundaries:

- Up to 20% of the Members will make up the Extra Small billing category
- Up to 75% of the Members will make up the Extra Small and Small billing categories
- Up to 95% of the Members will make up the Medium billing category and all smaller billing categories
- Up to 99% of the Members will make up the Large billing category and all smaller billing categories
- The remaining Members will make up the Extra Large billing category

Percentage of Total Members per Billing Category

Billing Category	2006	2007	2008	July 2009	Target 2010
Extra Small	33 %	37 %	34 %	24 %	20 %
Small	47 %	43 %	45 %	53 %	55 %
Medium	16 %	16 %	17 %	18 %	20 %
Large	3 %	3 %	3 %	4 %	4 %
Extra large	1 %	1 %	1 %	1 %	1 %

Note: The percentages for 2010 may deviate slightly. If a set of members with the same score falls across the boundary between two billing categories they will be part of the higher billing category.

The Billing Score Algorithm will be run after the members at the General Meeting have approved the Charging Scheme 2010. The billing scores for Members will be determined based on data from 30 September 2009. This will also apply for Independent Internet Number Resources for 2010. Note that in future Charging Schemes, temporary independent assignments will be taken into account. Every Member will be notified of their billing score, their billing category and their service fee by email.

The billing category for each Member can be seen by selecting the relevant Member from the full list of Members by country available at:
http://www.ripe.net/membership/indices/

Change Matrix - Expected Changes of Members Between the Billing Categories for 2010
The Change Matrix indicates the percentage of Members currently in a certain billing category that are expected to move to a different billing category for 2010. Due to the fact that all new registries start as Extra Small, the migration from Extra Small to other categories is higher than the migration from other categories.

For example: The matrix shows that for 2010:
- 38% of the Members currently in the Extra Small billing category will move to the Small category
- 3% of the Members currently in the Extra Small billing category will move to the Medium category
- None of the Members currently in the Extra Small billing category will move to the Large category
- None of the Members currently in the Extra Small billing category will move to the Extra Large category

BILLING CATEGORY	Change to Extra Small	Change to Small	Change to Medium	Change to Large	Change to Extra Large	2010 TOTAL CHANGE
Extra Small		38%	3%	-	-	**41 %**
Small	15%		9%	<1%	-	**24 %**
Medium	2%	16%		7%	-	**25 %**
Large	1%	3%	17%		6%	**27 %**
Extra Large	2%	-	2%	12%		**16 %**

Note: In the table above, "-" indicates that no registries are expected to move to a particular category.

Appendix 1: Billing Score Algorithm

A Member's billing category is set based on the Member's billing algorithm score. This score is based on Aggregatable Internet Number Resources made over time at the Member's request. The scoring system takes into account all:

- IPv4 allocations
- IPv6 allocations

For the purpose of this scoring algorithm, an allocation of IPv4 /21 is equivalent ($\triangleq$) to one IPv6 /32 allocation. The following table shows how scoring units are determined based on resource usage. To establish scoring units based on larger or smaller resource usage, the same ratio applies.

IPv4 Allocation	IPv6 Allocation	Scoring Unit
/ 22 $\triangleq$	/ 33 $\triangleq$	0.5
/ 21 $\triangleq$	/ 32 $\triangleq$	1
/ 20 $\triangleq$	/ 31 $\triangleq$	2
/ 19 $\triangleq$	/ 30 $\triangleq$	4

Using this matching system, the following algorithm is run to determine the total score per member:

$$S \text{ (reg)} = \sum_{i=1}^{N} a_i * t_i$$

a_i = Scoring unit
t_i = Time function of allocation i (year of allocation – 1992)
N = Number of allocations

In simplified terms:
- Score = Scoring unit that an allocation is worth
- Time Score = Time function of an allocation (year of allocation – 1992)
- Score X Time score = Allocation score

The total score per Member is the sum of all allocation scores for that Member with a time factor applied to give more weight to recent allocations. Thus, the relative weight of a given allocation decreases over time.

Appendix 2: Administration and Maintenance fees for Direct Assignment Users

Upon conclusion of the End User Assignment Agreement, the Direct Assignment User shall pay to the RIPE NCC a one-time Administration Fee of EUR 2,000. During the term of the agreement, the Direct Assignment User shall pay a periodical Maintenance Fee equal to the Extra Small billing category.

The total fees to be paid by a new Direct Assignment User for 2010 are:
- A one-time Administration Fee of EUR 2,000
- An annual Maintenance Fee of EUR 1,300

The total fees to be paid by an existing Direct Assignment User for 2010 are:
- An annual Maintenance Fee of EUR 1,300