Supporting Notes for the European IP Address Space Request Form

ASCII PostScript

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Introduction

To make appropriate assignment decisions,information must be gathered about the organisation, addressing requirements, network infrastructure, current address space usage and the future plans of the end-user requesting address space. The ***European IP Address Space Request Form*** is a tool for gathering the information necessary to evaluate the request and to ensure that the same guidelines are applied to each assignment.

This document contains instructions for completing the form consisting of the templates contained in it. An example of a completed form is given in Section 4. **A separate form must be filled out on behalf of each separate network or customers' network. (Do not include requests for several customers in one form).**

The policies and procedures to follow in making IP address space assignment decisions are described in ripe-185***"European Internet Registry Policies and Procedures."***. Please refer to this document if you have any questions on policy.

As stated in ripe-185, address space assignments are valid for as long as the original criteria on which the assignment was based remains true. If an assignment is made for a specific purpose and the purpose no longer exists, the assignment is no longer valid.

1. Instructions for Network Administrators

After completing this form, send it to the Internet Service Provider that gave it to you. Any questions should be referred to them. For detailed instructions, skip to Section 3.

2. Instructions for Local Internet Registries

When sending the completed ***European IP Address Space Request Form*** to the RIPE NCC, all information requested in the first three sections of the form must be supplied. In some cases, the RIPE NCC will request additional information. **The more information you provide, the easier the hostmasters can understand the end-user's network set up, and the faster a decision can be made. Therefore, if you have extra information not included in the first three parts of the form, please attach it.**

The form should be sent to the RIPE NCC by the Local IR Provider processing the request, not by the network administrators, nor by another ISP. It should be submitted via e-mail to `<hostmaster@ripe.net>` as an ASCII text document. The form must include the Registry Identifier (X-NCC-RegID) in the e-mail header or at the top of the form.

You can use this form to gather information from the end-users and to document your IP space assignments. When using this form for your own administrative purposes, you may modify it to fit your needs. However, a Local IR is responsible to gather and maintain the information indicated in the forms for every address space assignment.

3. Instructions for the European IP Address Space Request Form

I. General Information

We first gather information on the organisation in which the address space will be used.

Overview of Organisation

To assess a user's request, we must understand the structure of the organisation wanting the addresses and in which part of that organisation they would be used. In this section, a description of the organisational structure should be given. Include information on how the addresses will be distributed among the various departments. If the organisation has offices in more than one country, please specify which country will use the address space. Please include details of the parent company, subsidiaries and contact persons.

> *#[OVERVIEW OF ORGANISATION TEMPLATE]#*
>
> Santa's Workshop Inc. is divided into a Development Division which includes departments for candy cane construction, toy manufacturing and reindeer training; and a Surveillance Division that oversees investigations of naughty and nice children. The Development Division is located in Christmastown, and each department in the division has its own subnet. The Surveillance Division is an international operation with numerous branch offices operating around the globe.

Contact Information

The requester template should contain the contact person making the request. The user template is for the organisation that will be using the address space. Each template should include the fields listed below.

```
Contact Information Fields
----------------------------------------------------------
name:             The  full  name  of  the  contact person;
                  Please don't use titles like "Dr." and do
                  not add a dot (".") between names or ini-
                  tials.

organisation:     The full name of the organisation.

country:          The ISO 3166 two-letter country code  for
                  the  country  where the contact person is
                  located; If you don't  know  the  country
                  code,  you  can  fill in the full name of
                  the country (in English).

phone:            The work telephone number of  the  person
                  listed  above;  Specify the number with +
                  <country  code>  <area  code>  <telephone
                  number>.
```

```
fax-no:            The  fax number of the person above. This
                   field is optional.

e-mail:            e-mail address of the contact person.
```

#[REQUESTER TEMPLATE]#

name: *Johnny B Good*
organisation: *Antarctic Internet Company*
country: *NN (or Northern Nowhere)*
phone: *+12 21 111 2222*
fax-no: *+12 21 222 1111*
e-mail: *jbgood@antarctic.nn*

#[USER TEMPLATE]#

name:*Santa A Claus*
organisation:*Santa's Workshop Inc.*
country:*NN*
phone:*+12 12 122 2121*
fax-no:*+12 12 221 1212*
e-mail:*santa@antarctic.nn*

Current Address Space Usage

In this section, please show how the organisation is using all address space that has been assigned to it in the past, and what its future plans are for that space. Do not include information here for address space they are requesting nor about [private address space].

Include an entry for each physically separate subnet in the network. Subnets are considered to be physically separate if there is an IP router between them.

```
Current Address Space Usage Fields

Prefix:              The  position  in  the  assigned address
                     space at which  the  addresses  in  this
                     subnet start.

Subnet mask:         The subnet mask of each entry.

Size:                The size of the subnet, which determines
                     the maximum number of network interfaces
                     that  can be incorporated in the subnet.

Addresses Used:      In these three fields, show the  current
                     and  estimated  usage  for  the next two
                     years.  Include  interfaces   used   for
                     hosts,  routers, gateways, terminal con-
                     centrators, printers and any  other  ma-
                     chines requiring one or more network in-
                     terfaces.

Current:             The number of  network  interfaces  cur-
```

```
                    rently used in the subnet.

1-yr:               The  total number  of network interfaces to be
                    used in one year.

2-yr:               The total number of network interfaces  to  be
                    used in two years.

Description:        Used to specify a short but semantically
                    meaningful description of  the  role  of
                    the subnet in the user's organisation.
```

#[CURRENT ADDRESS SPACE USAGE TEMPLATE]#

```
                                       Addresses Used
Prefix           Subnet Mask      Size Current 1-yr   2-yr   Description

193.1.193.0      255.255.255.192   64     28     34     60     Candy Cane Dept.
193.1.193.64     255.255.255.224   32     10     21     28     Toy Design
193.1.193.96     255.255.255.224   32     8      13     27     Toy Manufacture
193.1.193.128                      128                         Unused
193.1.194.0      255.255.254       512    317    429    480    Reindeer Training
193.1.196.0      255.255.255       256    132    200    230    Naughty or Nice

                                   1024   495    697    825    Totals
```

II. The Request

Request Overview

Information supplied in the request overview templates helps to evaluate and process your request. It will be kept in confidence and is for internal use only. The information will **not** be entered into the RIPE Network Management Database.

```
Request Overview Fields
----------------------------------------------------------------
request-size:              The  number  of addresses being re-
                           quested.

addresses-immediate:       The number of addresses  that  will
                           be  used  immediately following the
                           assignment; In  these  fields  only
                           include  the new addresses that the
                           organisation is requesting, not ad-
                           dresses they already have.

addresses-year-1:          The total number  to be  used  within  12
                           months.

addresses-year-2:          The total number to  be  used  within  24
                           months.
```

subnets-immediate:	**The number of subnets to be used immediately.**
subnets-year-1:	**The total number to be used within 12 months.**
subnets-year-2:	**The total number to be used within 24 months.**
****inet-connect:**	**Whether or not the organisation concerned plans to connect to the Internet. Please use the option that most closely describes the position of the organisation: Will never connect; Already connected through <provider name>; Plan to connect <date> <provider name>**
country-net:	**The ISO 3166 two-letter country code of the country where the network is located. For international enterprises, specify the country in which the network that will use the addresses is located.**
private-considered:	**Has the requester considered using for the organisation instead of, or in addition to, a public IP address; "Yes" or "no" is sufficient. More information is welcome.**
request-refused:	**If the organisation has had a request refused in the past, please give the name of the provider that refused the request and an explanation for the refusal.**
PI-requested:	**"Yes" if address space requested is provider independent; "No" otherwise. (see European Internet Registry policies and Procedures.)**
address-space-returned:	**If the user is returning any address space, specify the range of addresses that will be returned, to whom and before what date. Use the following format: <x.x.x.x - x.x.x.x> to <name> before <yymmdd>**

****NOTE**: Prior to assigning address space, it is essential to know if the end-user requesting address space is already connected to the Internet. If so, then the selection of appropriate address space for this user may depend on which provider currently supplies connectivity. If the user is not connected, but is planning to be, this should also be taken into account. This information is essential if the conservation and aggregation goals of the public address space distribution are to be met. If the organisation is not planning to connect to the internet in the near future, please consider the recommendations in "Address Allocation for Private Internets" (RFC 1918).

> *#[REQUEST OVERVIEW TEMPLATE]#*
>
> **request-size:** *256*
> **addresses-immediate:** *120*
> **addresses-year-1:** *171*
> **addresses-year-2:** *202*
> **subnets-immediate:** *6*
> **subnets-year-1:** *7*
> **subnets-year-2:** *7*
> **inet-connect:** *Already connected through Antarctic Internet Company*
> **country-net:** *NN*
> **private-considered:** *yes*
> **request-refused:** *yes, by North Pole Inet because we believe reindeer can fly.*
> **PI-requested:** *no*
> **address-space-returned:** *193.1.196.0 - 193.1.196.255 to Antarctic Inet on 19960623*

Addressing Plan

In this section, specify how the organisation plans to use the requested addresses. Only include information about the public address space being requested. Use of private address need not be described. Like the "current address space usage" template, the addressing plan is a table in which every subnet is specified.

Include an entry for each physically separate subnet in the network. To conserve address space, the start positions of the subnets should be selected to minimise padding in the address space. In the example below, we arrange the rows in decreasing order of the **Size** fields to achieve an optimal packing of the address space. The size of every valid request for address space will be the sum of all sizes of the subnets specified in the addressing plan.

`Addressing Plan Fields`

```
Relative Prefix:     The  relative  position  in the assigned
                     address space at which the addresses for
                     this subnet will start. The relative po-
                     sition of the  first  subnet  is  always
                     0.0.0.0. For each subsequent subnet, the
                     start position is selected to allow  for
                     the  total  number  of hosts in the Size
                     fields of the subnets which precede  it.

Subnet mask:         The subnet mask of each entry.

Size:                The size of the subnet, which determines
                     the maximum number of network interfaces
                     that  can  be  used  in the subnet. This
                     must be a power of two.

Addresses Used:      In these three fields, show the  planned
                     usage of the requested address space for
                     the next two years.  Include  interfaces
                     that  will  be  used for hosts, routers,
                     gateways, terminal concentrators, print-
                     ers and any other machines requiring one
                     or more network interfaces.

Immediate:           The number of network interfaces  to  be
                     used  immediately  following the assign-
                     ment.

1-yr:                The total number of interfaces to be  used  in
                     12 months.

2-yr:                The total number  of interfaces to be used in
                     24 months.

Description:         Specify a short but  semantically  mean-
                     ingful  description  of  the role of the
                     subnet in the user's organisation.
```

#[ADDRESSING PLAN TEMPLATE]#

Relative Prefix#	Subnet Mask	Size	Addresses Used Immediate	1yr	2yr	Description
0.0.0.0	255.255.255.128	128	80	95	100	Toy Design
0.0.0.128	255.255.255.224	32	12	17	25	Toy Manufacture
0.0.0.160	255.255.255.224	32	0	15	28	Elf Personnel
0.0.0.192	255.255.255.240	16	7	8	10	Naughty or Nice North
0.0.0.208	255.255.255.240	16	10	14	14	Naughty or Nice South
0.0.0.224	255.255.255.240	16	10	12	12	Naughty or Nice East
0.0.0.240	255.255.255.240	16	8	10	13	Naughty or Nice West
		256	127	171	202	Totals

III. Database Information

Network Template

This is the information that **will** be entered in the RIPE database about the organisation requesting the address space. To obtain practical information on using the RIPE database, try:

> *whois -h whois.ripe.net help*

```
Network Template Fields
---------------------------------------------------------
inetnum:       Specifies  the  IP address range that will
               be assigned to the enterprise. It will  be
               filled  out  by  the Local IR (or the RIPE
               NCC in exceptional cases)  after  the  re-
               quest is approved. It is needed when send-
               ing the object to the database. The  field
               can be left blank in the form.

netname:       A  concise,  descriptive name for the net-
               work.  The "netname" is used  for  adminis-
               trative  purposes  like  Internet Registry
               consistency checking. Valid characters are
               letters,  numbers  and  dash. Use
               whois  to check  that the  netname  is not
               already  in use.

descr:         A  short  description of the organisation,
               including the location;  The  full  postal
               address  is not needed as this is provided
               in the person template (see below).

country:       The ISO 3166 two-letter country code which
               is  most appropriate for the organisation.
               For networks that will cross international
               boundaries,  choose  the  country in which
               the administrative contact is  based.   If
               you  don't  know  the  appropriate country
               code, use the full name of the country.

**admin-c:     The NIC handle of the person  who  is  the
               administrative  contact  for  the network.
               The administrative contact must be someone
               who  is  physically located at the site of
               the network. More than one contact can  be
               specified by adding more "admin-c" fields.

**tech-c:      The NIC handle of  the  technical  contact
               person.  The technical contact person does
               not have to be physically located  at  the
               site  of  the  network.  There can be more
               than one name specified in multiple fields
               for this template.

status:        Specifies  whether the request is provider
               aggregatable  or   provider   independent.
               Should  be filled in with either "ASSIGNED
               PA" or "ASSIGNED PI".
```

```
mnt-by:        This mandatory field  references  a  regis-
               tered  maintainer  object, which specifies
               authorisation checks  on  changes  to  the
               inetnum  object  in the database. More in-
               formation on the database  maintainer  ob-
               ject can be found in ripe-120.

notify:        This  optional  field  specifies an e-mail
               address to which notifications of  changes
               to the object should be sent.

changed:       The  e-mail address of the person complet-
               ing this form, followed by the date. Spec-
               ify  the  date  in  the <yymmdd> format as
               shown in the example.

source:        The source of the information. This  field
               will  always be RIPE and should already be
               filled in.
```

****NOTE:**Each person or role object in the database should contain a NIC handle which allows unambiguous identification of the appropriate persons as needed for Internet network administration.
To obtain a NIC handle, just put

nic-hdl: AUTO-1

OR

nic-hdl: AUTO-1YourInitials

in the "nic-hdl:" field of the object to be added to the database. If "YourInitials" are specified (no less than 2, and no more than 4 letters), the database will use them in constructing a NIC handle. Otherwise, it will determine the letters itself. In both cases, the NIC handle is guaranteed to be unique.

You can reference these (AUTO-1 or AUTO-1YourInitials) as temporary NIC handles in the same update message in the fields of other objects that require a NIC handle (e.g. the inetnum object described above). The database software will then fill in the freshly assigned NIC handles in the objects. Note that you can also use other numbers.(example: AUTO-2) so that you can add more objects in one E-mail message.

Person Template

If contact information for the network administration persons entered in the Network Template is already in the RIPE database , then the person handling the request should check to see if it is up to date. For each person specified in the network template for which there is no entry in the RIPE database , one should now be created by using the following template:

```
Person Template Fields
```

```
-------------------------------------------------------
person:     The  full  name  of the person. No official
            titles and no dots  between  the  names  or
            initials should be used.

address:    The  full  postal  address,  written  as it
            would be for an ordinary postal  mail  with
            one line for each part of the address.

phone:      The  work  telephone  number  of the person
            mentioned above;  +  <country  code>  <area
            code> <telephone number>.  If there is more
            than one phone number, put each on a  sepa-
            rate line, starting with the most appropri-
            ate number for the person.

fax-no:     The fax  number  of  the  person  specified
            above, this field is optional.

e-mail:     The  e-mail address of the person specified
            above.

nic-hdl:    The person's NIC handle.

mnt-by:     This optional field references a registered
            maintainer object, which specifies authori-
            sation checks on  changes to the person ob-
            ject in the database.  More information  on
            the database maintainer object can be found
            in the RIPE document "Authorisation and No-
            tification of Changes in the RIPE Database".

notify:     This optional field specifies an e-mail ad-
            dress to which notifications of changes  to
            the object should be sent.

changed:    The e-mail address of the person submitting
            the form, followed by  the  date.  Use  the
            <yymmdd>  format  for  the date as shown in
            the example.

source:     This field  will be RIPE and should already
            be filled in.
```

#[NETWORK TEMPLATE]#

inetnum: *x.x.x.x/24*
netname: *XMAS*
descr: *Santa's Workshop Inc.*
Christmas Toys Manufacturing Facility
Northern Nowhere
country: *NN*
admin-c: *SC12-RIPE*
tech-c: *RR212-RIPE*
status: *ASSIGNED PA*
notify: *jbgood@antarctic.nn*
mnt-by: *SANTA-SECURITY-MNT*
changed: *jbgood@antarctic.nn 19960412*
source: *RIPE*

#[PERSON TEMPLATE]#

person: *Santa A. Claus*
address: *Santa's Workshop Inc.*
Jingle Bell Lane 12
1224CH Christmastown
Northern Nowhere
phone: *+12 12 122 2121*
+12 12 122 2211 ext. 1221
fax-no: *+12 12 221 1212*
e-mail: *santa@antarctic.nn*
nic-hdl: *SC12-RIPE*
notify: *jbgood@antarctic.nn*
mnt-by: *SANTA-SECURITY-MNT*
changed: *jbgood@antarctic.nn 19960412*
source: *RIPE*

#[PERSON TEMPLATE]#

person: *Rudolf R N Reindeer*
address: *Santa's Workshop Inc.*
Jingle Bell Lane 21
1224CH Christmastown
Northern Nowhere
phone: *+12 12 122 1111*
fax-no: *+12 12 122 2222*
nic-hdl: *RD212-RIPE*
e-mail: *rudolf@xmas.nn*
notify: *jbgood@antarctic.nn*
mnt-by: *SANTA-SECURITY-MNT*
changed: *jbgood@antarctic.nn 19960412*
source: *RIPE*

IV. Additional Information

In the assessment of an assignment request, additional information is always useful, especially if there are some special circumstances that affect the request. In this section, please include any or all information that will help RIPE NCC Hostmasters to make a better and faster decision about the request. This will save a lot of time involved in the exchange of e-mails between RIPE NCC Hostmasters and the LIRs for additional information about the requests.

For example, if substantial network expansion is planned, it is useful to include a deployment plan with a list of events (and planned dates) that will lead to the use of the requested addresses. A topological map of the current and planned network infrastructure can also be helpful. The map can be sent to the RIPE NCC by fax.

Information regarding special circumstances, such as the use of old systems or special purpose hardware that affects the request, should be included with the request. In some cases, the RIPE NCC may ask for information about the user's understanding of network planning and management, to be sure the estimates in the addressing plan are realistic.

4. Example of a Completed European IP Address Space Request Form

X-NCC-RegID: nn.antarctic

I. General Information

#[OVERVIEW OF ORGANISATION TEMPLATE]#

Santa's Workshop Inc. is divided into a Development Division which includes departments for candy cane construction, toy manufacturing and reindeer training ; and a Surveillance Division that oversees investigations of naughty and nice children. The Development Division is located in Christmastown, and each department in the division has its own subnet. The Surveillance Division is an international operation with numerous branch offices operating around the globe.

#[REQUESTER TEMPLATE]#

name: Johnny B Good
organisation: Antarctic Internet Company
country: NN (or Northern Nowhere)
phone: +12 21 111 2222
fax-no: +12 21 222 1111
e-mail: jbgood@antarctic.nn

#[USER TEMPLATE]#

name: Santa A Claus
organisation: Santa's Workshop Inc.
country: NN
phone: +12 12 122 2121
fax-no: +12 12 221 1212
e-mail: santa@antarctic.nn

#[CURRENT ADDRESS SPACE USAGE TEMPLATE]#

```
                              Addresses Used
```

Prefix	Subnet Mask	Size	Current	1-yr	2-yr	Description
193.1.193.0	255.255.255.192	64	28	34	60	Candy Cane Dept.
193.1.193.64	255.255.255.224	32	10	21	28	Toy Design
193.1.193.96	255.255.255.224	32	8	13	27	Toy Manufacture
193.1.193.128		128				Unused
193.1.194.0	255.255.254	512	317	429	480	Reindeer Training
193.1.196.0	255.255.255	256	132	200	230	Naughty or Nice
		1024	495	697	825	Totals

II. The Request

#[REQUEST OVERVIEW TEMPLATE]#

request-size: 256
addresses-immediate: 120
addresses-year-1: 171
addresses-year-2: 202
subnets-immediate: 6
subnets-year-1: 7
subnets-year-2: 7
inet-connect: Already connected through Antarctic Internet Company
country-net: NN
private-considered: yes
request-refused: yes - North Pole Inet refused us service because we believe reindeer can fly.
PI-requested: no
addresses-returned: 193.1.196.0 - 193.1.196.255 to Antarctic Inet on 19960623

#[ADDRESSING PLAN]#

Relative			Addresses Used			
Prefix#	Subnet Mask	Size	Immediate	1yr	2yr	Description
0.0.0.0	255.255.255.128	128	80	95	100	Toy Design
0.0.0.128	255.255.255.224	32	12	17	25	Toy Manufacture
0.0.0.160	255.255.255.224	32	0	15	28	Elf Personnel
0.0.0.192	255.255.255.240	16	7	8	10	Naughty or Nice North
0.0.0.208	255.255.255.240	16	10	14	14	Naughty or Nice South
0.0.0.224	255.255.255.240	16	10	12	12	Naughty or Nice East
0.0.0.240	255.255.255.240	16	8	10	13	Naughty or Nice West
		256	127	171	202	Totals

III. Database Information

#[NETWORK TEMPLATE]#

inetnum: x.x.x.x/24

netname: XMAS
descr: Santa's Workshop Inc.
Christmas Toys Manufacturing Facility
Northern Nowhere
country: NN
admin-c: SC12-RIPE
tech-c: RR212-RIPE
status: ASSIGNED PA
notify: jbgood@antarctic.nn
mnt-by: SANTA-SECURITY-MNT
changed: jbgood@antarctic.nn 19960412
source: RIPE

#[PERSON TEMPLATE]#

person: Santa A. Claus
address: Santa's Workshop Inc.
Jingle Bell Lane 12
1224CH Christmastown
Northern Nowhere
phone: +12 12 122 2121
+12 12 122 2211 ext. 1221
fax-no: +12 12 221 1212
e-mail: santa@antarctic.nn
nic-hdl: SC12-RIPE
notify: jbgood@antarctic.nn
mnt-by: SANTA-SECURITY-MNT
changed: jbgood@antarctic.nn 19960412
source: RIPE

#[PERSON TEMPLATE]#

person: Rudolf R N Reindeer
address: Santa's Workshop Inc.
Jingle Bell Lane 21
1224CH Christmastown
Northern Nowhere
phone: +12 12 122 1111
fax-no: +12 12 122 2222
e-mail: rudolf@xmas.nn
nic-hdl: RD212-RIPE
notify: jbgood@antarctic.nn
mnt-by: SANTA-SECURITY-MNT
changed: jbgood@antarctic.nn 19960412
source: RIPE

IV. Optional Information