0)851,100,14 330000:13be3 3-19-F2:80:1198 1:2209:600 30/08:1095

IPv4: Where do we stand?

SEE2, Skopje 2013

Ingrid Wijte ingrid@ripe.net



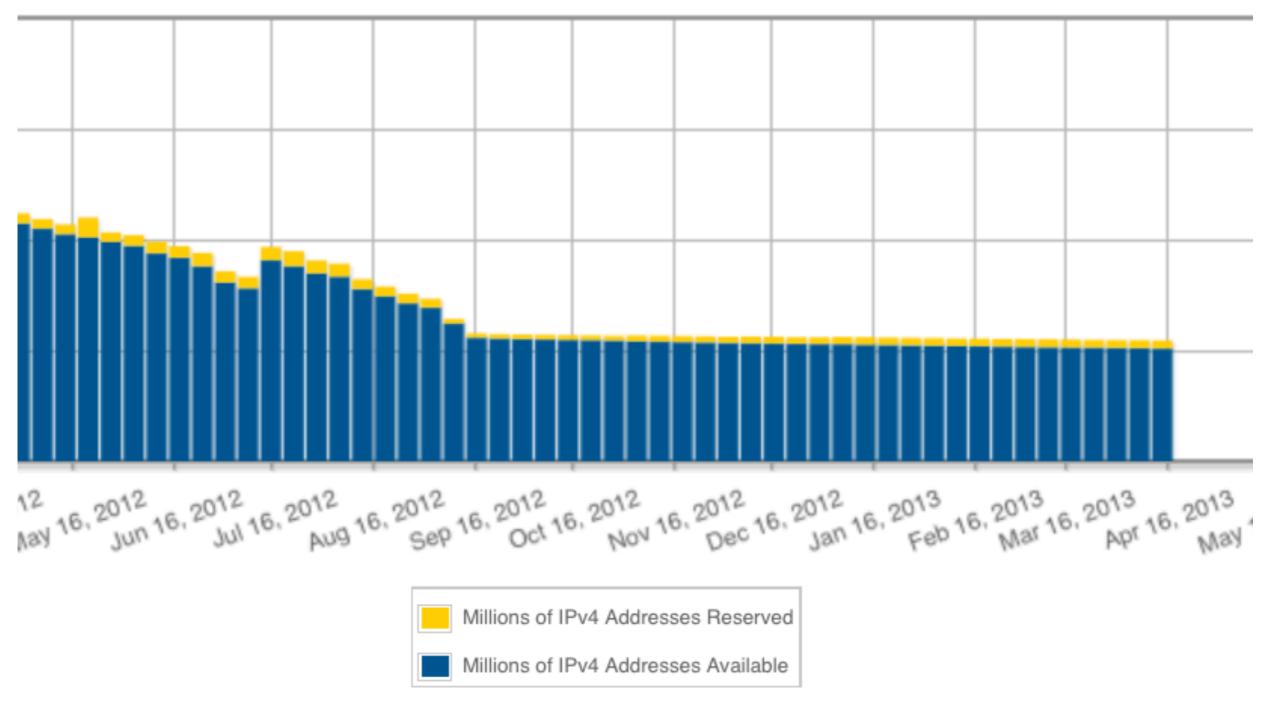
Allocations From The Last /8

- The RIPE NCC reached the last /8 on 14 September 2012
- LIRs can receive one /22 (1,024 IPv4 addresses), even if they can justify a larger allocation
 - LIRs must already have an IPv6 allocation from an upstream LIR or the RIPE NCC
- No new IPv4 Provider Independent (PI) address space
- 1,429 /22s issued so far
- Address space set aside for IXP and temporary assignments



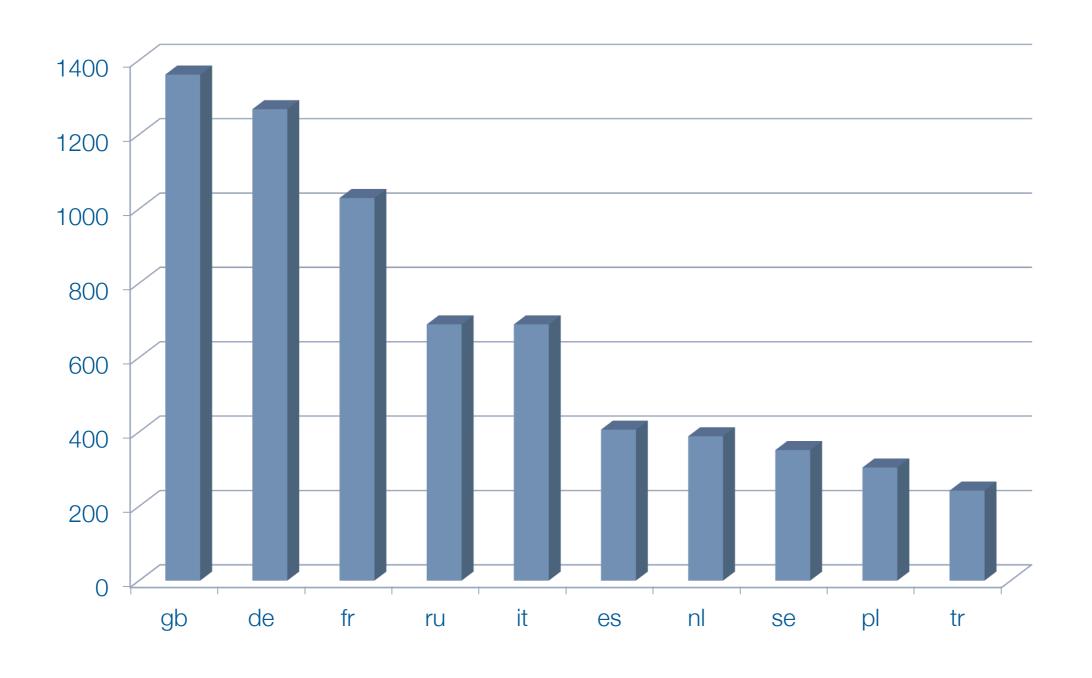
IPv4 Available Pool

RIPE NCC IPv4 Pool — Last 12 Months





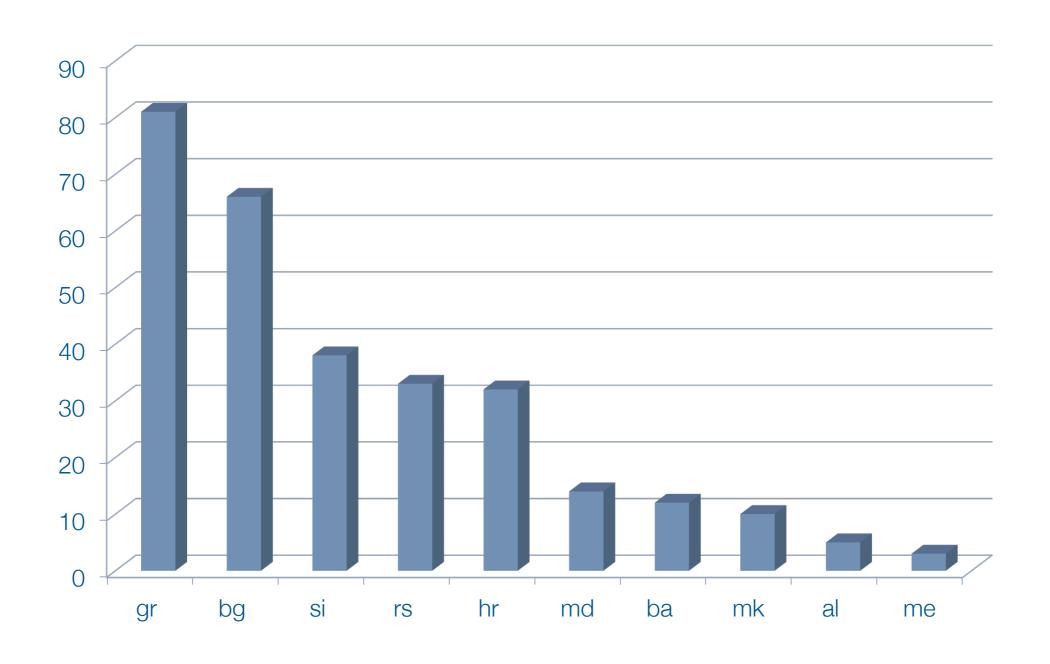
IPv4 Address Space Per Country



Counted in /16s



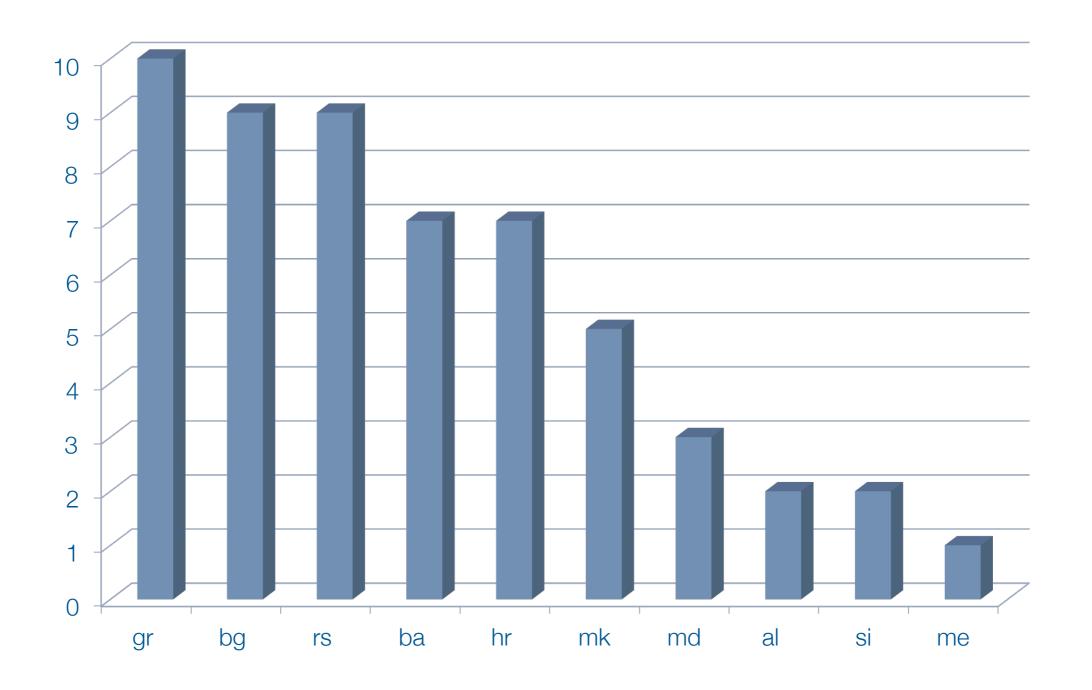
IPv4 Address Space – Regional Statistics



Counted in /16s



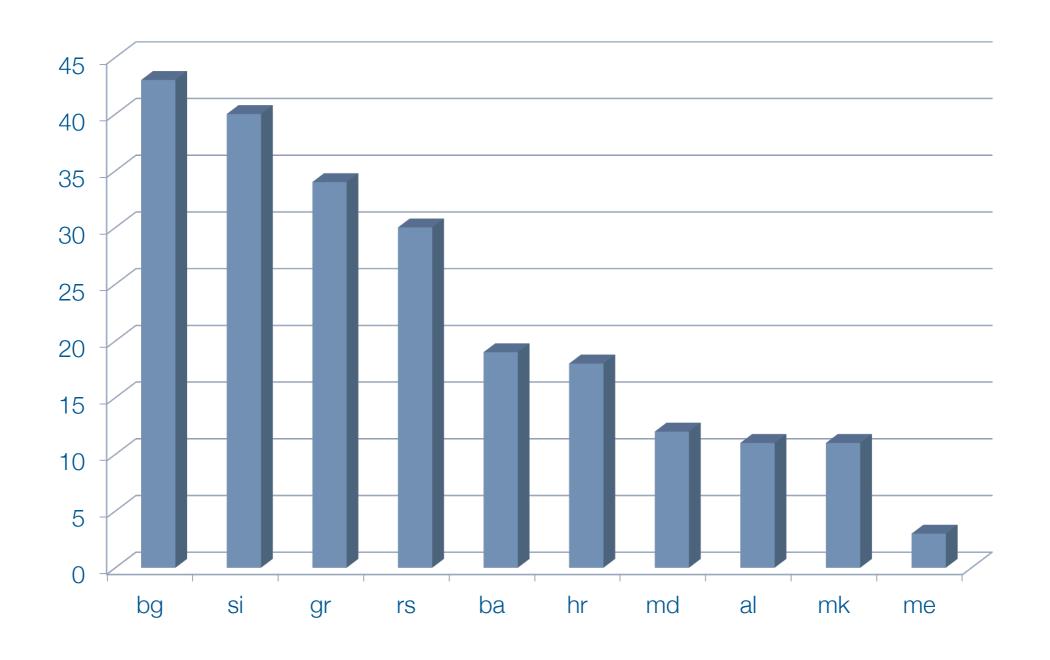
/22 IPv4 Allocation – Regional Statistics



Total allocations: 55



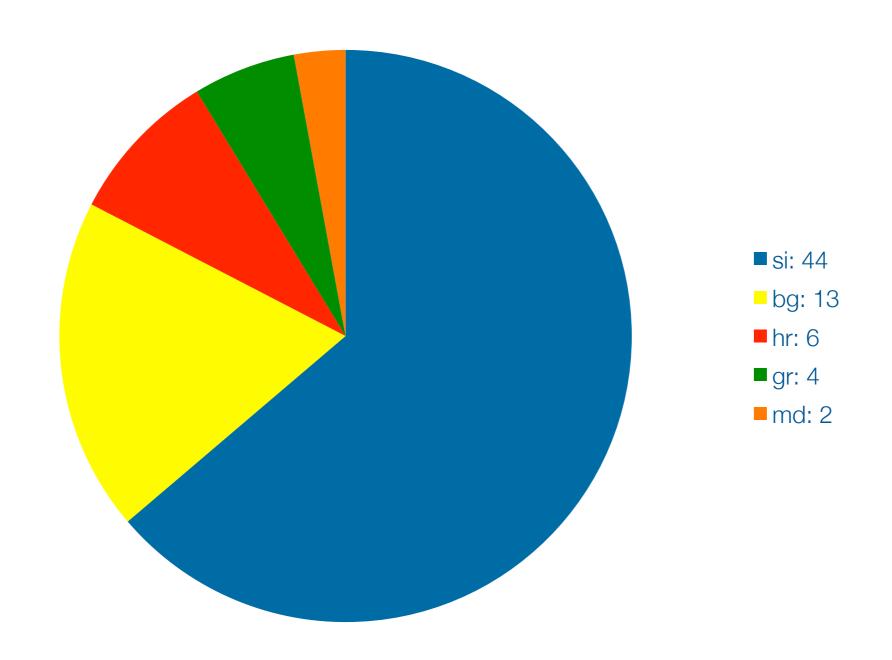
IPv6 - Regional Statistics



Number of allocations



IPv6 PI Assignments – Regional Statistics





Need More Address Space?

- Three different types of intra-RIR transfers:
 - 1) Mergers and acquisitions
 - 2) "Normal" transfers of allocations
 - 3) Legacy space transfers
- An inter-RIR transfer policy proposal is currently under discussion that would allow transfers between regions with reciprocal policies



1) Mergers and Acquisitions

- If an organisation (or part of it) is being sold, the Internet number resources in use by its network can be transferred
- Documentation requested:
 - Merger/purchase agreement
 - Company registration papers for both parties
 - New "Independent Assignment Request and Maintenance Agreement" (only for Provider Independent resources)
- Based on procedural document ripe-579

2) "Normal" Transfers of Allocations

- Policy requirements
 - Transfers between LIRs only
 - The IP addresses transferred must not be in use
 - Receiving LIR must justify need for IP addresses
 - Permanent or temporary
- Documentation requested:
 - Signed RIPE NCC Transfer Agreement
 - Company registration papers for both parties
 - RIPE NCC additional allocation (pre)approval for receiver
- Based on ripe-582, section 5.5

3) Legacy Space Transfers

- IPv4 address space that was distributed prior to the formation of the Regional Internet Registry (RIR) system
- The RIPE NCC is able to support transfers of legacy space when this is covered by a "Legacy Space Agreement"
- The RIPE NCC is not involved in the transfer when the legacy resources are not covered by a "Legacy Space Agreement"

IPv4 Transfer Listing Service

- Enables LIRs looking to transfer allocations to find receiving parties
- LIRs can also request resources
- Member-only service through the LIR Portal
- The RIPE NCC has no interest in financial transactions
- Transfers must follow transfer policy in ripe-582, section
 5.5
- Currently 45,056 IPs offered vs 12,077,056 requested
- Data available in JSON format



You are signed in as gceccher@ripe.net - Profile I Sign out

My LIR General Information > Billing Details > LIR Contacts > My Location > Communication Preferences > Manage Users > Add Users >

IPv4 Transfer Listing Service

Offered IPv4 Addresses

The IPv4 Transfer Listing Service is a platform that enables RIPE NCC members to list and exchange the IPv4 address space they hold and no longer need. This can be transferred between RIPE NCC members as described in "IPv4 Address Allocation and Assignment Policies for the RIPE NCC Service Region". More information about transfers of IPv4 address space can be found here.

Before any resources can be transferred the receiving LIR must send an initial/additional allocation form to the RIPE NCC for pre-approval. The request must state the listing service is being used and the desired allocation size.

By using this service you explicitly express your agreement with the IPv4 Transfer Listing Service Terms and Conditions.

Click here to offer IPv4 address space

Edit existing offer

Click here to request IPv4 address space

Edit existing request

Resources IP Analyser IPv4 IPv6 ASN Request Forms Object Editors IPv4 Transfer Listing Service

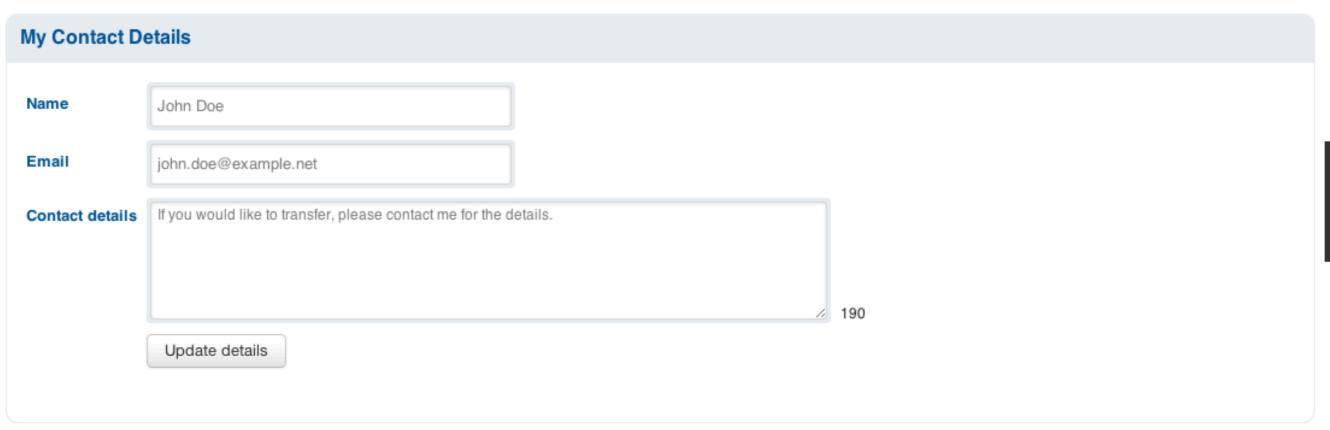
→ /21 (3)		
Requested IPv4 addresses		

	· /13 (1)
esource Certification	· /14 (1)
shboard >	→ /16 (6)
A Configuration >	· /17 (2)
	→ /18 (10)



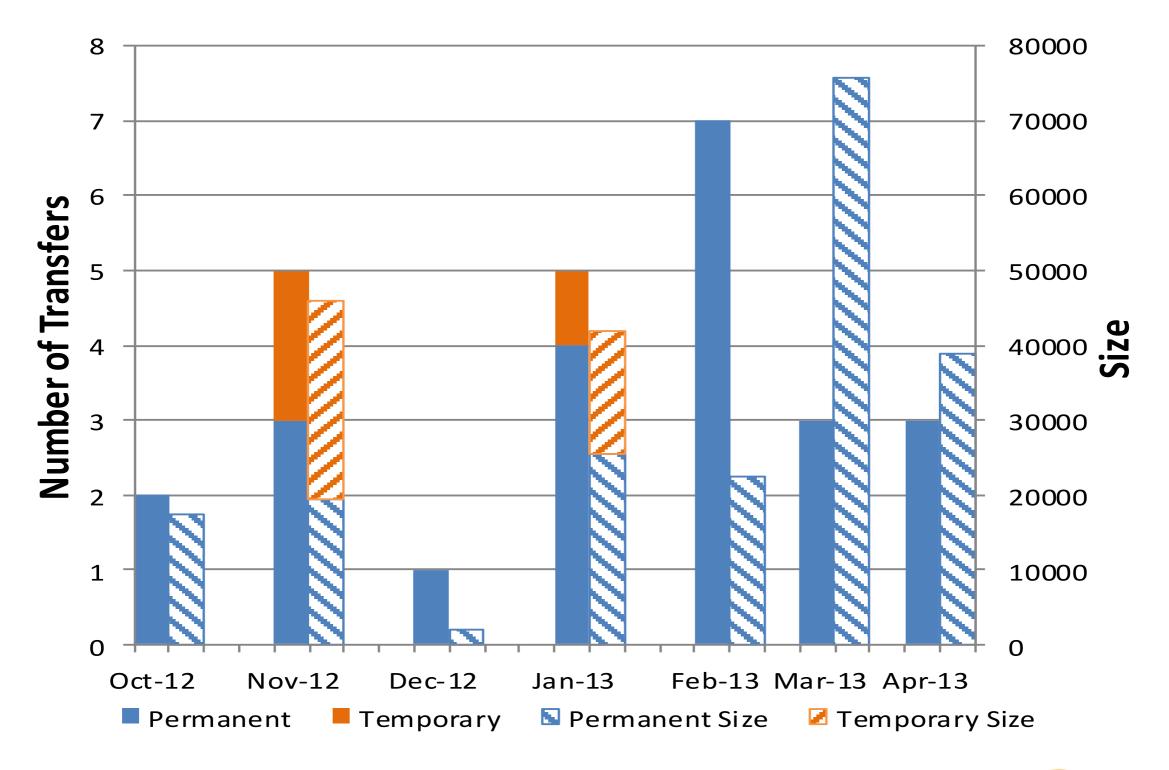
Request Unused IPv4 Address Space

The IPv4 Transfer Listing Service enables RIPE NCC members to list and exchange the IPv4 address space they hold and no longer need. For more information about this service, please see the IPv4 Transfer Listing Service FAQs.



Requested IP A	Allocation
Current request	There is no request listed for your registry.
Allocation size	Choose One ‡
Transfer duration	○ Temporary ○ Permanent
	Publish

Permanent and Temporary Transfers



Recent Policy Changes (1)

IPv4 Transfer Statistics

- Accepted policy proposal 2012-05, "Transparency in Address Block Transfers"
- To increase the transparency of the transfer market for IPv4 addresses
- RIPE NCC to publish a record of all transfers conducted under the transfer policy
- Non-approved transfers published as aggregate statistics

http://www.ripe.net/lir-services/resource-management/ipv4-transfers/table-of-transfers



Recent Policy Changes (2)

- "Revert "Run Out Fairly""
 - Policy proposal 2012-06
 - This proposal reverts the changes made by "Run Out Fairly"
 - Was 3 months allocation / assignment period
 - New allocation / assignment periods
 - 12 months allocation
 - 24 months assignment

Current Transfer Policy Proposals (1)

- "Policy for Inter-RIR Transfers of IPv4 Address Space"
 - Policy proposal 2012-02
 - This proposal describes how transfers of IPv4 address space between LIRs of different Regional Internet Registries will occur
 - Section 5.5 applies
 - Need for policy compliance between RIRs:
 - Originating party complies with policy of originating RIR
 - Destination party complies with policy destination RIR
 - RIRs must have "compatible" as well as reciprocal policies
 - Status: Review Phase awaiting Working Group Chair decision



Current Transfer Policy Proposals (2)

- "Intra-RIR Transfer Policy Proposal"
 - Policy proposal 2012-03
 - This proposal changes the period for transferred allocations from
 12 to 24 months

Status: Review Phase – awaiting Working Group Chair decision

Current (Transfer) Policy Proposals (3)

- "No Need Post-Depletion Reality Adjustment and Cleanup"
 - Policy proposal 2013-03
 - Remove needs-based requirement for IPv4 delegations
 - Status: Discussion Phase awaiting documentation
- "RIPE NCC Services to Legacy Internet Resource Holders"
 - Policy proposal 2012-07
 - Status: Discussion Phase (currently a lot of input being received)



Brokers

- Some members may decide to use a broker to facilitate the transfer process
- Listing "recognised brokers" on the website
 - Brokers who have signed an agreement to follow
 - RIPE Policies
 - RIPE NCC procedures



Where Does The RIPE NCC Stand?

- Our ultimate priority is keeping the registry up to date
- Ensuring that transfers follow RIPE Policy
- Supporting our members through the transfer process
- The RIPE NCC has no interest in financial transactions

What's Next?

- Increasing transparency
 - New transfer section on website (accessible from the homepage)
- Listing "recognised brokers" on the website
 - Brokers who have signed an agreement to follow RIPE Policies
- Simplifying the transfer process
 - One single transfer form in the LIR Portal (upcoming)

Participate in Discussions

Address Policy Working Group:

http://www.ripe.net/mailman/listinfo/address-policy-wg

Links

- http://www.ripe.net/lir-services/resource-management/ ipv4-transfers
- https://www.ripe.net/ripe/docs/ripe-553#----transfers-of-allocations
- https://www.ripe.net/lir-services/resource-management/ ipv4-transfers/transfer-of-pa-space
- https://www.ripe.net/lir-services/resource-management/ listing
- https://www.ripe.net/ripe/policies/current-proposals/ current-policy-proposals



Questions?



