



RIPE NCC

RIPE NETWORK COORDINATION CENTRE

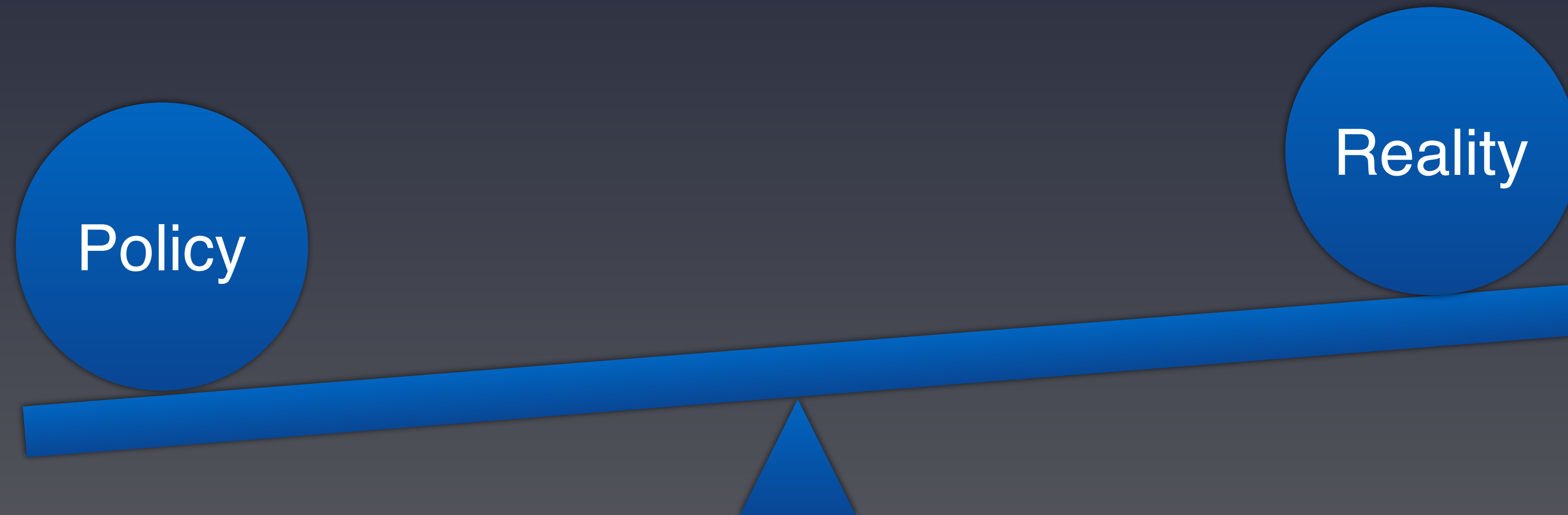
Feedback from the RIPE NCC Registration Services

Marco Schmidt | RIPE 87 | 29 November 2023

Overview



- IPv4 and IPv6 allocations
- ASN requests



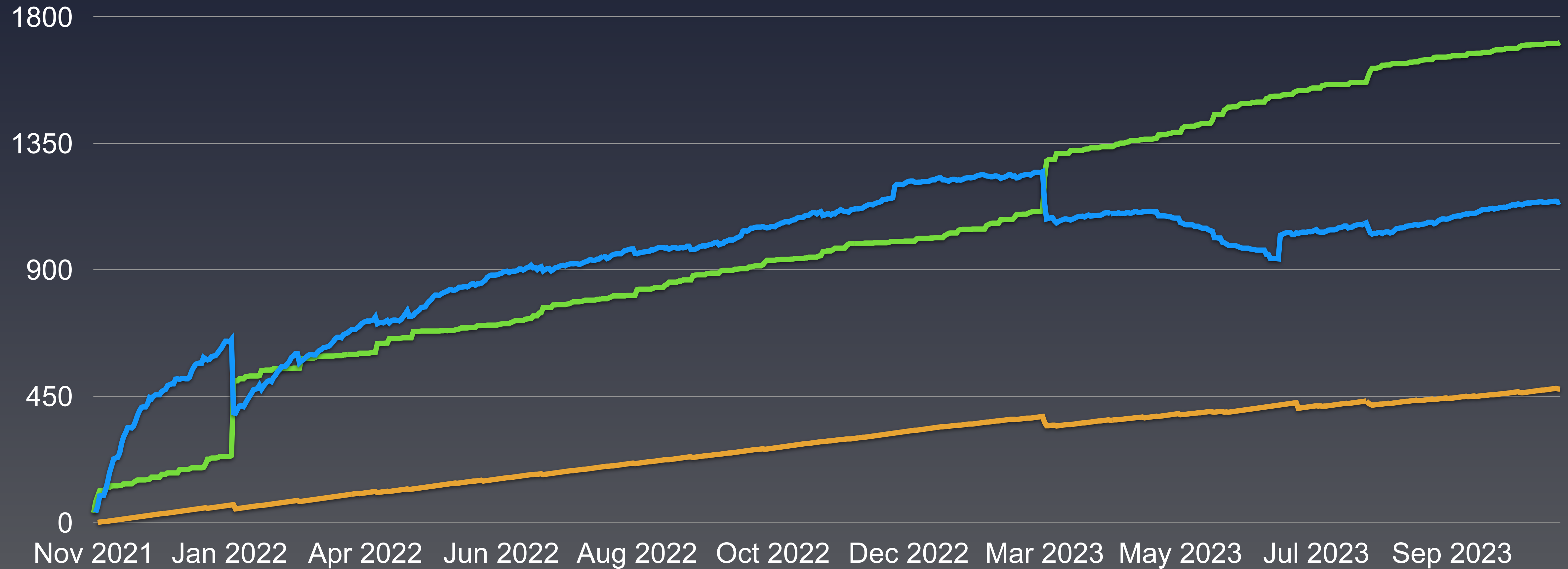


IPv4 & IPv6

IPv4 Waiting List



— LIRs waiting — /24s issued — Days that first LIR in queue has been waiting



Looking Back



- ~1,700 /24 allocations have been provided since 17 November 2021 (when the waiting list became active again)
- Those currently first in line have been waiting since August 2022
- Almost half went to multiple LIR accounts
- RIPE Labs: [Who's Waiting on the IPv4 Waiting List?](#)

Looking Forward



- In the next six months, we will provide around 550 /24 allocations (our current recycled IPv4 pool size)
- Coming from 97 allocations (389 /24s) + 84 assignments (161 /24s)
- Estimated waiting time when joining the waiting list:
18-24 months

IPv6 Allocation



- IPv6 harvesting is still a thing
- How many IPv6 allocations does the largest member have?



/29

$250 \times /29 = \sim /21$

Why Should We Care?



250 IPv6 allocations

=

250 resource requests + 250 transfer/consolidation requests

=

~500 working hours (~63 working days) for the RIPE NCC

- Five other members possess over 100 IPv6 allocations
- ~4,000 blocks held by members with three or more allocations

Conclusion



- Do the IPv4 and IPv6 policies demand clearer guidelines on who qualifies for an allocation?
- Is it time to scrutinise IPv6 transfers?
- Should receiving larger IPv6 allocations be made more straightforward?



AS Numbers

ASN Policy Requirements



- *“From 1 January 2010 the RIPE NCC will cease to make any distinction between 16-bit AS Numbers and 32-bit only AS Numbers, and it will operate AS Number assignments from an undifferentiated 32-bit AS Number allocation pool.”*

<https://www.ripe.net/publications/docs/ripe-679>

But

- In May 2009, during RIPE 58, the Address Policy WG decided to extend the previous approach, mostly due to the lack of 32-bit readiness



16-bit vs 32-bit

- The RIPE NCC is the only RIR that still makes a distinction between 16-bit and 32-bit ASN requests
- Other RIRs issue ~1% 16-bit ASNs
- The RIPE NCC issues around 20% 16-bit ASNs
 - Many are transferred after the holding period expires
 - 62% of transfers in 2023 were 16-bit ASNs
- The RIPE NCC wants to begin operating an undifferentiated ASN pool

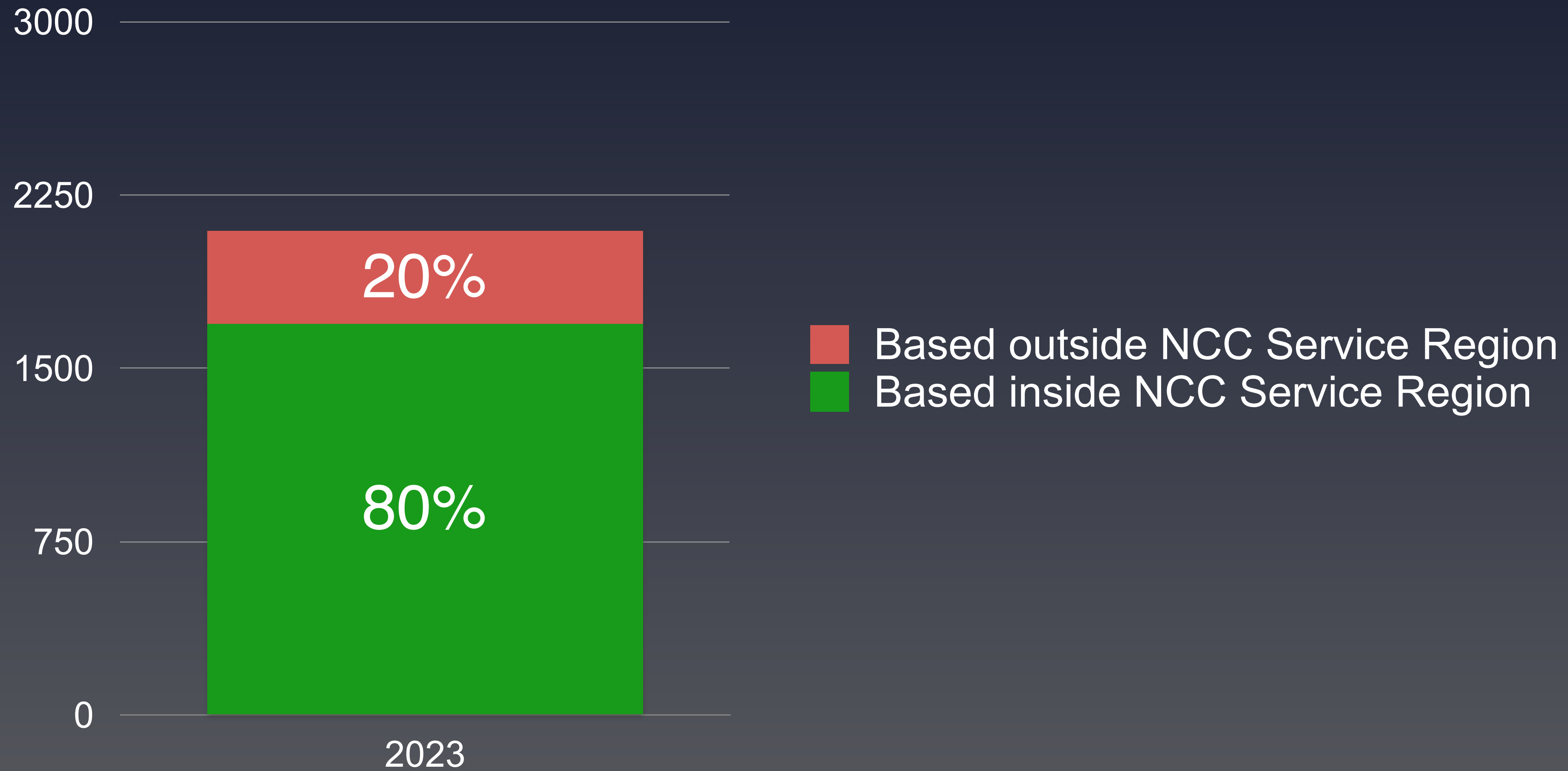
ASN Policy Requirements



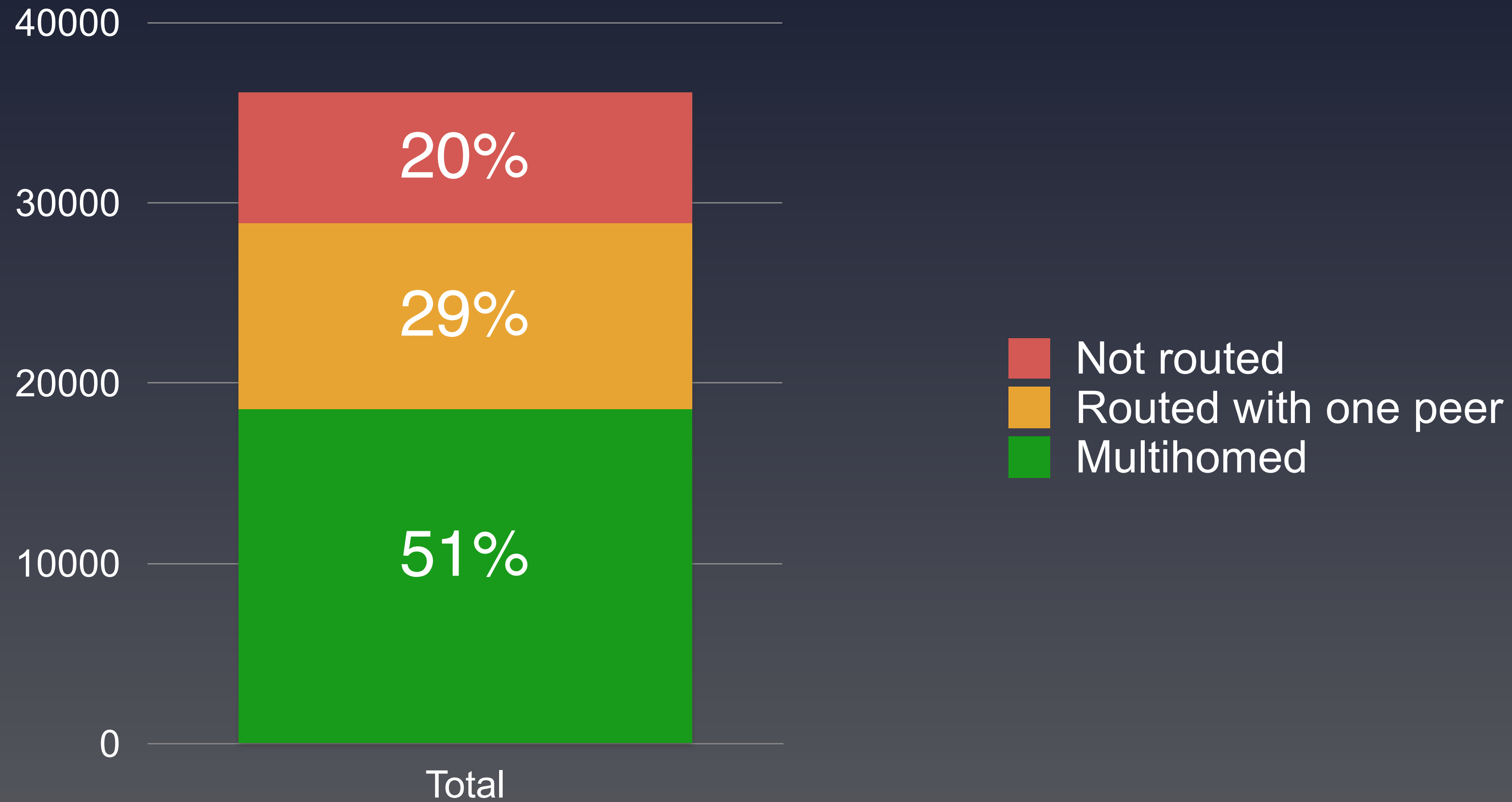
- *“Assignment of globally unique Autonomous System (AS) Numbers within the RIPE NCC service region”*
- *“A network must be multihomed in order to qualify for an AS Number.”*

<https://www.ripe.net/publications/docs/ripe-679>

Where Are the ASN Holders Based?



Peering Status (ASNs Issued before 2023)





Conclusion

- Requests follow the policy requirements, but things often turn out differently later on
- The RIPE NCC could spend significant resources to ensure policy compliance OR
- The ASN policy might need changes to match real needs, making requests easier for everyone, without creating loopholes
 - Review multihoming requirement
 - Review location requirement
 - Follow policy on ASN pool management



Summary

Feedback Needed



- Clearer guidelines needed on who qualifies for an IPv4 or IPv6 allocation
- Does the IPv6 Policy need a review, especially concerning transfers and allocation size?
- Align the ASN policy with practical realities, or vice versa?



Questions



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