

RIPE NCC Charging Scheme 2011

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.

End Users can request independent Internet number resources from a sponsoring member. In such a case, the sponsoring member 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, and who 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 2011

Following the major change in 2010 caused by the implementation of Policy Proposal 2007-01, "Direct Internet Resource Assignments to End Users from the RIPE NCC", the Charging Scheme 2011 is almost exactly the same to allow for predictability and continuity for members. The effectiveness of the 2010 Charging Scheme means there is no need to introduce significant changes for 2011.

For 2011, the Charging Scheme structure and the Billing Score Algorithm for defining billing categories have two changes in comparison with the Charging Scheme 2010. All first allocations of IPv6 address space to a member will score 0 in the Charging Scheme 2011 and so will not incur a charge for that member. All subsequent IPv6 allocations will be scored in the same way as in 2010 and as set out in Appendix 1: Billing Score Algorithm. This facilitates IPv6 deployment by guaranteeing that members do not incur

an additional fee as a result of their initial IPv6 allocation. The second change is that independent IPv4 and independent IPv6 assignments that are made on the same day to the same customer will have only a single charge of EUR 50.

It is likely that remodelling of the Charging Scheme will take place for 2012 to reflect the depletion of the IPv4 address pool and the possible introduction of RIPE Policies on registration and certification.

RIPE NCC Annual Service Fees 2011

The service fees for 2011 are annual charges for the RIPE NCC membership. The service fee for 2011 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 2010. For the 2011 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 and 2011
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	2007	2008	2009	August 2010	Target 2011
Extra Small	37 %	34 %	27%	27%	20 %
Small	43 %	45 %	50%	50%	55 %
Medium	16 %	17 %	18%	18%	20 %
Large	3 %	3 %	4%	4%	4 %
Extra large	1 %	1 %	1%	1%	1 %

Note: The percentages for 2011 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 2011. The billing scores for members will be determined based on data from 30 September 2010. This will also apply for independent Internet number resources for 2011. 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 2011

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 2011. 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 2011:

- 18% of the members currently in the Extra Small billing category will move to the Small category
- 5% of the members currently in the Extra Small billing category will move to the Medium category
- 1% 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
- The other 76% of the members will remain in the Extra Small billing category

BILLING CATEGORY	Change to Extra Small	Change to Small	Change to Medium	Change to Large	Change to Extra Large	2011 TOTAL CHANGE
Extra Small		18%	5%	1%	-	24%
Small	12%		10%	1%	3%	26%
Medium	0%	1%		15%	3%	19%
Large	-	-	2%		12%	14%
Extra Large	-	-	0%	1%		1%

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 Internet resource allocations made over time at the member's request. The scoring system takes into account all:

- IPv4 allocations
- IPv6 additional allocations (initial IPv6 allocations are not taken into account)

For the purpose of this scoring algorithm, an allocation of IPv4 /21 is equivalent (\triangleq) to one IPv6 /32 additional 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 Additional 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 2011 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 2011 are:

- An annual Maintenance Fee of EUR 1,300