

RIPE NCC Charging Scheme 2007

RIPE NCC

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Introduction

The purpose of the RIPE NCC Charging Scheme is to define the annual service fee charged to members. As Internet number resources do not have a value in themselves, the RIPE NCC charges members an annual service fee based on the services that the member receives from the RIPE NCC. These services are related to the distribution of Internet number resources to the member. The annual service fee charged to each member is related to the workload involved in providing the services requested by that member. The annual service fee charged to a member is based on the billing category of that member as defined by the Charging Scheme. The billing categories are based on Internet number resources allocated or assigned over time at the request of the member.

RIPE NCC Charging Scheme 2007

For 2007, the Charging Scheme structure and the Billing Score Algorithm for defining billing categories remain the same as in the Charging Scheme 2006.

The changes in the Charging Scheme 2007 are the following:

- The average service fee for existing members decreases by 9%
- A one-time rebate for members that will redistribute the excess surplus that has accumulated in the RIPE NCC's Clearing House reserves

The annual service fees have been lowered to levels that will provide a total income for 2007 that matches the RIPE NCC's total expenses for the year. Stable and predictable service fees allow members a measure of consistency that can help when planning and budgeting. It also lowers the risk that the RIPE NCC will need to make significant increases to the annual service fees in any one year to compensate for changing industry conditions.

The most significant change in the Charging Scheme 2007 is the one-time rebate for members. The sole purpose of this rebate is to reduce the excess reserve that has accumulated in the RIPE NCC's Clearing House. It will not impact on RIPE NCC

operations or on the RIPE NCC's expense level. More information about the member rebate for 2007 can be found in [Appendix 2](#) of this document.

RIPE NCC Annual Service Fees 2007

The service fees for 2007 are fixed annual charges for the RIPE NCC membership and are based on the billing category of a member. For the 2007 service fees, and for a comparison with the service fees since 2003, see the following table:

Annual service fee (in EUR)	2003	2004	2005	2006	2007
Extra Small	-	2,000	1,750	1,500	1,300
Small	2,750	2,500	2,250	2,000	1,800
Medium	3,750	3,500	3,150	2,750	2,550
Large	5,250	5,000	4,750	4,250	4,100
Extra Large	-	6,750	6,500	5,750	5,500
Sign-up fee	2,500	2,500	2,000	2,000	2,000
Administration fee	-	1,250	1,250	1,000	1,000

Membership Growth Projections

The RIPE NCC uses several statistical models to forecast membership developments. External factors and industry expectations are then incorporated in order to improve the accuracy of the forecast. Following this procedure, a net growth rate of approximately 12% is expected over 2006. For 2007, taking into account expected member closures, a net growth rate of 9% is expected.

This table shows the actual membership numbers at the end of 2003, 2004 and 2005 as well as the projected membership numbers at the end of 2006 and the predicted membership numbers used for the 2007 budget.

Number of LIRs	2003	2004	2005	Projection 2006	Budget 2007
Extra Small	-	766	1,366	1,511	1,383
Small	2,664	2,126	1,971	2,225	2,569
Medium	659	749	697	773	935
Large	165	144	137	162	187
Extra Large	-	39	39	40	47
Total membership	3,488	3,824	4,210	4,711	5,121
Net Growth %	7 %	10 %	10 %	12 %	9 %

New members that are expected in 2007 are included in the Extra Small billing category.

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	2003	2004	2005	July 2006	Target 2007
Extra Small	-	19 %	32 %	28 %	20 %
Small	78 %	61 %	47 %	50 %	55 %
Medium	18 %	16 %	17 %	17 %	20 %
Large	4 %	3 %	3 %	4 %	4 %
Extra large	-	1 %	1 %	1 %	1 %

Note: These percentages for 2007 may deviate slightly. If a set of members with the same score fall across the boundary between two billing categories they will be part of the next higher billing category.

The Billing Score Algorithm will be run after the General Meeting has approved the Charging Scheme 2007. The billing scores for members will be determined based on 30 September 2006 data. Every member will be notified of their billing score and billing category by e-mail.

The billing category for each member will also be available 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 2007

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 2007. 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 2007:

- 57% of the members currently in the Extra Small billing category will remain in that category
- 38% 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
- 0% of the members currently in the Extra Small billing category will move to the Large category
- 0% of the members currently in the Extra Small billing category will move to the Extra Large category

From:	To:	Extra Small	Small	Medium	Large	Extra Large
Extra Small		57 %	38 %	5 %	0%	0%
Small		7 %	86 %	7 %	0%	-
Medium		0 %	10 %	86 %	4 %	0 %
Large		1 %	1 %	13 %	82 %	3 %
Extra Large		-	-	-	5 %	95 %

Note: In the table above, “-” indicates that no registries are expected to move to a particular category. “0%” indicates that there may be some registries that will move to a particular category but that this percentage is expected to be lower than 1%.

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 or assignments made over time at the member's request. The scoring system takes into account all:

- IPv4 allocations
- IPv6 allocations

The scoring system also takes into account any of the following assignments made at the request of the member between 1 October 2005 and 30 September 2006:

- IPv4 Provider Independent (PI) assignments
- IPv6 direct assignments
- AS Number assignments

For the purpose of this scoring algorithm, an allocation of IPv4 /21 is equivalent ($\hat{=}$) to one IPv6 /32 allocation or to one AS Number. 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	AS Number Assignment	IPv4 PI Assignment	IPv6 Direct Assignment	Scoring Unit
		Only includes assignments made between 1 October 2005 – 30 September 2006			
/ 22 $\hat{=}$	/ 33 $\hat{=}$		/ 25 $\hat{=}$		0.5
/ 21 $\hat{=}$	/ 32 $\hat{=}$	1 $\hat{=}$	/ 24 $\hat{=}$	1 $\hat{=}$	1
/ 20 $\hat{=}$	/ 31 $\hat{=}$	2 $\hat{=}$	/ 23 $\hat{=}$	2 $\hat{=}$	2
/ 19 $\hat{=}$	/ 30 $\hat{=}$	4 $\hat{=}$	/ 22 $\hat{=}$	4 $\hat{=}$	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/assignment i (year of allocation - 1992)

N = Number of allocations/assignments

The total score per member is the sum of all allocation and assignment scores for that

member with a time factor applied to give more weight to recent allocations and assignments. Thus, the relative weight of a given allocation or assignment decreases over time.

Appendix 2: RIPE NCC Member Rebate 2007

The purpose of the Clearing House reserves is to give the RIPE NCC a stable financial position thereby ensuring that it is able to operate soundly and continuously. The RIPE NCC's Clearing House agreement with the Dutch tax authorities ([ripe-322](#)) allows for a reserve equivalent to three times the total of the RIPE NCC's annual service fees. With the agreement of the RIPE NCC members, the RIPE NCC Executive Board has set a more limited target based on the principle that the reserve should be on a similar level to one year's RIPE NCC operating expenses. As a result of the surplus in 2005 and the expected surplus in 2006, the RIPE NCC's reserve has accumulated beyond the target set by the RIPE NCC Executive Board.

In order to reduce the level of this reserve, in 2007 the RIPE NCC will distribute the excess amount of 2.5 MEUR to existing RIPE NCC members in the form of a rebate. This rebate will only be given to eligible RIPE NCC members. In this context, an eligible member is defined as a member that has full or candidate membership status on 30 September 2006 and that has been invoiced for 2006.

The rebate procedure is based on the principle that an existing RIPE NCC member should receive a rebate that is proportional to the service fees that the member has contributed from 2003 – 2006. The proportion is calculated by dividing the amount the member has contributed in service fees from 2003 up to and including 2006 with the total amount of service fees received by the RIPE NCC for the same period. This principle is based on service fees starting from 2003 because it was in 2003 that the RIPE NCC started to accumulate the large reserve in the Clearing House that has continued to grow.