



**RIPE NCC**  
RIPE NETWORK COORDINATION CENTRE

# Feedback from RIPE NCC Registration Services: Looking Back

# The Aim of This Update



- In the Address Policy WG we present our observations
  - Trends in requests, external complains about policies, ambiguities
- We ask the RIPE community for guidance
  - Many topics are solved with feedback from the WG, others result in policy development
- Looking back at what has been achieved
  - Changes in address management, IPv6 deployment support and data accuracy



# **Address Management**

# ASN and IPv6 Transfers



- Increasing number of requests to transfer ASNs and IPv6 (RIPE 68)
  - Request from LIRs to transfer all resources to another LIR, while only a transfer policy for IPv4 was in place
- RIPE community response:
  - Two policy proposals were made (2014-12 and 2014-13)
  - Consensus reached in March 2015
  - So far 260+ IPv6 allocations, 30+ IPv6 PI and 620+ ASNs have been transferred within the RIPE NCC service region

# LIRs Keeping IPv6 PI



- Policy required LIRs to return their IPv6 PI if they requested an IPv6 allocation (RIPE 68)
  - 50+ LIRs returned their IPv6 PI to receive an allocation
  - This was creating an obstacle for IPv6 deployment
- RIPE community response:
  - Proposal 2015-02, “Keep IPv6 PI When Requesting IPv6 Allocation” was made to remove this requirement
  - Consensus reached in August 2015

# Re-assigning Referenced ASNs



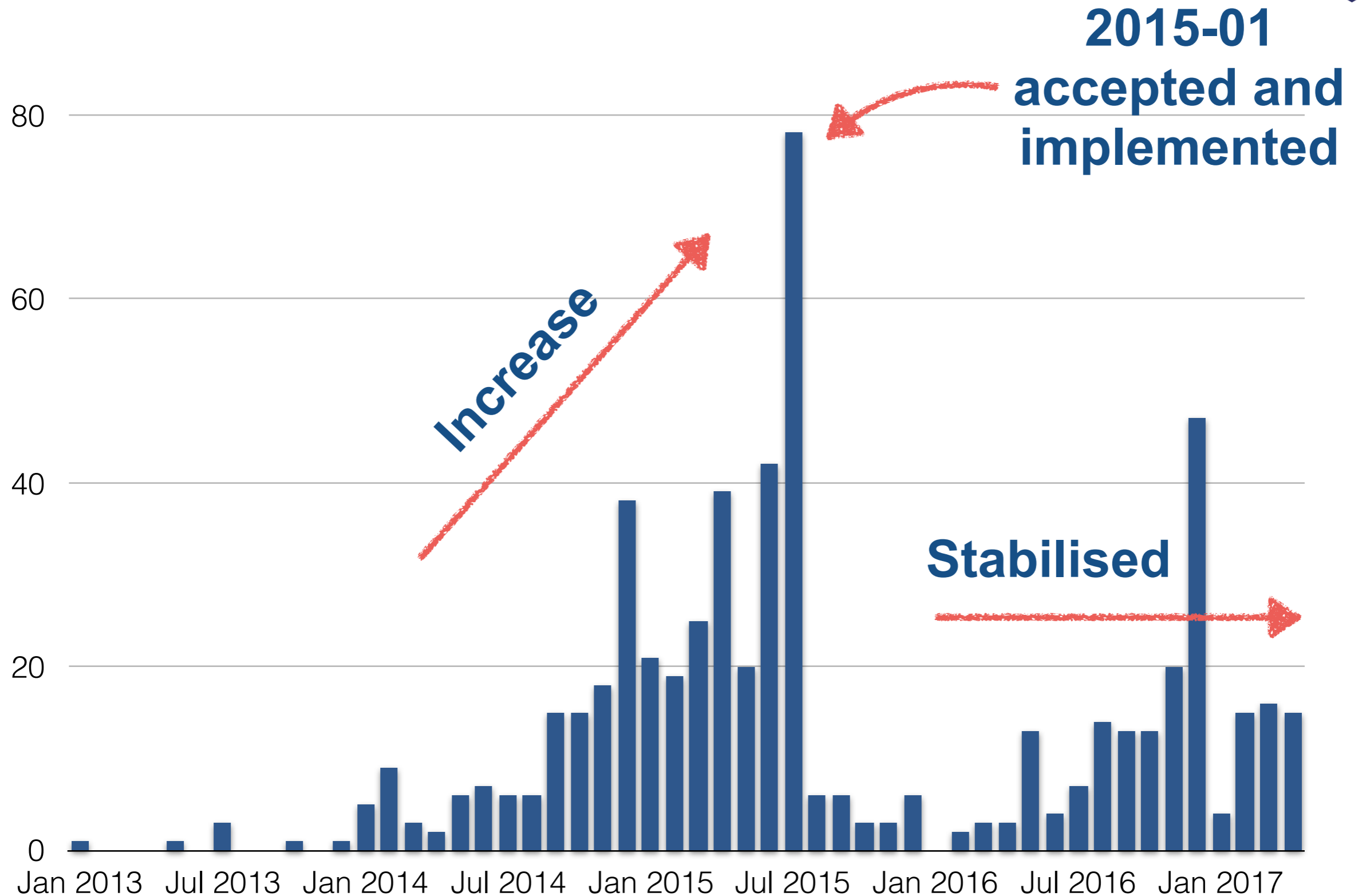
- Growing number of returned ASNs referenced in the RIPE Database (RIPE 68)
  - Referenced ASNs were not being re-assigned
- RIPE community response:
  - Gave us a mandate to re-assign ASNs even if they are referenced in other RIPE Database objects
  - ~3,900 ASNs have been added to the pool and ~1,200 ASNs have been reassigned since
  - No major issues reported so far

# Multiple /22s per LIR



- An increasing number of LIRs were opening, requesting an /22 IPv4, transferring the allocation and closing (RIPE 69)
  - This was considered against the spirit of Last /8 Policy
- RIPE community response:
  - 2015-01, “Alignment of Transfer Requirements for IPv4 Allocations” added a 24-month holding period for all IPv4 allocations received from the RIPE NCC
  - Reached consensus in July 2015
  - The number of resource transfers from the last /8 has stabilised

# Transfer Statistics for 185/8







# IPv6 Deployment

# Sub-assignments in IPv6 PI



- Differences between IPv4 and IPv6 policies on what is considered infrastructure and sub-assignments (RIPE 68 and 69)
- RIPE community response:
  - Proposal 2016-04, “IPv6 PI Sub-assignment Clarification”
  - Discussion still ongoing due to undesired side effects of the initial approach

# Non-typical IPv6 Allocation Needs



- Increasing number of requests for large IPv6 requests (RIPE 70)
  - Based on network hierarchy and segmentation instead of user base
- RIPE community response:
  - Ongoing discussion for 2015-03 was supported
  - Consensus reached in October 2015
  - Several allocations were issued under new policy

# IPv6 Policy Out of Sync



- IPv6 additional allocation criteria conflicting with first allocation criteria (RIPE 73)
  - Organisations receiving first allocation based on network hierarchy and segmentation instead of user base cannot justify an additional allocation
  - Problem for LIRs that discover new needs during IPv6 deployment
- RIPE community response:
  - Proposal 2016-05 was made to add criteria to IPv6 subsequent allocation policy
  - Reached Consensus in March 2017



# Data Accuracy

# Inconsistent Allocation Status



- 38 LIRs holding 93 ALLOCATED PI/ UNSPECIFIED (RIPE 71 and 72)
  - Inconsistent with current policies
  - Status of resources unclear to LIRs and End Users
- RIPE community response:
  - Mandate to follow up with LIRs to identify and correct status
  - So far 35 of 93 Allocated PI/UNSPECIFIED converted
  - So far ~600 PI assignments converted to PA
  - So far ~580 NOT-SET assignments converted to PA

# Returning Unused ASNs to Free Pool



- ~ 22% of assigned ASNs are not advertised in the routing system and potentially unused (RIPE 73)
- RIPE community response:
  - Gave us a mandate to proceed with our plan of action
  - We will contact LIRs and sponsoring LIRs for around 6,600 ASNs to identify how many are actually unused



# Questions



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