



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

Registry Update

RIPE 88, Kraków

James Kennedy | RIPE NCC Services | 22 May 2024

Commitment



Registry Accuracy

World Class Service Delivery

Protecting Registry Resources



Registry Accuracy

Accuracy Goals



Verify all Members data every five years

Verify all *End Users data every five years

Complete 2,400 ARCs annually

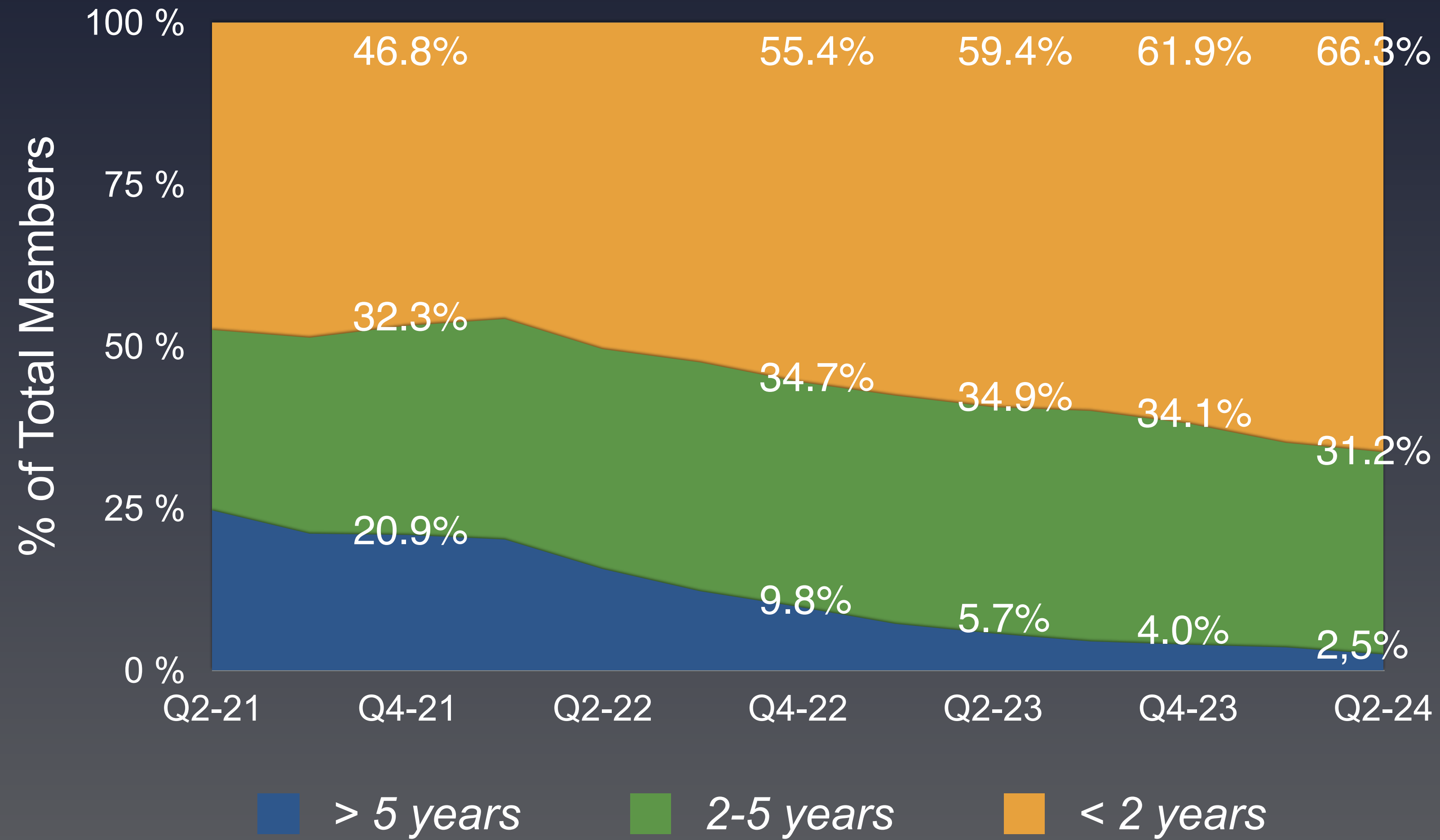
* PI IPv4, IPv6 and ASN holders

Verifying Registry Information

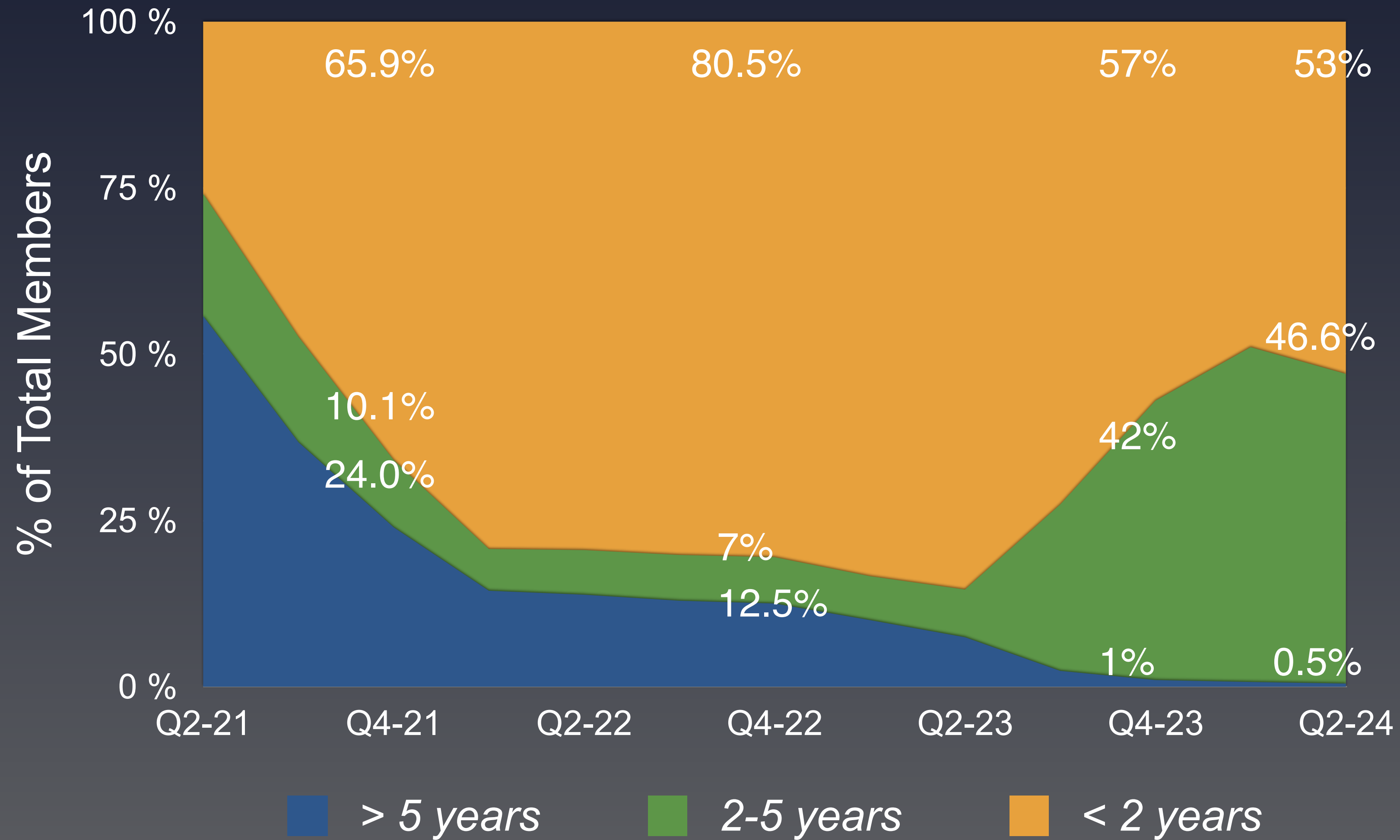


- Member and End User data verified against official source
 - Legal name and address, registration/ID number and status
- Member data monitored with Dun & Bradstreet
 - End Users expected for 2024
- Last verified date timestamped and logged
 - Verifications aggregated into three categories
 - ▶ Verified < 2 years ago
 - ▶ Verified 2-5 years ago
 - ▶ Verified > 5 years ago

Members Last Verified Date



End Users Last Verified Date



Verification Methods/Types

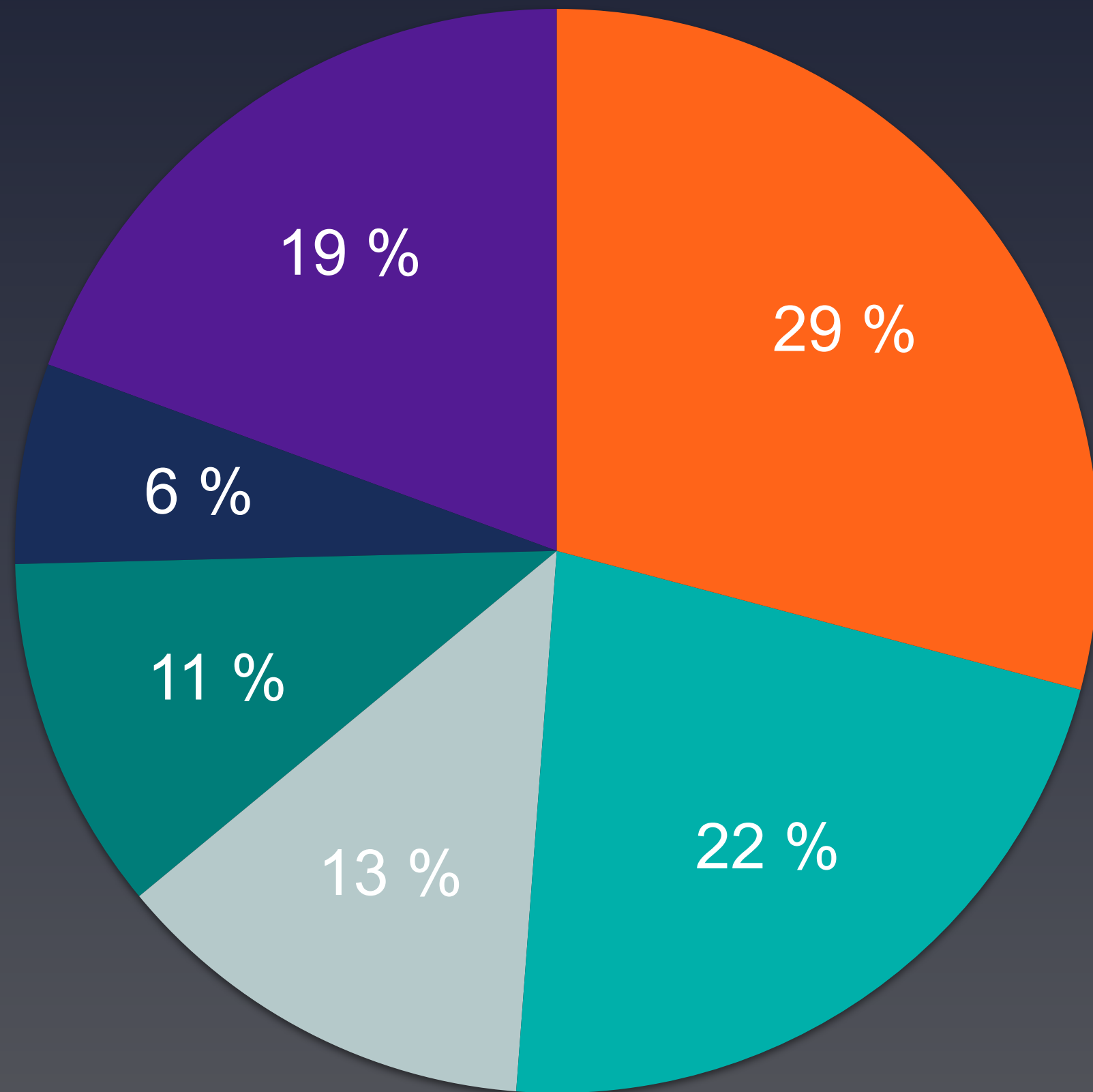


Members

- Transfers (4,770)
- Org Changes (3,615)
- ARC (2,098)
- Reg. Accuracy Monitoring (1,737)
- LIR Account Activations (979)
- Other (3,179)

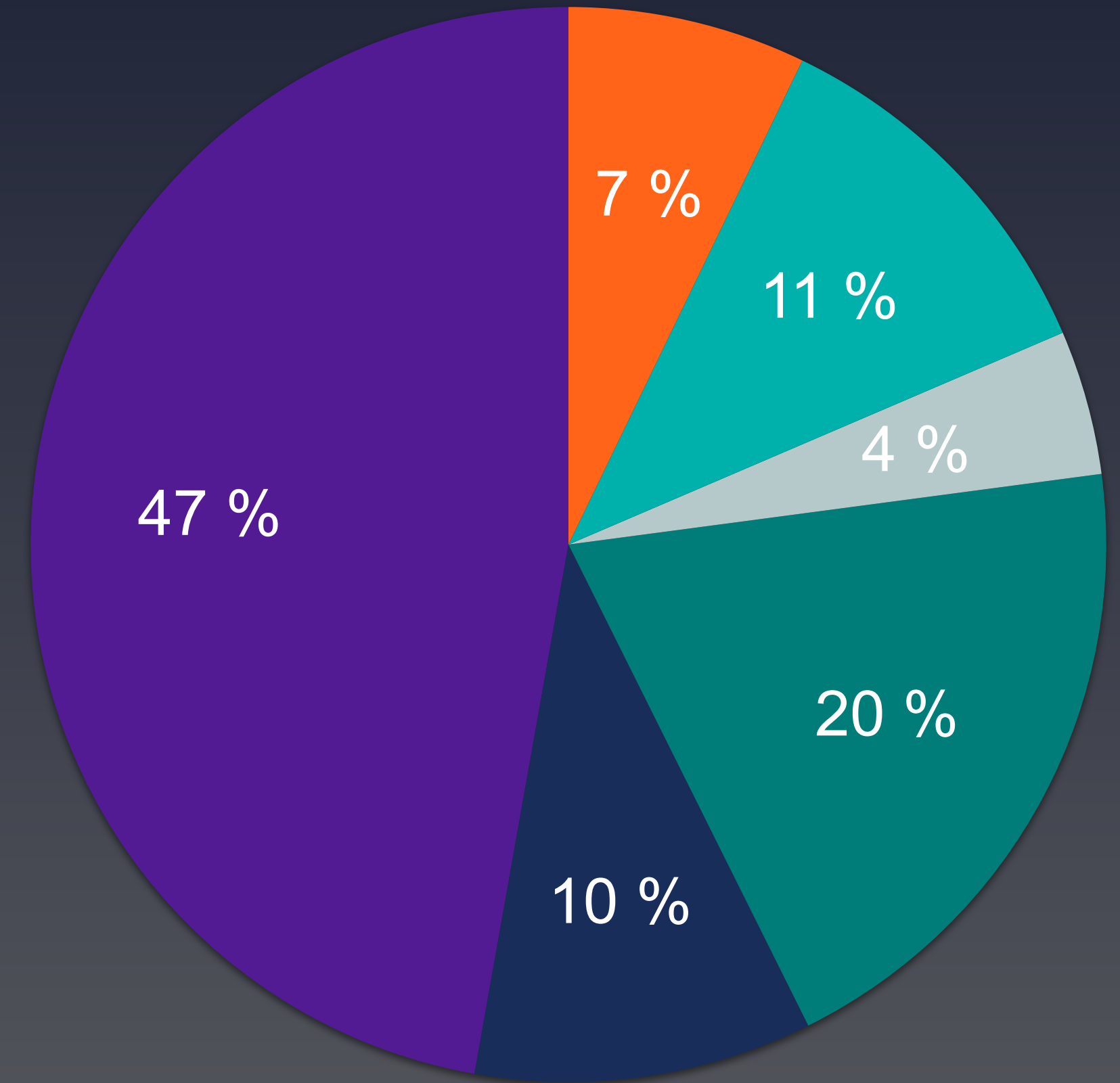
End Users

- Transfers (603)
- Org Changes (959)
- ARC (366)
- PI Assignment (1,662)
- Sponsorship Change (855)
- Other (3,974)



Members

Last 12 months = 16,378



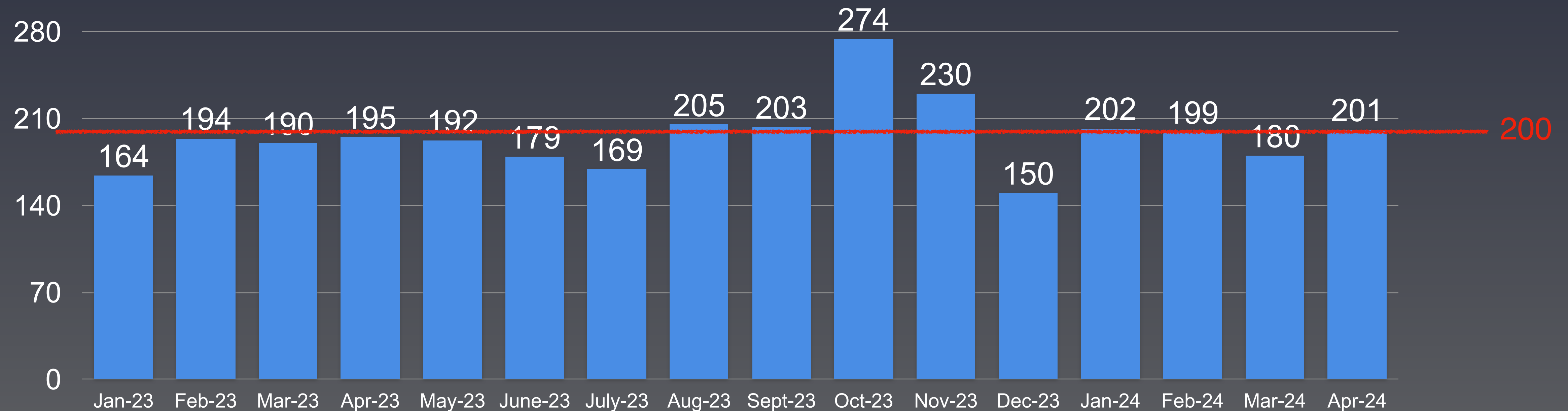
End Users

Last 12 months = 8,419



2,400 ARCs per year

- Target members with +5 year last verified date
 - Help keep member's and sponsored End User registry data accurate and correct
 - Explain RIPE policy, our services (RPKI, Atlas, RIPEstat) and also 2FA
- Total completed 2023 = 2,345





Service Levels

World Class Metrics



Net Promoter Score > 80

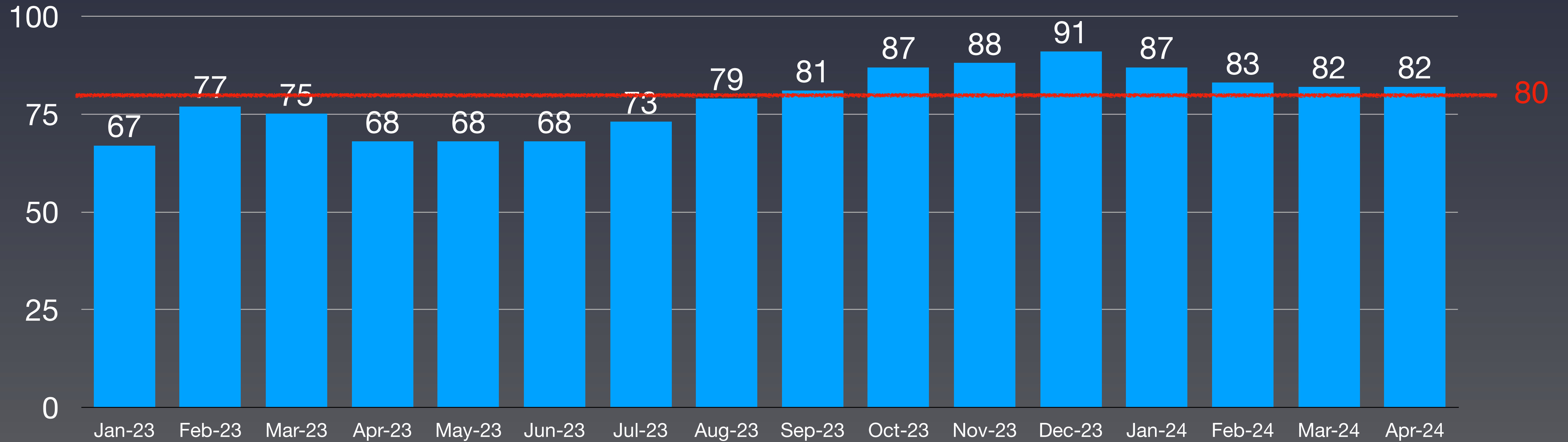
Customer Effort Score > 6.5

Ticket Response Times < 1 business day

Net Promoter Score > 80



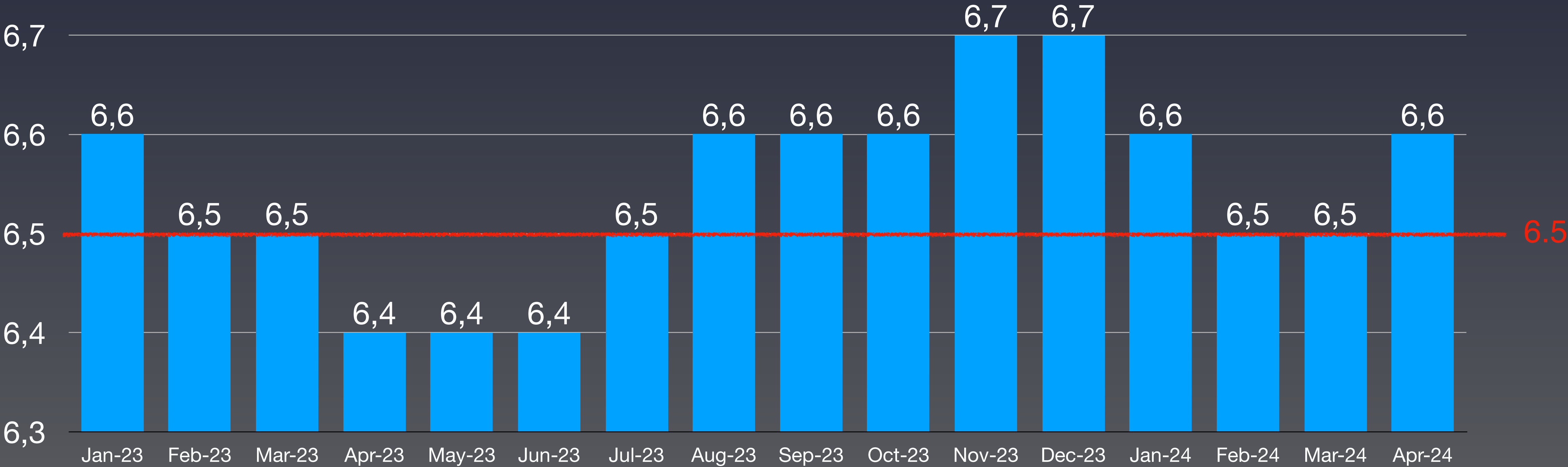
- 8 months in-a-row!



Customer Effort Score > 6.5



- 10 months in-a-row!



One Business Day Ticket Responses %



Since Jan 2023	
Average	97.7%
Minimum	87.5%
Maximum	100 %
Total Tickets	71,929

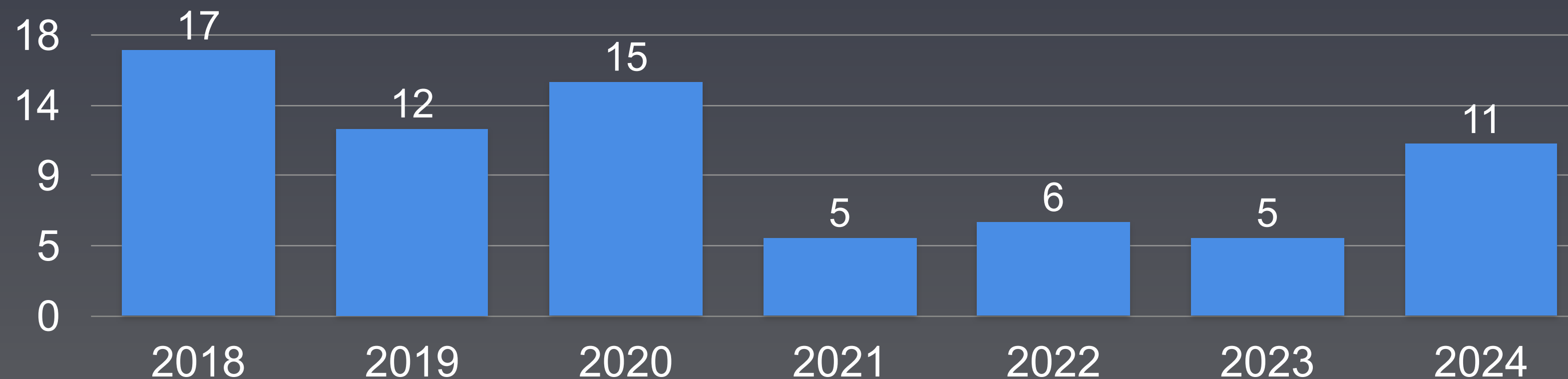


Protecting Registry Resources

Fraud Handling



- Falsified documents and misleading information are registry risks
- Consequences of confirmed manipulated docs include
 - Closure of membership, Resource deregistration, RIPE NCC blacklisting, reporting to police
- Police reports



Registry Investigations



- In recent months, unauthorised access of LIR accounts
 - Unusual trends detected by the registry, confirmed by members
 - Fraudulent documents submitted perform two transfers
- Actions taken
 - Due diligence checks uncovered a pattern of incidents
 - Audits conducted and rightful owners verified
 - Unauthorised changes reverted including transfers
 - Offender identified and membership duly closed in line with RIPE NCC procedures

Registry Investigations



- Best practices to protect your services
 - Ensure all contacts in your LIR account are valid and kept up to date
 - Be vigilant about validity of your email domains and email security
 - Store account credentials in a secure manner, and to stop using shared accounts
 - Report any suspicious activity to us immediately
- Registry Investigation Report

External Auditing



- Independent external review of the Registry conducted every two years
- In Feb 2024, concluded transfers integrity audit with Ernst & Young
- No major vulnerabilities identified
- Recommendations added to registry optimisation plans



Other Registry Insights

Sanctions Compliance



- Screening for EU and OFAC sanctions
 - All current members and End Users screened and monitored
 - Alerted when members and End Users are sanctioned - resources are frozen until matter is clarified
 - Confirmed sanctioned entities prevented from registering new resources and existing resources are frozen
- Alerts are individually investigated
 - ~1300 alerts per month. Most false positives
 - A lot of manual checks, especially for indirect sanctions
- Quarterly Sanctions Transparency Report



Registry Labs Articles



- Registry reflections and workload insights
 - Curious case of growing ASN work, fraud handling
 - <https://labs.ripe.net/author/james-kennedy/reflections-on-six-months-as-chief-registry-officer/>
- IPv6 stockpiling
 - Members accumulating multiple IPv6 allocations
 - Observations reported by Marco Schmidt: https://labs.ripe.net/author/marco_schmidt/ipv6-stockpiling-a-trojan-horse-in-our-midst/
 - Discussion taking place in Address Policy Working Group
- Other registry topics?



Summary

Summary



- Registry accuracy and integrity remain paramount
- World class service levels being maintained
- Proven robust and effective due diligence framework
- Thank you Registry team!





Questions