



**RIPE
NCC**

Feedback From RIPE NCC Registration Services

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- To report back to the RIPE community:
 - The feedback that we receive from LIRs
 - Highlighting potential problem areas
- Asking for guidance on these topics
- Providing input to the community for policy discussion

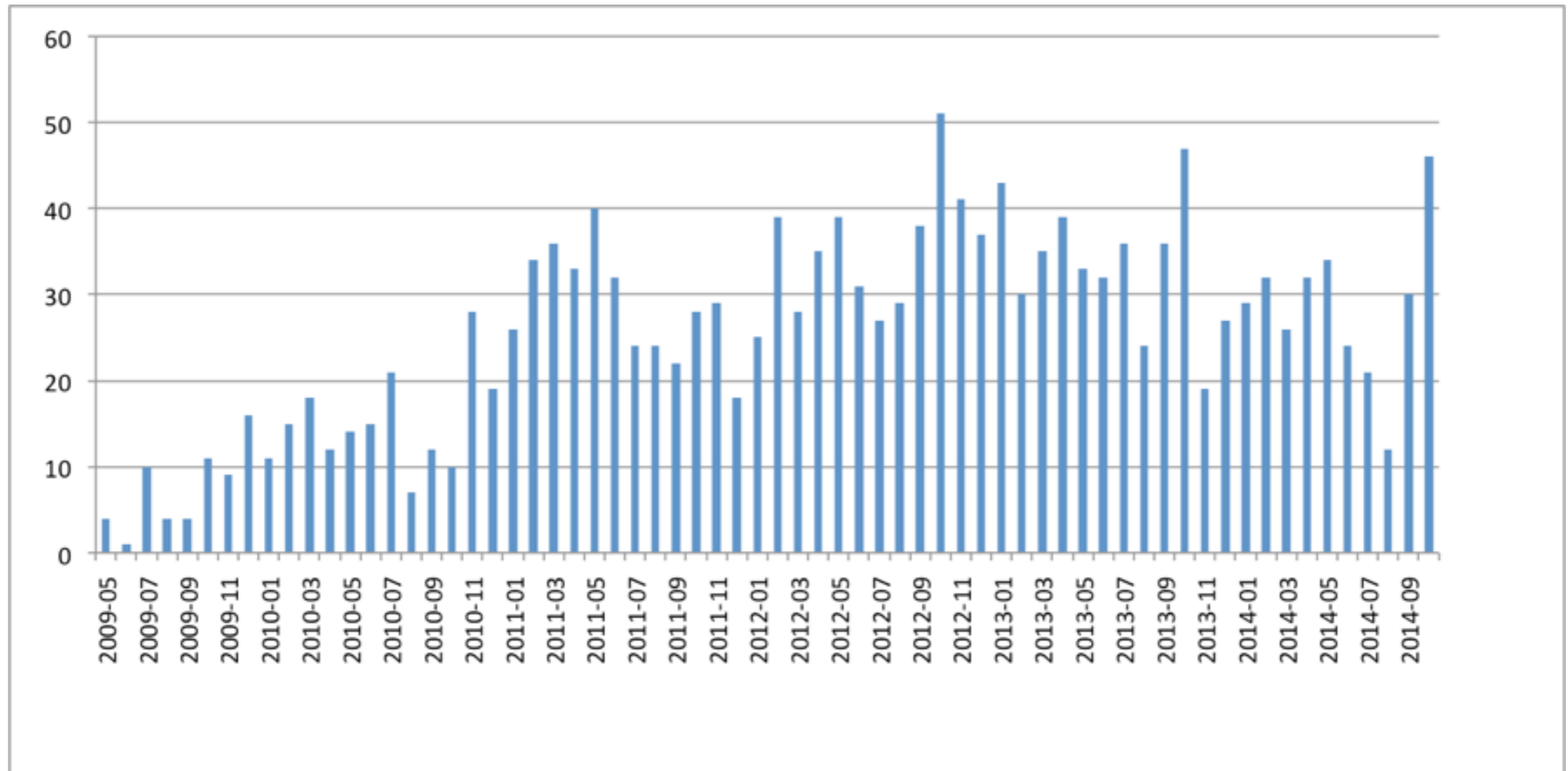
- Local Internet Registries (LIRs) returning IPv6 Provider Independent (PI) assignments
- Infrastructure Use in IPv6 PI
- Holding Period for Temporary Transfers
- Multiple /22s

“If an organisation already received a PI assignment before becoming an LIR, the PI assignment should be returned upon receiving an IPv6 allocation if there are no specific routing requirements to justify both.”

[http://www.ripe.net/ripe/docs/ripe-589#IPv6 PI Assignments LIR](http://www.ripe.net/ripe/docs/ripe-589#IPv6_PI_Assignments_LIR)

- The RIPE NCC receives requests from LIRs for an IPv6 allocation
 - LIR has an IPv6 PI assignment
 - The assignment is in use
 - There is no different routing requirement to justify both
- IPv6 assignment is being returned
 - 47 IPv6 PI assignments returned so far

Organisations that have IPv4 PI also want IPv6 PI



- Both IPv4 PI and IPv6 PI policies do not allow for making further assignments
 - IPv6 policy: *“The PI assignment cannot be further assigned to other organisations”*
 - IPv4 policy: *“ASSIGNED PI: This address space has been assigned to an End User for a specific purpose. It cannot be used to make further assignments to other parties.”*

- IPv4 policy defines infrastructure to include IP addresses for connecting customers
 - *“IP addresses used solely for the connection of an End User to a service provider (e.g. point-to-point links) are considered part of the service provider's infrastructure. These addresses do not have to be registered with the End User's contact details but can be registered as part of the service provider's internal infrastructure.”*
- IPv6 PI requesters are confused, IPv6 deployments are delayed or cancelled...

“This re-allocation may be on either a permanent or non-permanent basis.” (...) “LIRs that receive a re-allocation from another LIR cannot re-allocate complete or partial blocks of the same address space to another LIR within 24 months of receiving the re-allocation.”

- Does the 24-month holding period apply to temporary transfers once the transfer period has ended, and the address space has been returned to the original holder?

“The sum of all allocations made to a single LIR by the RIPE NCC after the 14th of September 2012 is limited to a maximum of 1024 IPv4 addresses”

- Organisations are opening multiple LIRs
 - /22s quickly transferred and the LIR closed
- Against the ‘spirit’ of the last /8 policy but technically possible
- ± 70 confirmed cases so far, but we see a growing trend



- Returning IPv6 PI for LIRs
- Infrastructure Use in IPv6 PI
- Holding Period for Temporary Transfers
- Multiple /22s