Internet Exchange Point Request Supporting Notes

This document contains instructions for LIRs on how to complete the "Internet Exchange Point Assignment Request Form".

The instructions are based on the following policy documents:

1. I[Pv4 Address Allocation and Assignment Policy for the RIPE NCC Service Region](#)
2. [IPv6 Address Allocation and Assignment Policy](#)
3. [Contractual Requirements for Provider Independent Resource Holders in the RIPE NCC Service Region](#)

General Information

```
#[GENERAL INFORMATION]#

% Please add your RegID.
request-type: ixp-assign
form-version: 1.0
x-ncc-regid: nl.bluelight
```

Please do not change the value of the "request-type:" and "form-version:" fields.

Enter your Registry Identifier (RegID) in the "x-ncc-regid:" field. RegIDs have the following format: <country code>.<name>. If you do not know your RegID, please contact ncc@ripe.net.

Overview of Organisation

```
#[OVERVIEW OF ORGANISATION]#

% Is this request being sent by a sponsoring LIR on behalf of an End
% User?  (Yes/No)
end-user-of-sponsoring-lir: Yes
% If yes, please confirm that the "End User Assignment Agreement"
% contains all of the elements listed in paragraph 2.0 of "Contractual
% Requirements for Provider Independent Resource Holders in the RIPE
% NCC Service Region".  (Yes/No)
confirmation: Yes
% Which IXP will use the requested address space?
org-description: Ruritania IXP Ltd
```

If you are an LIR sending this request on behalf of an End User, you should answer "Yes" in the "end-user-of-sponsoring-lir" field.

If you answered "Yes" you should also confirm that all of the elements of paragraph 2.0 of "Contractual Requirements for Provider Independent Resource Holders in the RIPE NCC Service Region" are listed in the "End User Assignment Agreement" that is signed by the End User and the sponsoring LIR.

 For all assignments that are requested through a sponsoring LIR for an End User, we need to receive a copy of the "End User Assignment Agreement" and the company registration papers of the End User.

You can find an example agreement at:
https://www.ripe.net/lir-services/resource-management/direct-assignments/independent-assignment-request-and-maintenance-agreement

You can send us an agreement in your local language or use the English version.

If this request is sent by a Direct Assignment User, you answer "No" to the above two questions. Direct Assignment Users have already signed an "End User Assignment Agreement" with the RIPE NCC. If the request is for an LIR, you should also answer with "No".

 In the "org-description:" field, write a short description of the IXP requesting the assignment(s).

Overview of the User

```
#[OVERVIEW OF THE USER]#

% Who is the contact person for this IXP?
Name:          Fred Bloggs
Organisation:  Ruritania IXP
Country:       NN
Phone:         +123 45 678910
Email:         fred@rurixp.ripe.net
```

Enter the legal name and primary location of the organisation in the "organisation:" and "country:" fields.

Please use international dialing codes (for example, +31 for the Netherlands,) in the "phone:"field.

Existing Address Space Usage

```
#[EXISTING ADDRESS SPACE USAGE]#

% If the IXP has any IPv4 ranges(s) for their peering LAN, list them
% below.  If any such space is being returned, then the return date
% should be specified.
subnet-ipv4: 192.0.2.0/24 to nl.bluelight in 1 month.
% If the IXP has any IPv6 assignments, list them below.
subnet-ipv6: None
```

Please specify address prefixes using slash notation (for example, y:y:y::/yy). You can repeat the "subnet-ipv4 or subnet-ipv6:" field as many times as needed.

If there is any address space assigned that they will be returned, list each prefix in separate "address-space-returned" fields. The maximum renumbering is 180 days. You can use the following syntax: <x.x.x.x/xx> in <time period> for this field.

IPv4 Address Space Usage

```
#[IPv4 ADDRESS SPACE USAGE]#

% How will the IXP use the requested IPv4 address space?
% ADDRESSING PLAN
%           Subnet        Immediate    Intermediate   Entire    Purpose
%           size (/nn)    Requirement  Requirement    Period
subnet:     /27           16           24             32        Network Infrastructure

subnet:     /24,/26       272          296            320       Members connections


totals:     /24,/26,/27   /24,/27      /24,/26        /24,/26,/27
number-of-subnets:
```

The addressing plan shows how the End User will use the requested address space.

You can repeat the "subnet" row as many times as needed. Delete any empty "subnet" fields before you send the request.

In the "Subnet size (/nn)" column, enter a slash notation prefix for each subnet. Each entry should be large enough to contain the number of addresses needed for that subnet over the next time period.

In order to demonstrate the predicted growth of your network, you must provide an estimate of the address space you will require over three distinct periods: Immediate, Intermediate and the Entire period. These columns can either contain numbers (for example, 256) or slash notation prefixes (for example, /24).

In the "Purpose" column, write a short description of each subnet. If needed, you can write a more detailed description in the "Supplemental Comments" section at the end of this form.

In the "totals" row, add the totals of each column. The total of the "Subnet size (/nn)" column should be the total amount of address space you are requesting for this assignment.

In the "number-of-subnets" field, enter the total number of subnets listed in the addressing plan.

IPv6 Address Space Usage

```
#[IPv6 ADDRESS SPACE USAGE]#

% How will the IXP use the requested IPv6 address space?
% ADDRESSING PLAN
%           Subnet        Within     Within    Within       Purpose
%           size (/nn)    3 months   1 year    2 years
subnet:     /64           x          -         -            Network Infrastructure
subnet:     /55           x          -         -            Members connections*
```

The addressing plan shows when the IXP plans to use the address space.

Enter the size of each subnet in the "Subnet size (/nn)" column. Please specify the size using IPv6 slash notation (for example, /48). You can repeat the "subnet:" field as many times as needed.

In the "Purpose" column, write a short description for each subnet. If needed, you can write a more detailed description in the "Insert Supplemental Comments" section at the end of the form.

Complete the remaining columns with a cross (x) or a dash (-). For example, if you will use a subnet within three months, enter a cross in the "Within 3 months" column and a dash in both the "Within 1 year" and "Within 2 years" columns.

Supplemental Comments

```
#[SUPPLEMENTAL COMMENTS]#

% Please add more information if you think it will help us understand
% this request. You can attach a network diagram or other relevant
% supporting documentation.  If the IXP has an online list of members,
% please add the URL below.

Ruritania IXP has 62 IXP members, and add approximately six new members every
month. Each member's connection requires one /30.
The IXP network consists of three routers (three IPs), three switches (three
IPs) and two firewalls (eight IPs).  Two more routers and switches will be
added next month.
We would like to return the current /24 used for our peering LAN and
receive one /23 IXP assignment to renumber current members and connect new
members.

The joining requirements are online at: http://www.rurixp.ripe.net/join_us.html
```

You can use this space for additional information that you think will be helpful for us when we evaluate your request.

A network diagram (topology map) can help us to understand the set-up of the network and its addressing needs.

Supporting Documentation

```
#[SUPPORTING DOCUMENTATION]#

% If this request is being sent by a sponsoring LIR on behalf of an
% End User, please attach a copy of the signed "End User Assignment
% Agreement" and the company registration papers of the End User.

% Have you attached any files/documents to this request?  (Yes/No)
file-attached:Yes
```

For each assignment that is requested through a sponsoring LIR for an IXP, we need to receive a copy of "End User Assignment Agreement" and the company registration papers of the End User.

If this request is for an LIR or a "Direct Assignment User", you do not have to attach a copy of "End User Assignment Agreement" and company registration papers.

Database Templates

```
#[IPv4 DATABASE TEMPLATE]#

% If you are requesting IPv4, complete this IPv4 database template.
% If you are not requesting IPv4, please remove this IPv4 database
% template.

inetnum: <leave empty>
netname:      RURIXP
descr:        Ruritania IXP Ltd
country:      NL
org:          ORG-Bb2-RIPE
admin-c:      HOHO15-RIPE
tech-c:       HOHO15-RIPE
status:       ASSIGNED PI
mnt-by:       RIPE-NCC-END-MNT
mnt-lower:    RIPE-NCC-END-MNT
mnt-by:       SANTA-MNT
mnt-domains:  SANTA-MNT
mnt-routes:   SANTA-MNT
changed:      hostmaster@ripe.net
source:       RIPE

#[IPv6 DATABASE TEMPLATE]#

% If you are requesting IPv6, complete this IPv6 database template.
% If you are not requesting IPv6, please remove this IPv6 database
% template.

inet6num:  <leave empty>
netname:      RURIXP
descr:        Ruritania IXP Ltd
country:      NL
org:          ORG-Bb2-RIPE
admin-c:      HOHO15-RIPE
tech-c:       HOHO15-RIPE
status:       ASSIGNED PI
mnt-by:       RIPE-NCC-END-MNT
mnt-lower:    RIPE-NCC-END-MNT
mnt-by:       SANTA-MNT
mnt-domains:  SANTA-MNT
mnt-routes:   SANTA-MNT
changed:      hostmaster@ripe.net
source:       RIPE
```

If the IXP is requesting IPv4 and IPv6, please complete all templates. If not, you should complete the relevant template(s) and delete the rest when sending the request.

Leave the "inetnum/inet6num" fields empty as we will choose the address range.

The "netname:" should be a short, descriptive name for the network and should reflect the name of the organisation operating the IXP.

Enter the legal name of the organisation operating the IXP in the "descr:" field.

Enter the ISO country code of the organisation in the "country:" field.

Enter the org-ID of the **organisation** object in the "org:" field. You can create **organisation** objects using 'webupdates'.

Person and **role** objects contain information about people. Each object has a unique NIC handle (nic-hdl). You can create **person** and **role** objects using webupdates.

The nic-hdl of the **role** or **person** object entered in the "admin-c:" field should be for someone who has administrative responsibilities for the network.

The nic-hdl of the **role** or **person** object entered in the "tech-c:" field should be for someone who has technical knowledge of the network.

The "status:" field must be ASSIGNED PI.

Maintainers protect objects in the RIPE Database. They contain the information needed to authorise creation, deletion or modification of these objects. You can create maintainers using the "Maintainer Editor" (https://lirportal.ripe.net).

One of the "mnt-by:" fields must be RIPE-NCC-END-MNT. Enter the IXP's maintainer in the other "mnt-by:" field. The IXP will be able to update the **inetnum/inet6num** object using webupdates.

The "mnt-lower:" field must be RIPE-NCC-END-MNT.

The "mnt-domains:" field shows which maintainer authorises the creation of **domain** objects for the assignment.

The "mnt-routes:" field shows which maintainer authorises the creation of **route/route6** objects for the assignment.

All of the objects that you enter in the template must already exist in the RIPE Database.

The "changed:" field must be hostmaster@ripe.net.

The "source:" field must be RIPE.

End of Request

Best Regards,

Jan Janssen, Bluelight Admin

Please write your full name below the "#[END of REQUEST]#" header.