# Feedback from the RIPE NCC Registry Services

Marco Schmidt | RIPE 84 | 18 May 2022

# Overview

- IPv4 Waiting List

- IPv6 Stockpiling

- Temporary Assignments

- Registration Updates for IPv4 PI Assignments

# IPv4 Waiting List

# IPv4 Waiting List
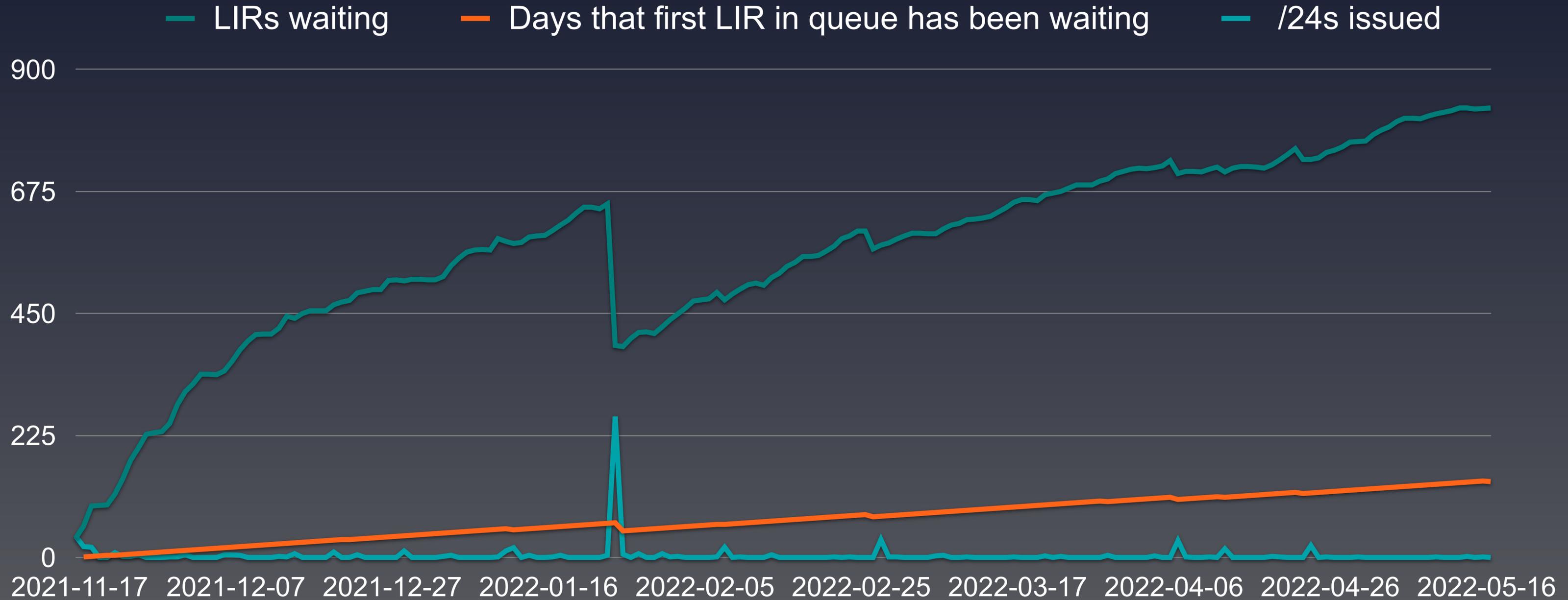
# Looking back

- 651 /24 allocations have been provided since 17 November 2021 (when the waiting list became active again)

- One month was needed to satisfy the requests that arrived on the first day of the waiting list

- Six months were needed to satisfy the requests that arrived within the first 30 days

- Those currently first in line have been waiting since the end of December 2021

# Looking forward

- In the next six months, we will provide around 260 /24 allocations (our current recycled IPv4 pool size)

- Coming from 27 allocations (~ 100 /24s) + 107 assignments (~ 160 /24s)

- Further allocations depend on future de-registrations of IPv4

- Currently we de-register around 40 /24s per month

- Amount of de-registration will continue to decrease

- Estimated waiting time when joining the waiting list: **18 months**

# Multiple LIRs on the Waiting List

## December 2021



- 1 LIR 25%
- 2-4 LIRs 13%
- 5-9 LIRs 14%
- 10+ LIRs 48%
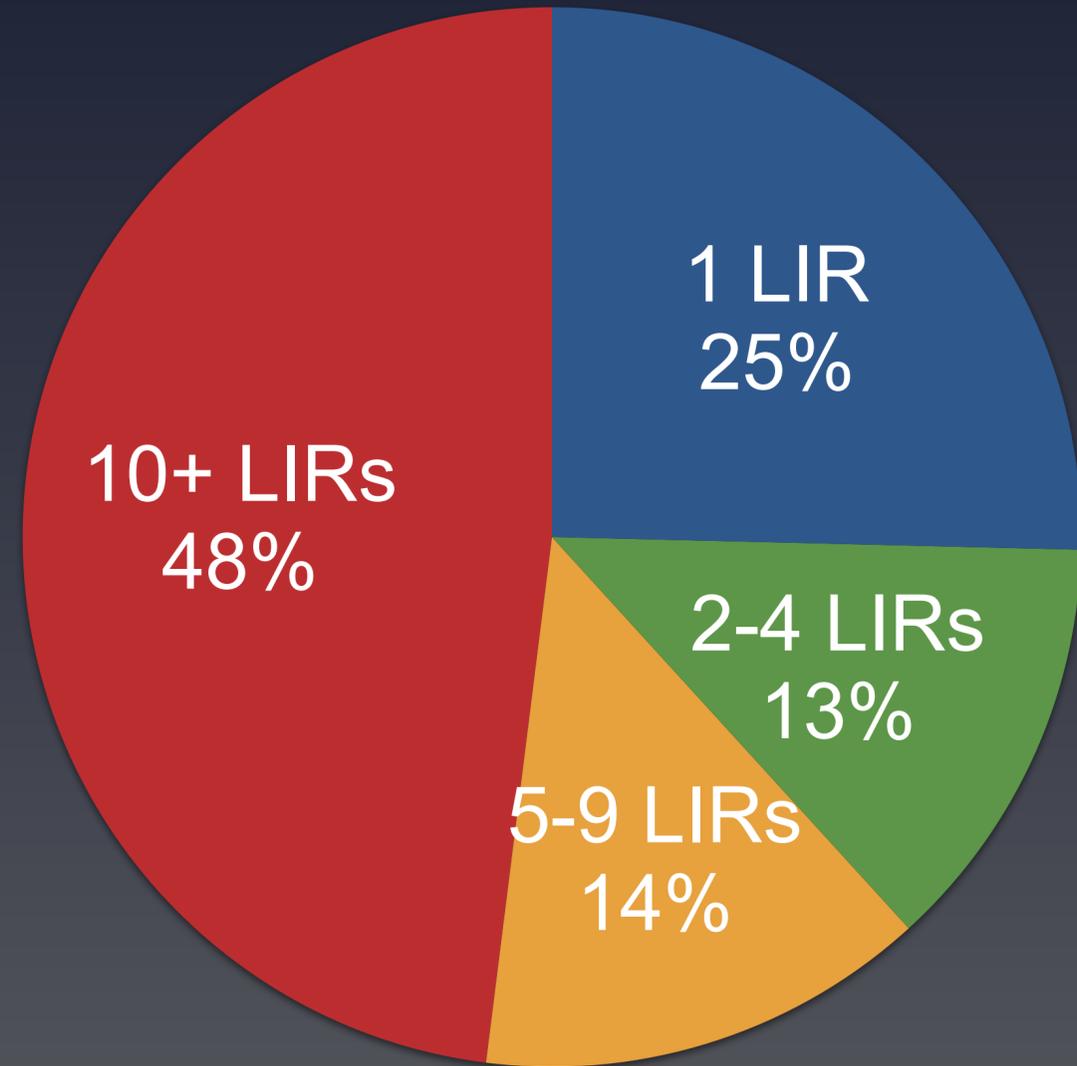
Total waiting: 330

## May 2022



- 10+ LIRs 19%
- 5-9 LIRs 9%
- 2-4 LIRs 18%
- 1 LIR 54%
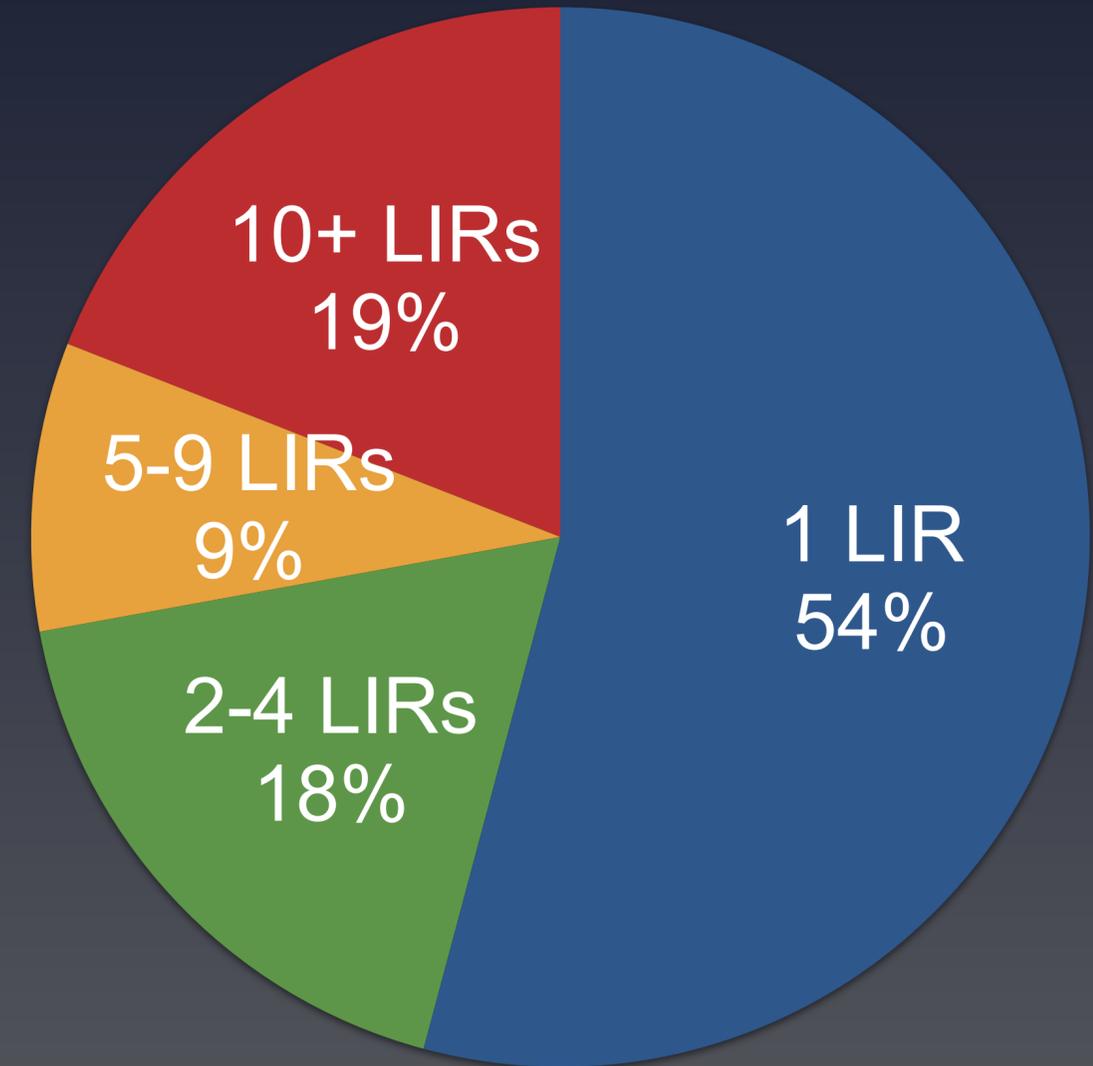
Total waiting: 830

# Multiple LIRs

- The market price for a /24 is about triple the cost of setting up an LIR account for three years

- Even with moderate wait time, it will be more attractive to open another LIR account

- Wait time for real newcomers will be significantly longer

# Conflict with policy intent

- Proposal 2019-02, IPv4 Waiting List Implementation
*"The goal of this policy proposal is to keep providing newcomers with a minimal amount of IPv4 space from the RIR for as long as possible."*

  https://www.ripe.net/participate/policies/proposals/2019-02

- Current development seems against the intent of the policy

# Stockpiling IPv6

# Some observations

- Follow-up from previous RIPE Meetings and the discussions on the APWG mailing list

    https://www.ripe.net/ripe/mail/archives/address-policy-wg/2021-October/013306.html

    https://www.ripe.net/ripe/mail/archives/address-policy-wg/2021-November/013324.html

- Several members requesting several IPv6 allocations via multiple LIR accounts or the transfer policy

- Around 100 members that have collected multiple IPv6 allocations totalling a size equivalent to a /26 or more

# Stockpiling through multiple LIRs
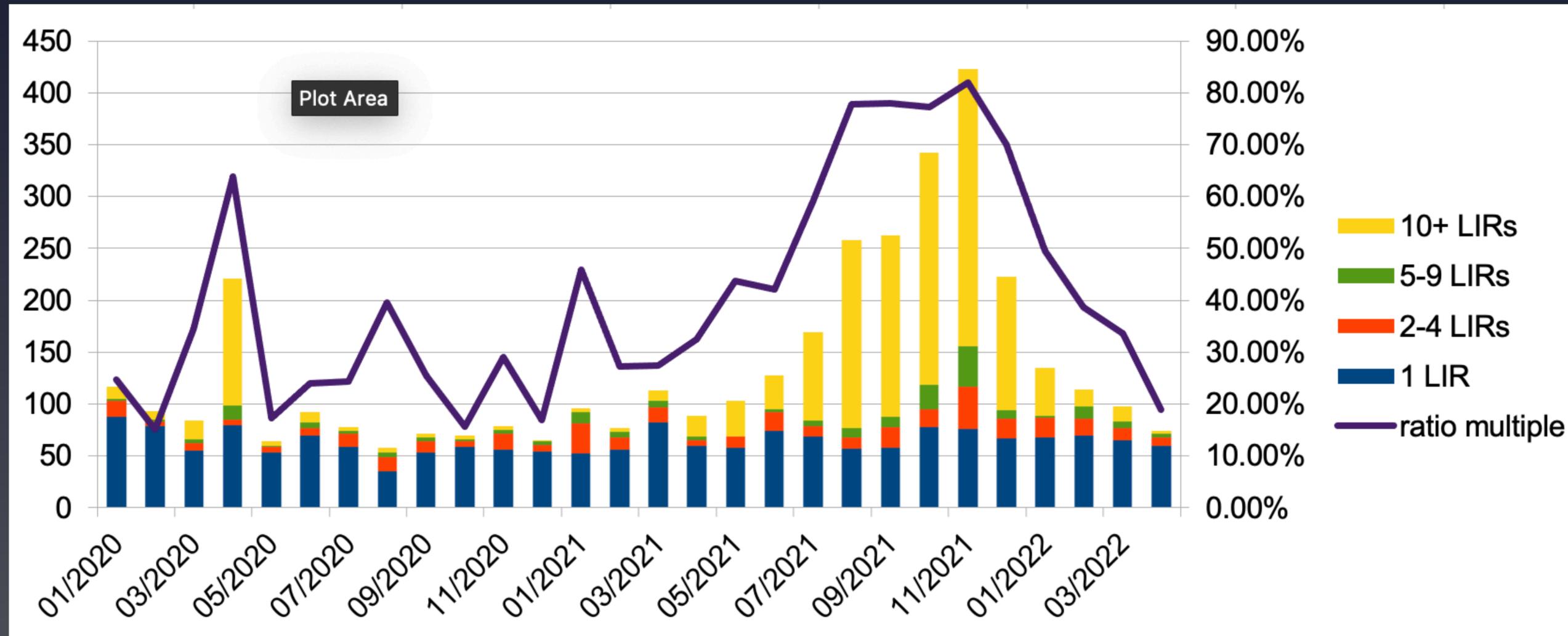


- Decreasing trend, but still about 20% of IPv6 allocations are going to members that already hold allocations in other LIR accounts

# Potential issues

- IPv6 might be deployed in conflict with RIPE Policies, resulting in challenges to that IPv6 deployment once the policy violation is discovered during an audit

- Negative impact on the quality of the Registry if large parts of allocations are given to third parties without clear registration requirements

- The policy requirement to justify larger IPv6 allocations would then be rendered useless

# Temporary Assignment

# Some background

- In January, the Address Policy WG started to discuss the limitations and vagueness in the Temporary Internet Number Assignment Policies
  https://www.ripe.net/ripe/mail/archives/address-policy-wg/2022-January/013438.html

- Limitation: *The utilisation rate of an assignment must be such that at least 50% of the total space […]"*

- Vagueness: *"The RIPE NCC may assign number resources to End Users on a temporary deployment basis for a specific time-limited purpose. Examples of specific purposes include, but are not limited to, academic research and experimental purposes, conferences […]"*
  https://www.ripe.net/publications/docs/ripe-587

# Temporary requests and approvals



Legend:
- Temporary requests received (including not approved)
- Issued temporary resources
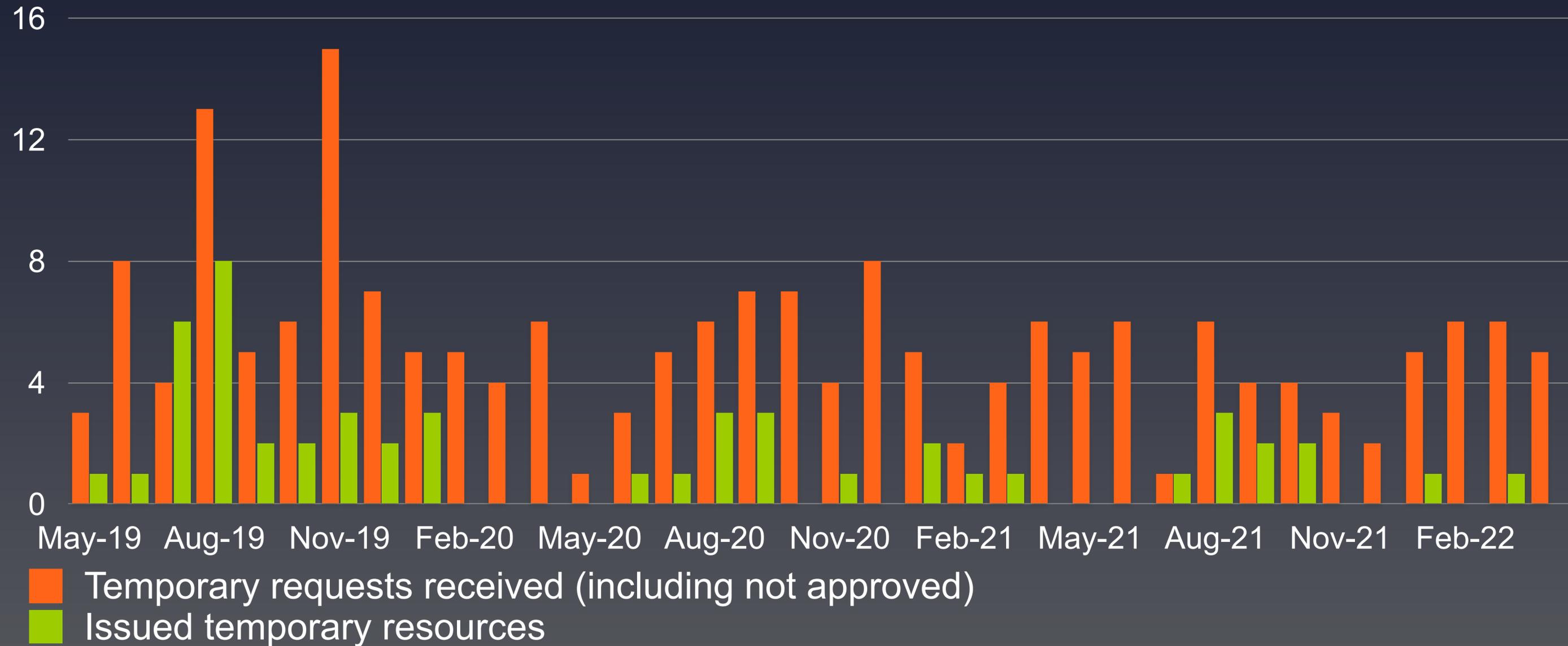
- In 36 months: 191 requests, 42 approved (~25% approval rate)

# Details on approved requests

- 51 resources (24 for conferences, 27 for research)

- 32 IPv4, 14 IPv6, 5 ASN

IPv4 Size
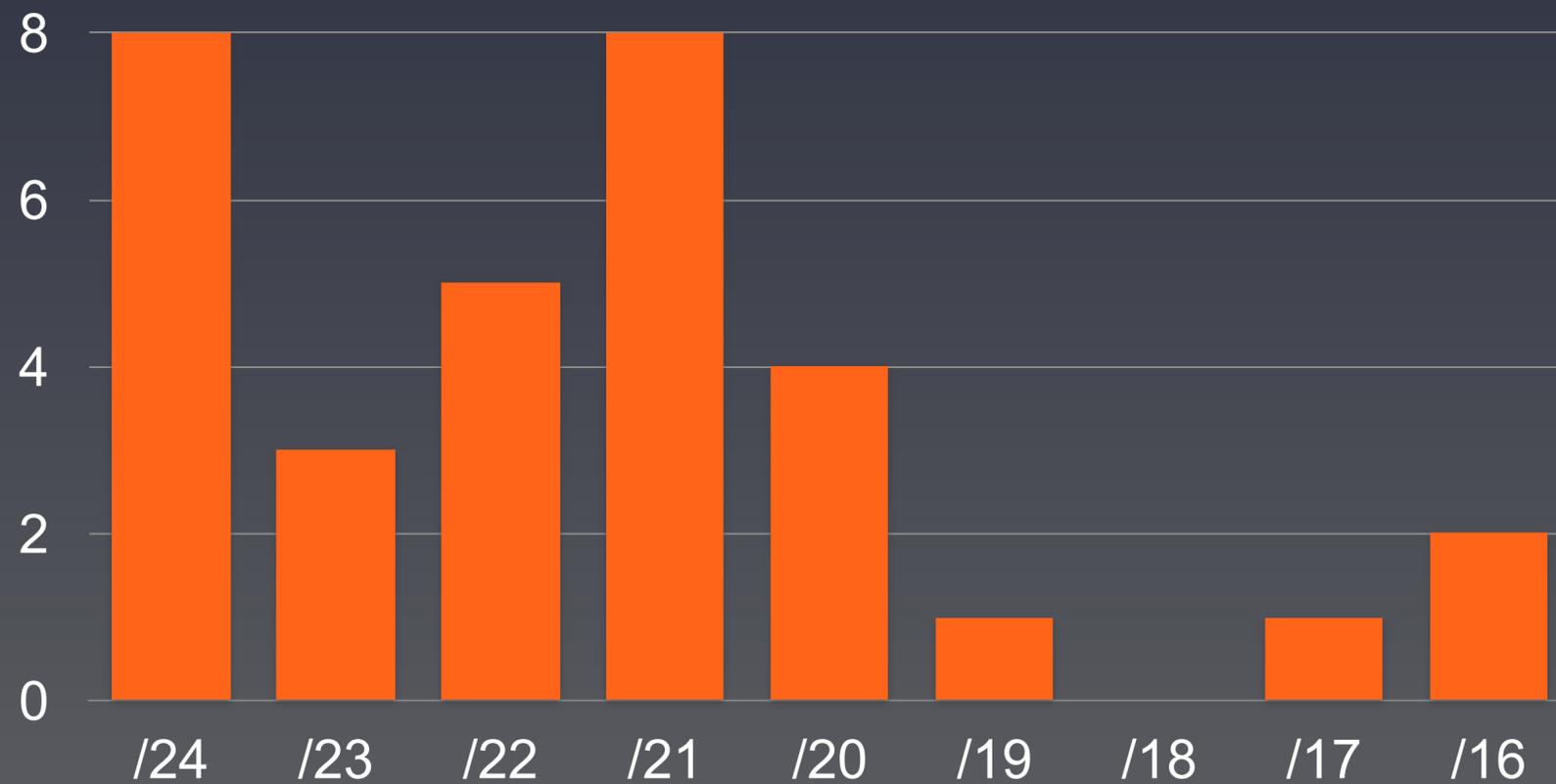
Assignment Duration
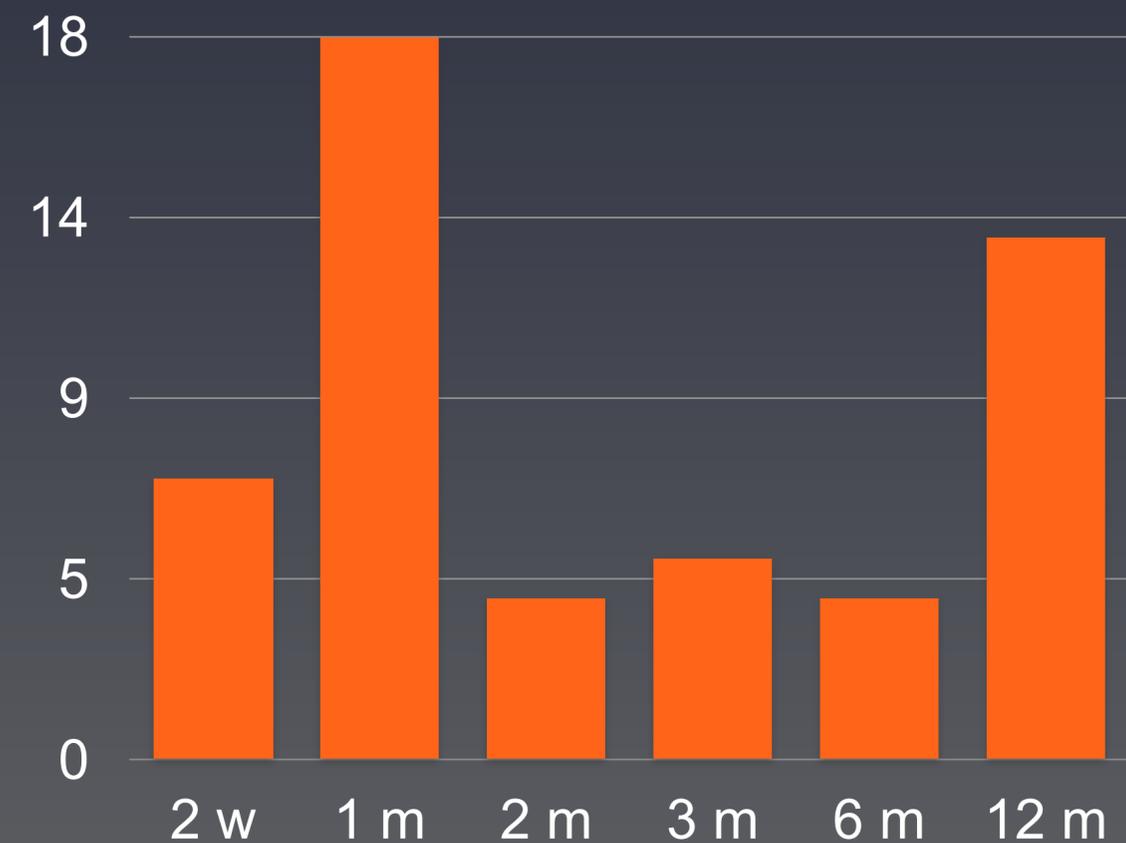
# Conclusions and questions

- Overall, the policy seems to be working, but with extra work for the RIPE NCC

- Can the RIPE NCC decide which requests are within the scope of this policy, or is a policy specification needed?

- Should there be a minimum assignment size in the policy?

# Registration Updates for IPv4 PI Assignments

# Observations

Time

PI Holder A — becomes → PI Holder A / Legal Successor B → PI Holder B

updates registration details

PI Holder A — sells/sub-assigns resource → PI User C

**X** no transfer possible 24-month holding period

PI User C
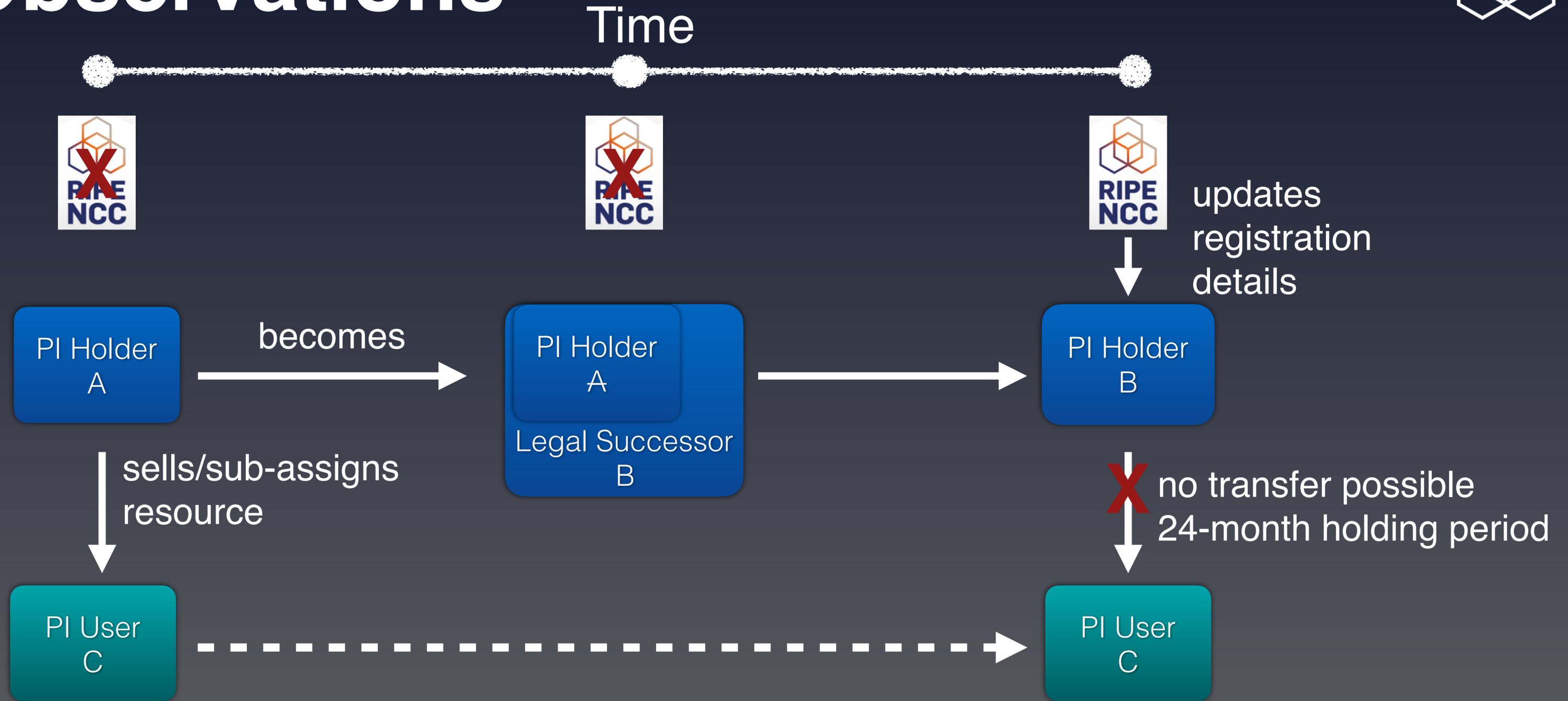
# Conflict

- The RIPE NCC must update resources to the legal successor

- *"Scarce resources, [...] (such as IPv4 or 16-bit ASNs), cannot be transferred for 24 months from the date the resource was received by the resource holder. This restriction also applies if the resource was received due to a change in the organisation's business"*

  https://www.ripe.net/publications/docs/ripe-682

vs

- *"ASSIGNED PI: [...] It cannot be used to make further assignments to other parties.*

  https://www.ripe.net/publications/docs/ripe-733

# Potential solutions

- Force the current user to stop using the IP range (not desired)

- Demand conversion from PI to PA space
  (requires RIPE NCC membership)

- Sponsoring LIRs take their roles more seriously - regularly connect with their end users and inform the RIPE NCC (enforce with policy?)

- Review sub-assignment ban for IPv4 PI

- Review the 24-month holding period for IPv4 PI and 16-bit ASN

# Questions ?

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