IPv6 Success Stories: Growing with IPv6

Moderator: John Curran

VIRGINIA TECH

IPv6

Is it new? No

Is it easy? No

Is it worth the effort? Yes

IPv6 Timeline

1996 R. Hindon & J. Postel work on rfc-1897

1997 Virginia Tech doctoral candidates gain interest
in experimenting with IPv6, David Lee & Daniel Lough

1997 A collaborative effort develops
between Operational and Academic branches
through Erv Blythe, Phil Benchoff (Operational)
and Scott Midkiff (ECE – Academic)

VIRGINIA TECH

Timeline continued...

VIRGINIA TECH

January 30, 1998 the university launched the first production IPv6 network on the Virginia Tech campus. RFC1897 prefix 5F05:2000:: /32

Parallel networks (Vendor Code)

Tunnels

Working with Vendors for better IPv6 support

Time to grow

- 2008 Emerge from the test and evaluation phase
- 2009 Virginia Tech became one of the first places where users could reach Google over IPv6
- By 2010 Google ranked Virginia Tech as one of top five deployments worldwide based on percentage of IPv6-enabled hosts and traffic volume

VIRGINIA TECH

More timeline...

2011 the university was asked to consult with the United States IPv6 Task Force to offer expertise on what we learned about the transition to IPv6 and presented at the 2011 IPv6 World Congress in London.

2012 June 26, the university was a leading participant in World IPv6 Launch Day and emerged at the top of the network operator category based on percentage of IPv6-enabled hosts, with nearly 60% of the Virginia Tech hosts supporting IPv6.

Where we are today

Virginia Tech's deployment has steadily grown from since that time and now near 90% of our network hosts support IPv6 as compared to 45% worldwide.

VIRGINIA TECH

THE END

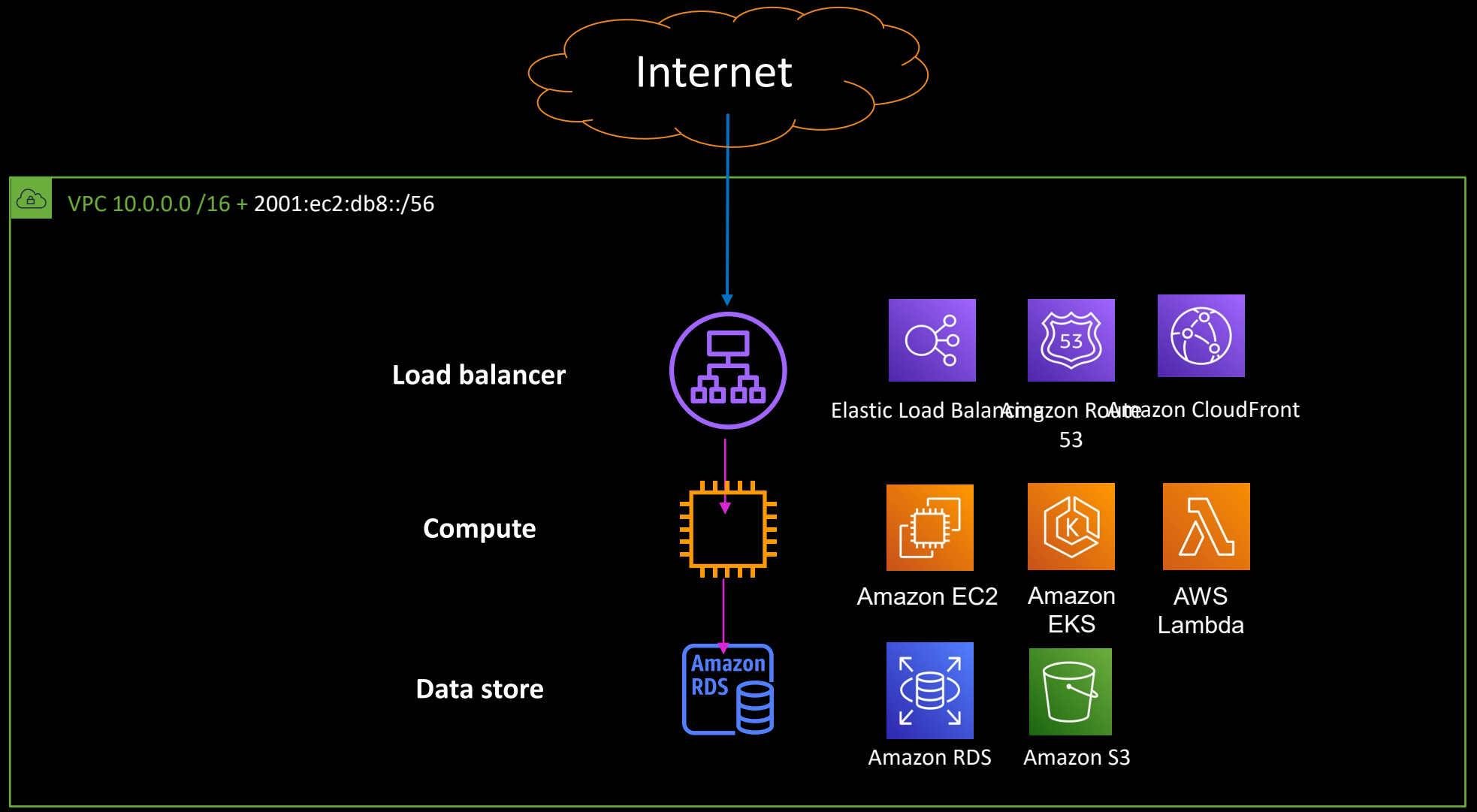
IPv6 on AWS

Madhura Kale

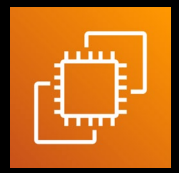
Senior Manager, Product Management
Networking and Compute

AWS started its IPv6 journey with the launch of IPv6 on the Elastic Load balancer in 2011

Applications on AWS



IPv6 on AWS


Amazon EC2


Amazon S3


Amazon VPC


Amazon CloudFront


Elastic Load Balancing


AWS Database Migration Service


Amazon RDS


Amazon ECS


AWS Shield

Amazon Route 53


AWS Site-to-Site VPN

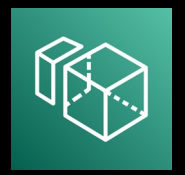

AWS WAF


Amazon EKS


Amazon ElastiCache


AWS Identity & Access Management


AWS Transit Gateway


Amazon WorkSpaces


AWS Direct Connect


AWS IoT


AWS Fargate


Amazon Aurora


AWS App Mesh


AWS Cloud Map


AWS PrivateLink


AWS Global Accelerator


Amazon Athena


AWS Secrets Manager


AWS Lambda

Learn more about IPv6 on AWS

Thank you!

CBL: IPV6 CASE STUDY

By Brent Mc Intosh
MCNET-SOLUTIONS | CARIBNOG

WHO IS :

CABLE BAHAMAS LIMITED

CBL	100% Bahamian-owned service provider
SERVICES	TV, Internet and Voice services
WHEN	Providing cable television services since March 1995 &Internet services since March of 2000

THE VALUE PROPOSITION:

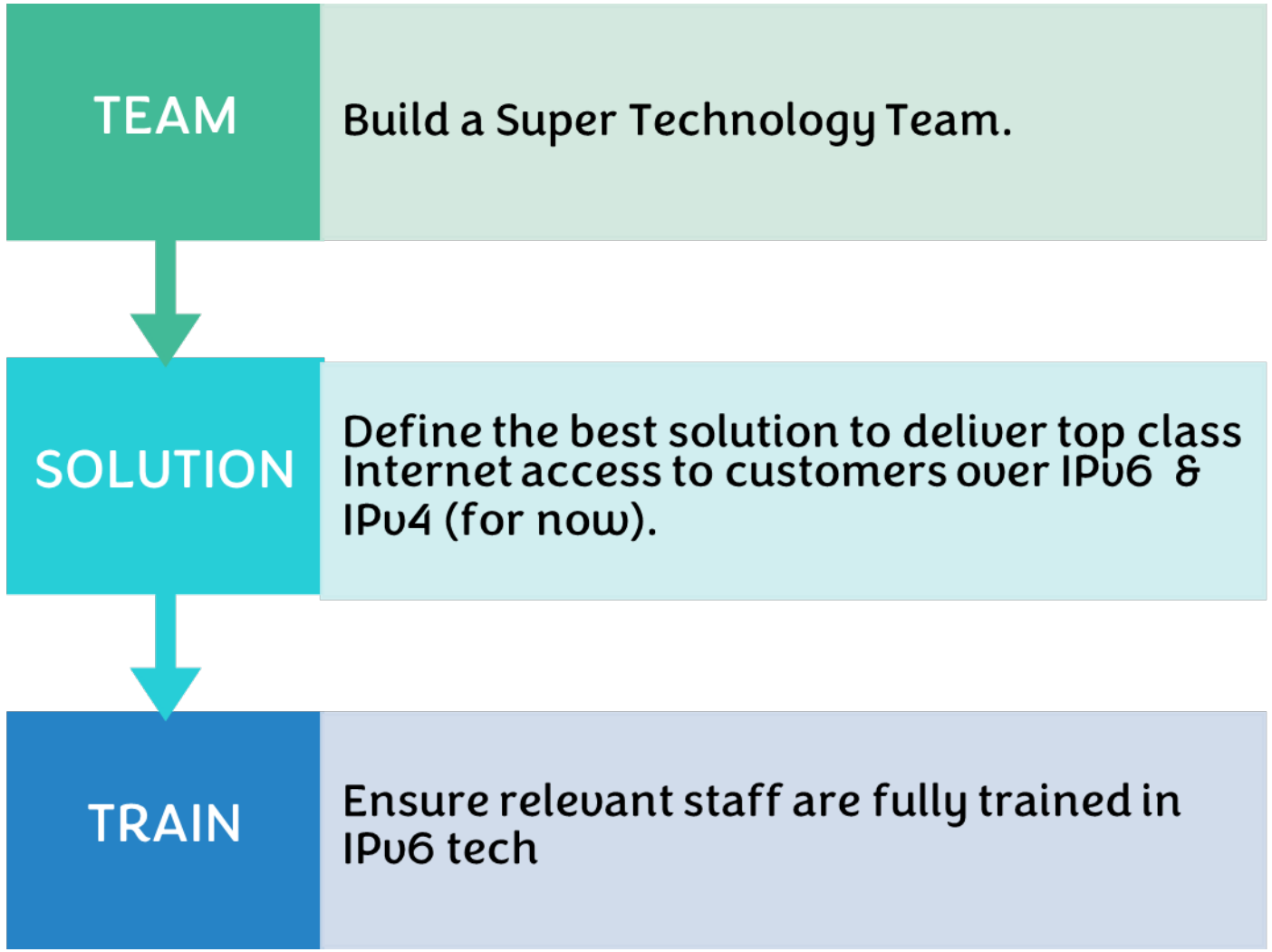
PROVIDE SEAMLESS INTERNET CONNECTIVITY TO RESIDENTIAL & BUSINESS SUBSCRIBERS.

THE ISSUE	IPv4 address shortage – a major challenge
INTIAL SOLUTION	CGNAT was introduce as a solution
NEW SOLUTION	Seamlessly Introduce IPv6 in the EDGE, CORE and ACCESS Network with DUAL-STACK

alivfibr

CBL IPV6 DEPLOYMENT:

THE STRATEGY



alivfibr

CBL IPV6 DEPLOYMENT:

THE TECH STUFF

ASN 15146

IPv6 Allocation - 2607:fe68::/32 16x/36s, 16x/40s per/36

INTERNET PEERING EDGE – 10x100 Gbps Multi-homed

CORE – Nx100 Gbps with MPLS and EVPN

ACCESS - Nx10 Gps to POPs with Redundant design

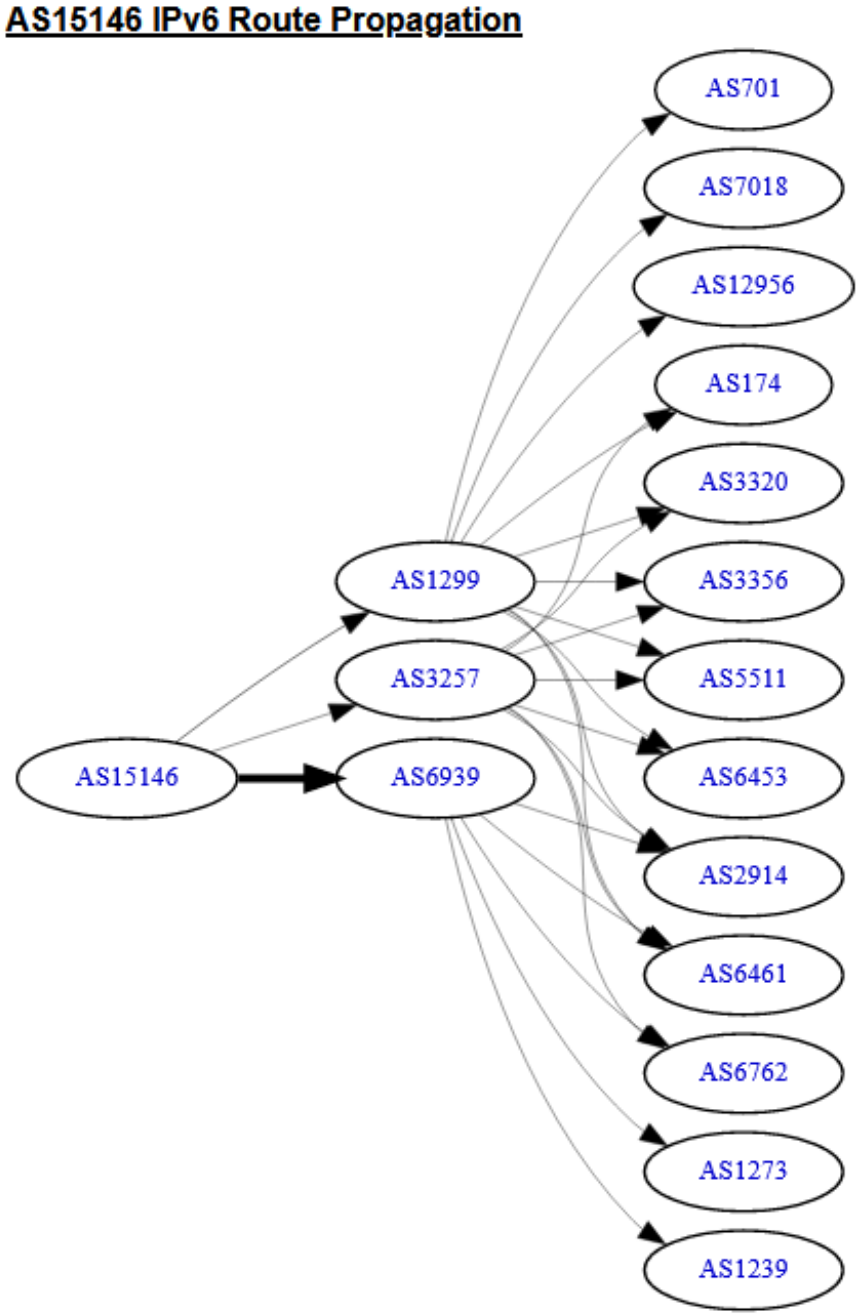
6. Customer Access – Direct Fiber &FTTH, /64 WAN &/56 LAN IPv6 Allocation to subscribers within the dual-stack.
PPPoE, DHCPv6-PD

Business Customer Access -FTTB /64 WAN and /48

alivfibr

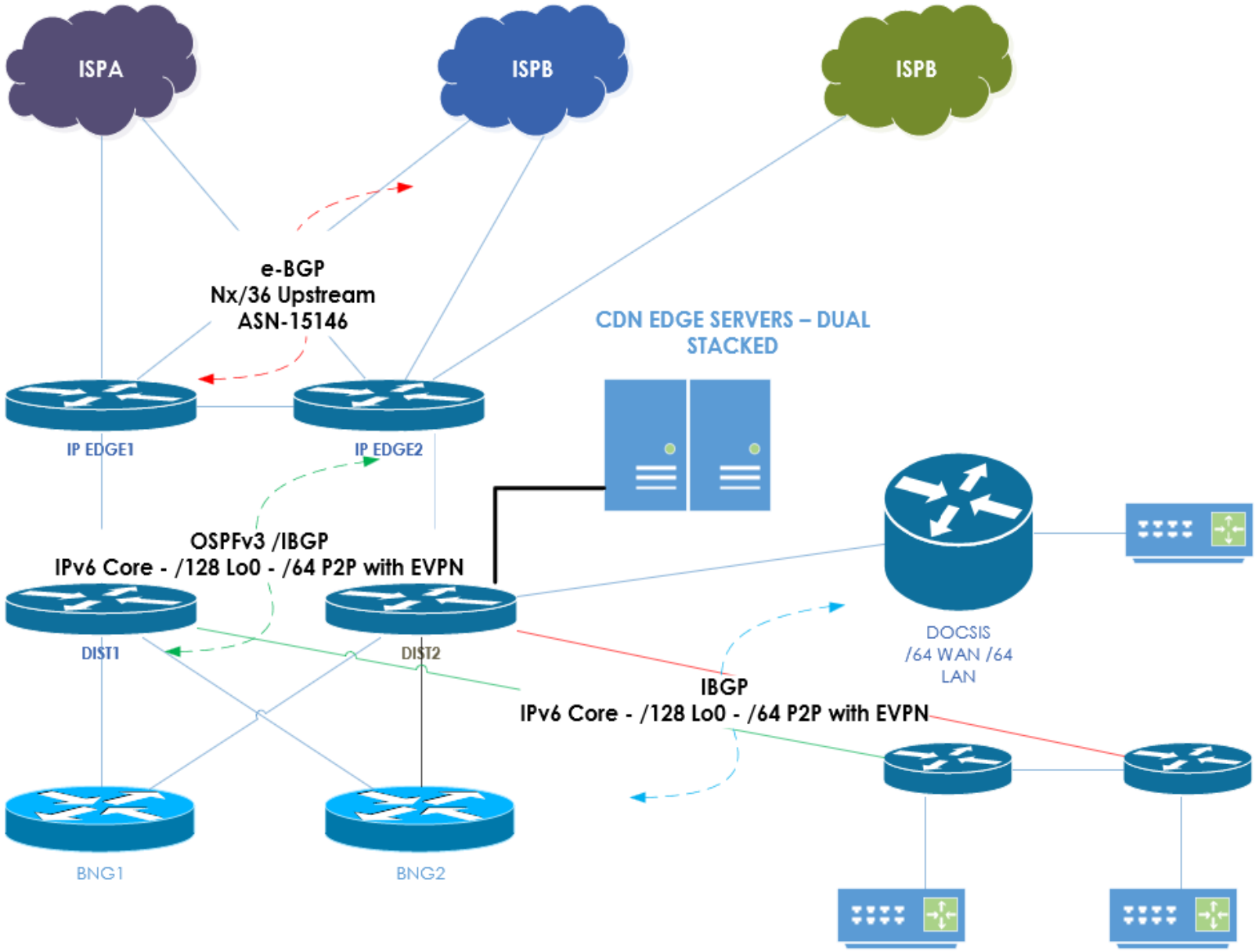
CBL IPV6 DEPLOYMENT:

IPV6 TRANSIT (4X100G)



CBL IPV6 DEPLOYMENT:

HIGH-LEVEL VIEW OF THE DESIGN




THANK YOU!

TELUS

An IPv6 Journey

Matthew Wilder

April 2023

Act I - Monitoring

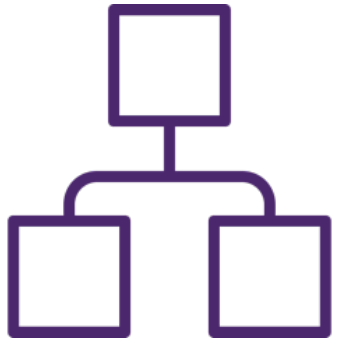
2003

Initial IPv6 allocation from ARIN

Act II - Building

2010

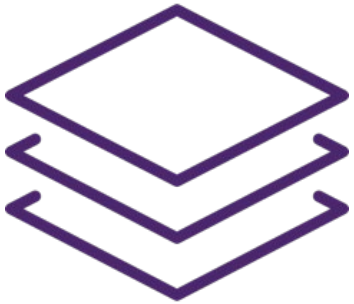
IPv6 Program takes form, identifying work streams



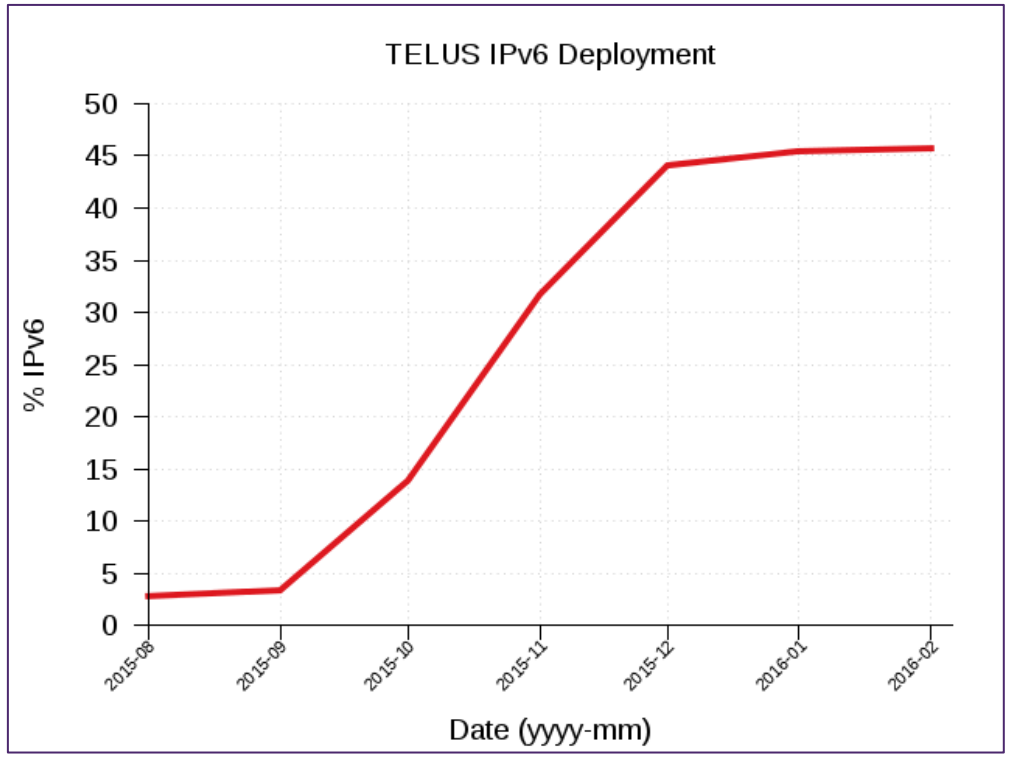
Act III - Deploying

2013

Enabling subsystems and service components

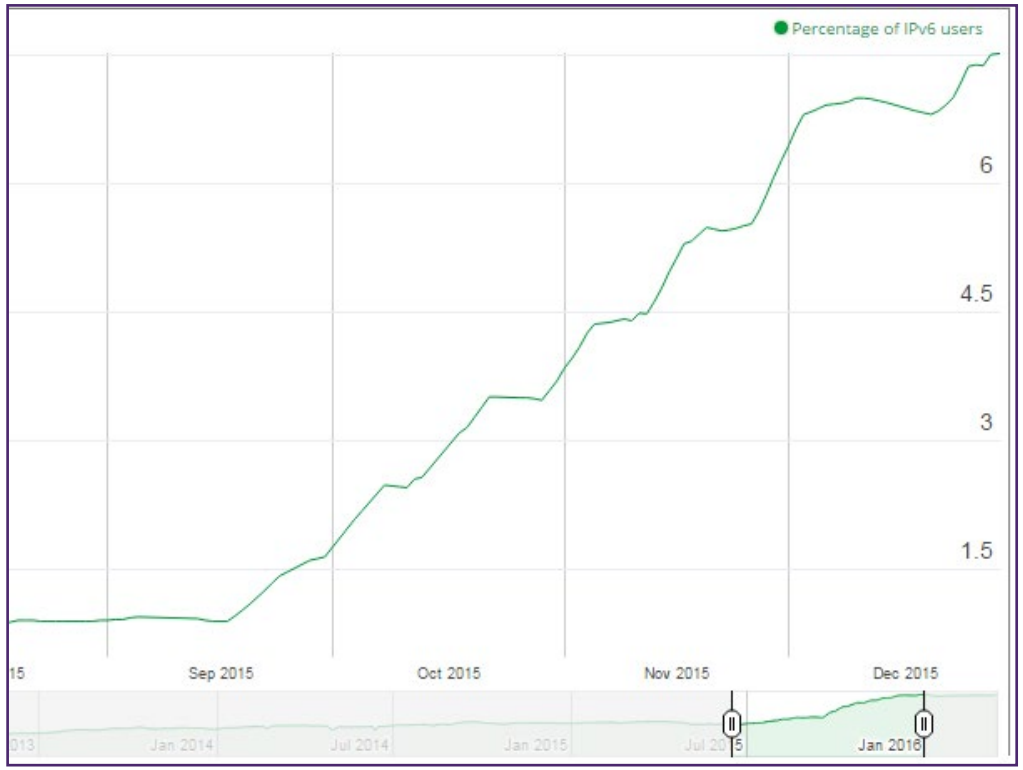


TELUS IPv6 Deployment



Source: World IPv6 Launch

Canada IPv6 Adoption



Source: Google IPv6 Stats

let’s make the future friendly™

See you after the break!

James Chirwa

Head of Member Services

AFRINIC Update

Our Next Speaker

Karla Skarda

Services Director

APNIC Update

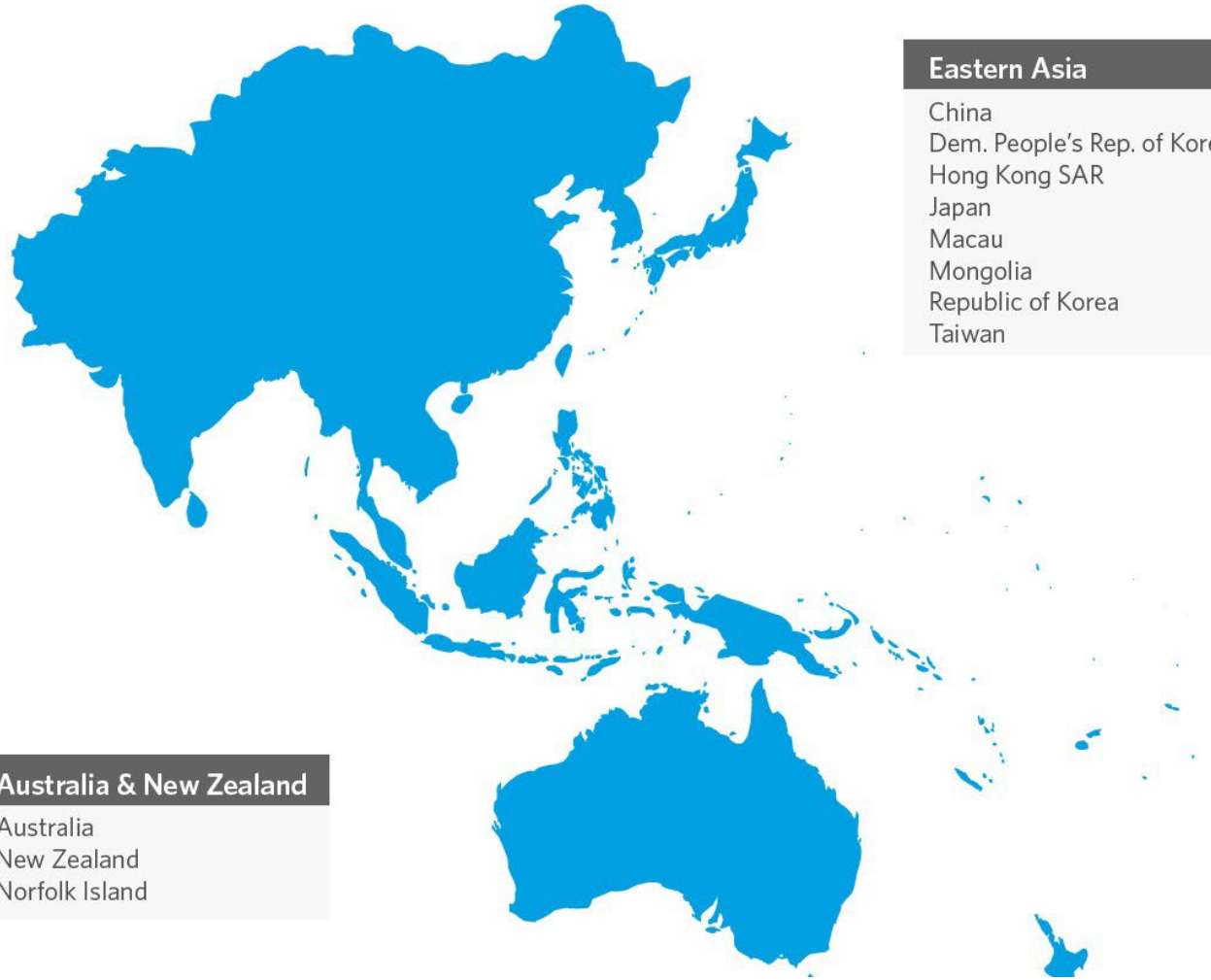
Our Next Speaker

APNIC Update for ARIN 51

Karla Skarda

Services Director

APNIC Region



South Asia

Afghanistan
Bangladesh
Bhutan
British Indian Ocean Territory
India
Maldives
Nepal
Pakistan
Sri Lanka

South-eastern Asia

Brunei Darussalam
Cambodia
Christmas Island
Cocos (Keeling) Islands
Indonesia
Lao People's Dem. Republic
Malaysia
Myanmar
Philippines
Singapore
Thailand
Timor-Leste
Vietnam

Australia & New Zealand

Australia
New Zealand
Norfolk Island

Eastern Asia

China
Dem. People's Rep. of Korea
Hong Kong SAR
Japan
Macau
Mongolia
Republic of Korea
Taiwan

Micronesia

Fed. States of Micronesia
Guam
Kiribati
Marshall Islands
Nauru
Northern Mariana Islands
Palau

Melanesia

Fiji
New Caledonia
Papua New Guinea
Solomon Islands
Vanuatu

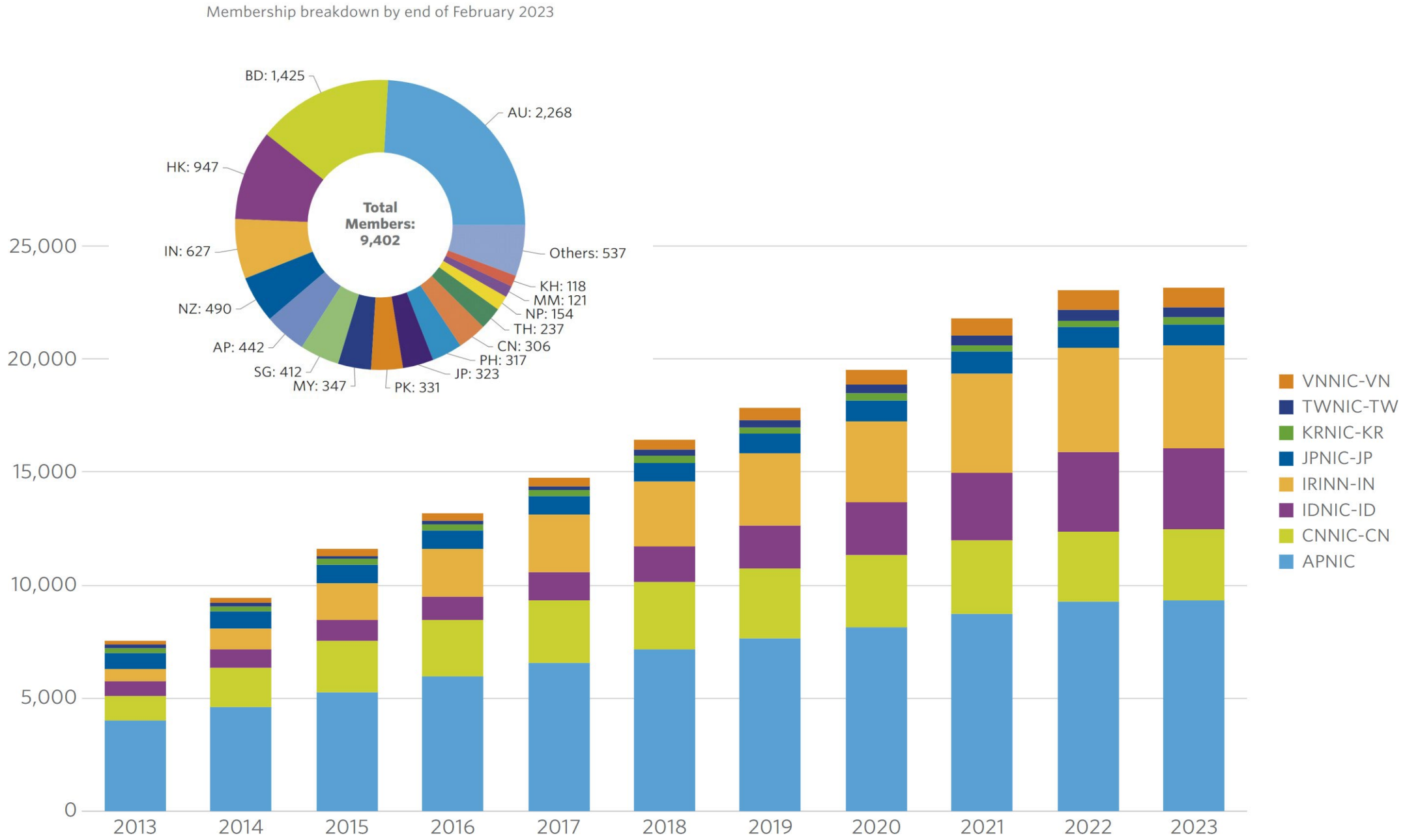
Polynesia

American Samoa
Cook Islands
French Polynesia
Niue
Pitcairn
Samoa
Tokelau
Tonga
Tuvalu

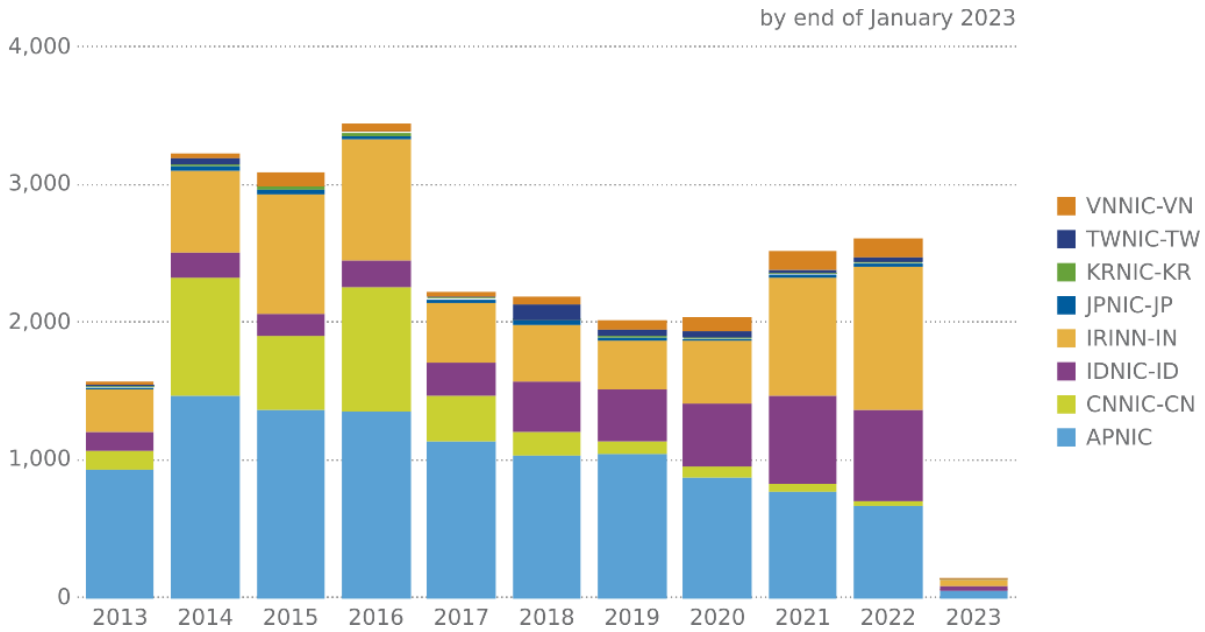
National Internet Registries (NIR)

- IDNIC (Indonesia)
- CNNIC (China)
- IRINN (India)
- JPNIC (Japan)
- KRNIC (Republic of Korea)
- TWNIC (Taiwan)
- VNNIC (Vietnam)

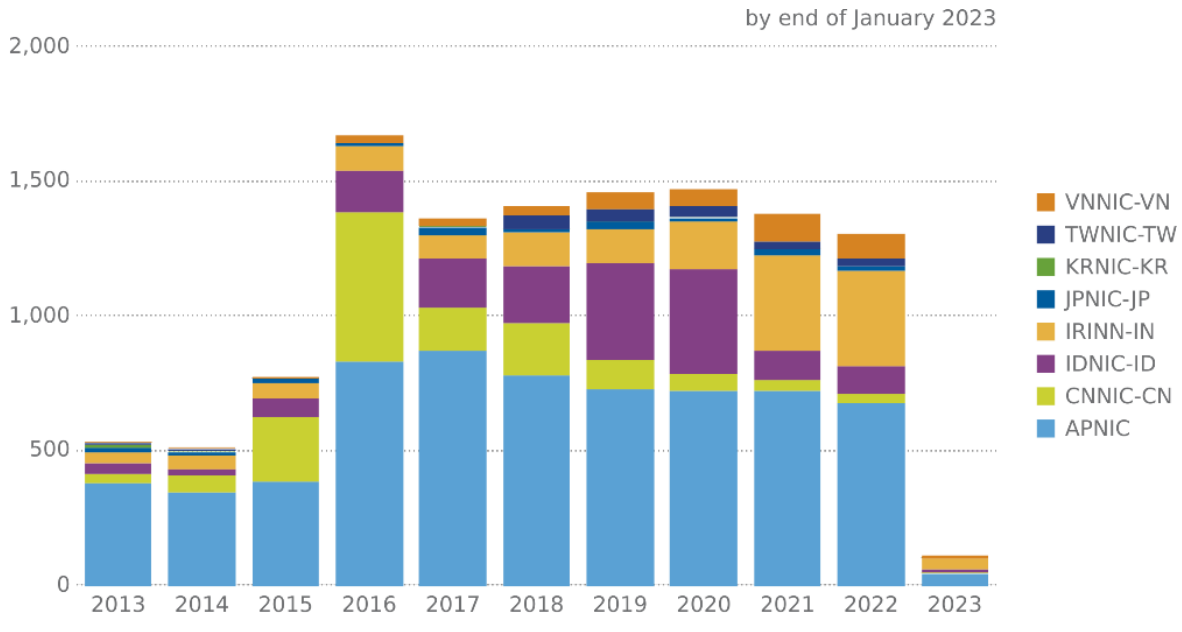
Membership


Membership breakdown by end of February 2023
BD: 1,425
AU: 2,268
HK: 947
Total Members: 9,402
IN: 627
Others: 537
KH: 118
MM: 121
NP: 154
NZ: 490
TH: 237
AP: 442
CN: 306
PH: 317
SG: 412
JP: 323
MY: 347
PK: 331
25,000
20,000
15,000
10,000
5,000
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
VNNIC-VN
TWNIC-TW
KRNIC-KR
JPNIC-JP
IRINN-IN
IDNIC-ID
CNNIC-CN
APNIC

IP address delegation including NIR (10 Years)

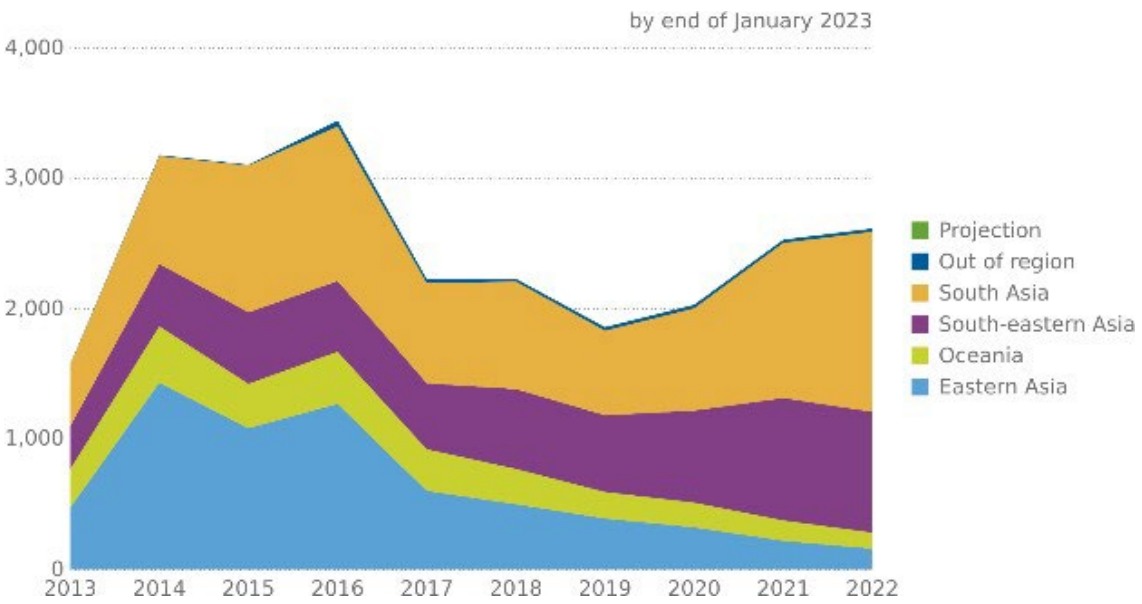


IPv4

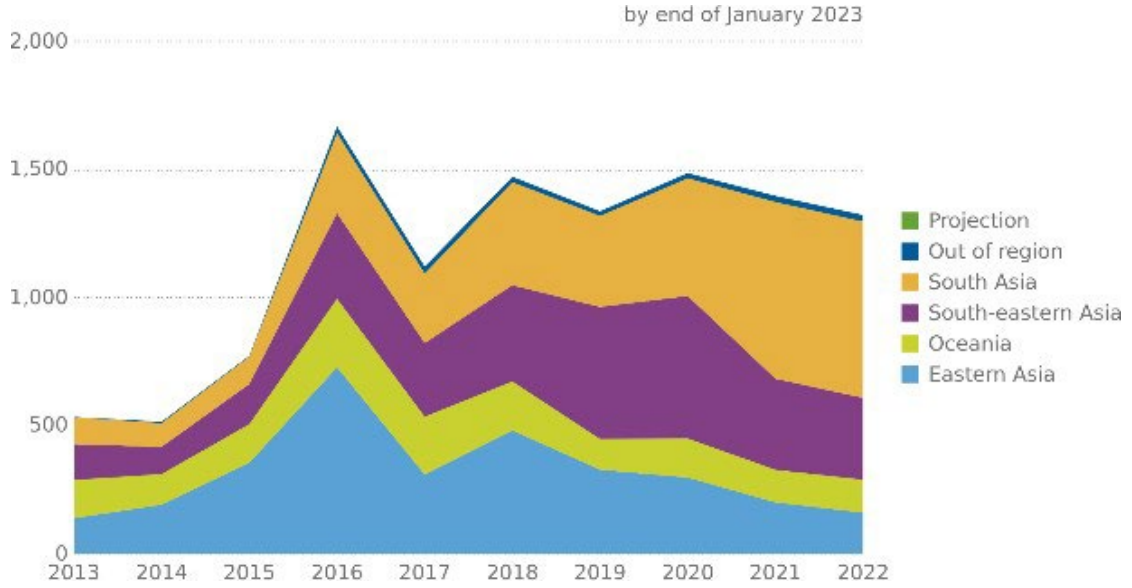


IPv6

Resource delegations by region (10 Years)

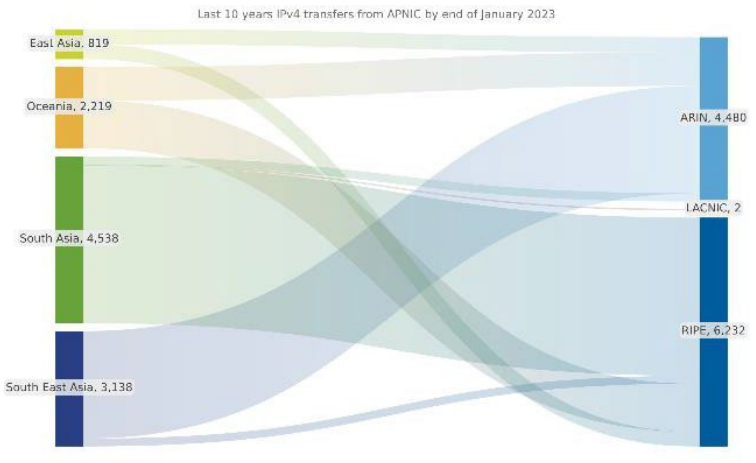


IPv4



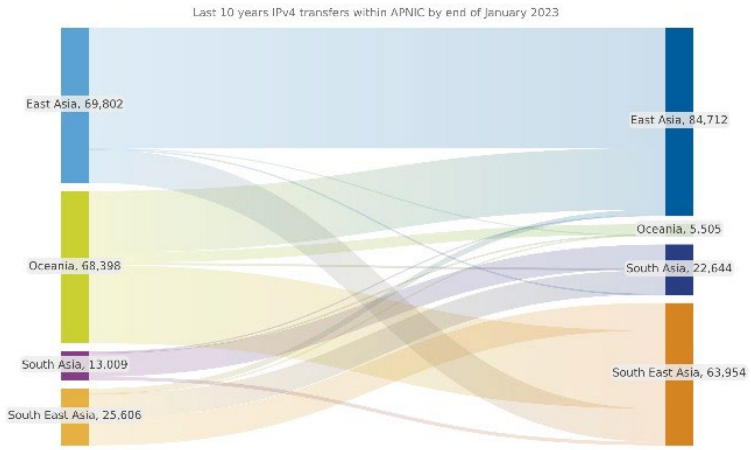
IPv6

IPv4 transfers (10 Years)



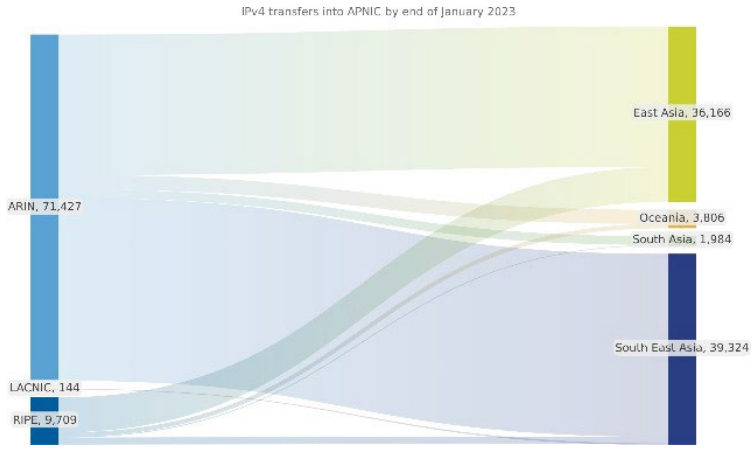
Sources

Out of the AP region



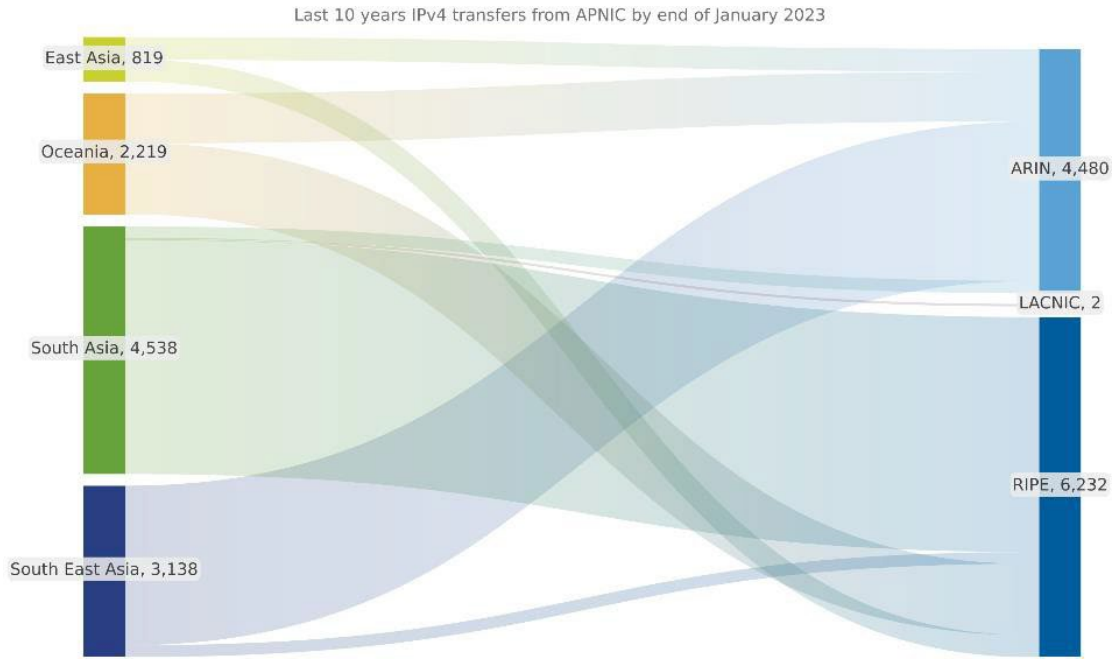
Recipients

Within the AP region



From other regions

Transfers out vs transfers in



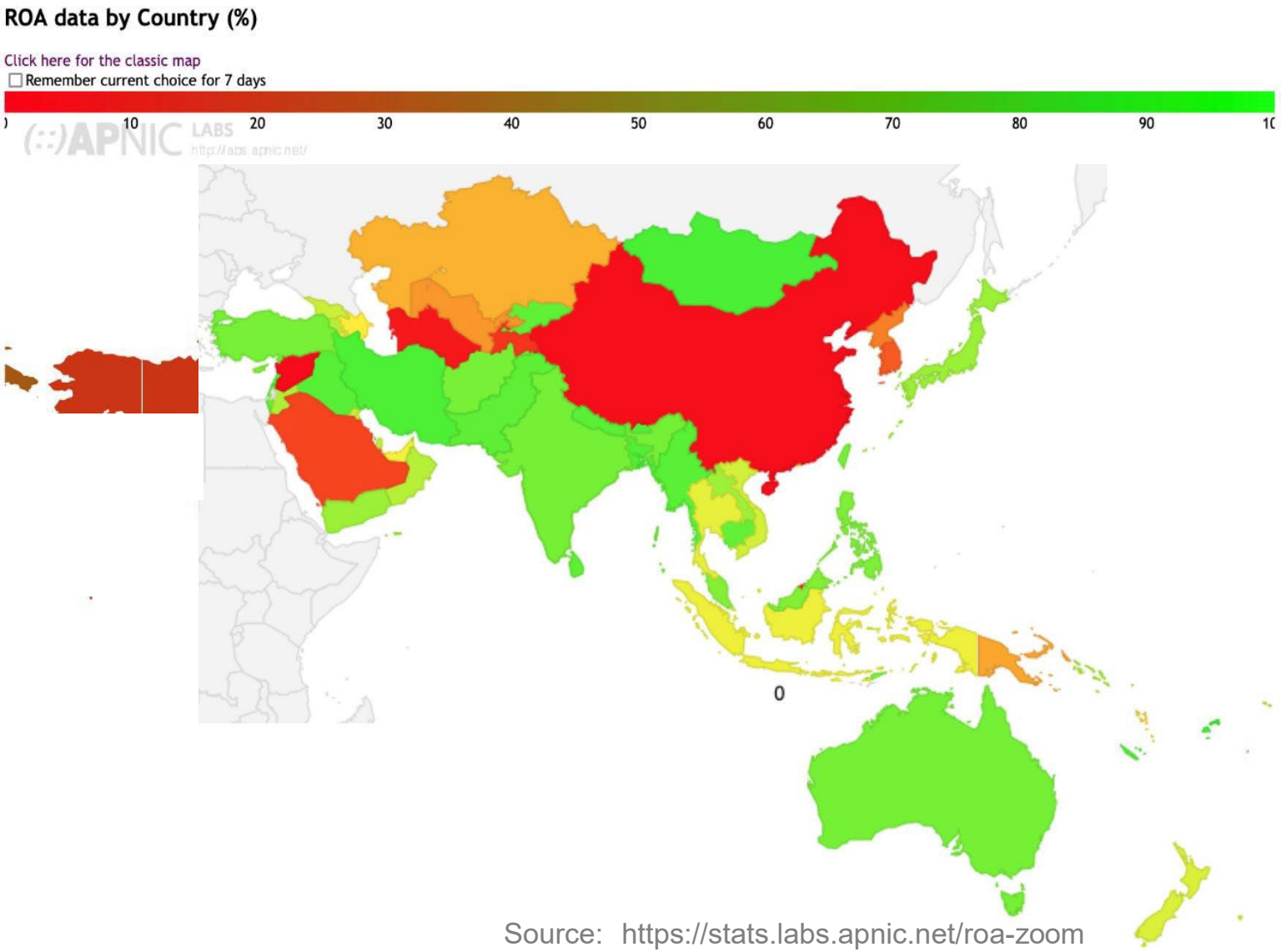
Sources

Recipients

Out of the AP region

From other regions

ROA Asia Pacific coverage



Source: https://stats.labs.apnic.net/roa-zoom

- 60% of respondents from 2022 APNIC Survey indicated their organization had not deployed RPKI
- 38% said they did not have the knowledge and expertise to deploy it
- Registry requires continued investment to meet the architecture, availability, and robustness requirements of RPKI

IPv6 uptake in the AP region

- In 2022, 8 economies are above average, 8 average and 9 significantly below average, for a total of 25 from 56
- 44% of the region's economies are now visible in IPv6 capability (above 1%)

BL	77.97%	IN	75.90%	BE	69.30%	FR	66.39%	SA	64.54%	DE	62.55%	GR	60.96%	UY	60.40%	IL	57.46%	MY	57.17%
MS	54.45%	US	54.10%	PR	54.08%	AX	49.52%	MX	48.67%	NL	48.53%	FI	48.30%	VN	47.98%	GB	47.46%	TW	47.14%
HU	46.95%	BR	45.85%	LK	44.83%	JP	44.83%	LU	44.71%	AE	44.01%	CH	41.82%	PT	41.37%	CA	40.59%	MM	39.42%
TH	39.14%	GT	38.15%																
World Average is 38%																			
EE	37.04%	AU	35.68%	NP	34.01%	PY	33.15%	AT	32.59%	RO	32.39%	NO	31.92%	PE	31.02%	MO	29.39%	CN	28.87%
SX	28.29%	CO	27.86%	MF	27.44%	SR	26.84%	TT	25.98%	EC	25.37%	IE	25.22%	GA	24.14%	NZ	23.75%	TG	23.66%
BT	22.16%	AR	22.06%	LI	21.82%	CZ	21.31%	KW	19.86%	BO	18.63%	CG	18.61%	CL	18.23%	NI	17.41%	JO	17.29%
PL	17.18%	BM	16.65%	GY	16.56%	OM	16.31%	KR	16.10%	LV	16.01%	SI	15.67%	GE	15.60%	SG	14.36%	BY	14.34%
IS	13.62%	SE	13.24%	PH	12.73%	JM	12.59%	LC	12.44%	MD	12.42%	RW	12.41%	ID	10.96%	ZW	10.48%	KZ	10.30%
SK	10.10%	VG	9.60%	BG	9.59%	BA	9.50%	DK	9.08%	UA	9.05%	SV	8.76%	RE	8.74%	PF	8.68%	VC	8.47%
RS	7.71%	IT	7.61%	AL	7.19%	KE	7.03%	RU	6.66%	BD	6.03%	HR	5.91%	BF	5.89%	BZ	5.81%	HN	5.29%
GD	5.20%	ES	5.00%	CR	4.91%	ZA	4.70%	MN	4.70%	GP	4.53%	PK	4.46%	HK	3.98%	AM	3.97%	DO	3.94%
EG	3.80%	VI	2.66%	TR	2.56%	PA	2.10%	PG	1.92%	NC	1.88%	CD	1.70%	CI	1.68%	SC	1.48%	LB	1.19%
VE	1.18%	CW	1.18%	MQ	0.97%	TO	0.92%	ML	0.83%	MC	0.71%	IR	0.61%	JE	0.54%	GF	0.51%	TZ	0.49%

Open Policy Meeting at APNIC 55

The following policy proposals reached consensus at the Policy SIG and AGM:

- prop-147: Historical Resources Management
  - Historical resources that are no longer published in the APNIC Whois Database and are placed in reserved status having been reclaimed under the HRM project will be placed in the free pool for re-delegation after 12 months
- prop-150: ROA/whois object with Private, Reserved and Unallocated (reserved/available) Origin ASN
  - guideline to advise it is unnecessary not to create ROA with Private, Reserved and unallocated ASN ranges
- prop-151: Restricting non-hierarchical as-set
  - restrict APNIC account holders from creating a non-hierarchical as-set, and notify all Members who already have non-hierarchical as-set that it is recommended they move to a hierarchical as-set

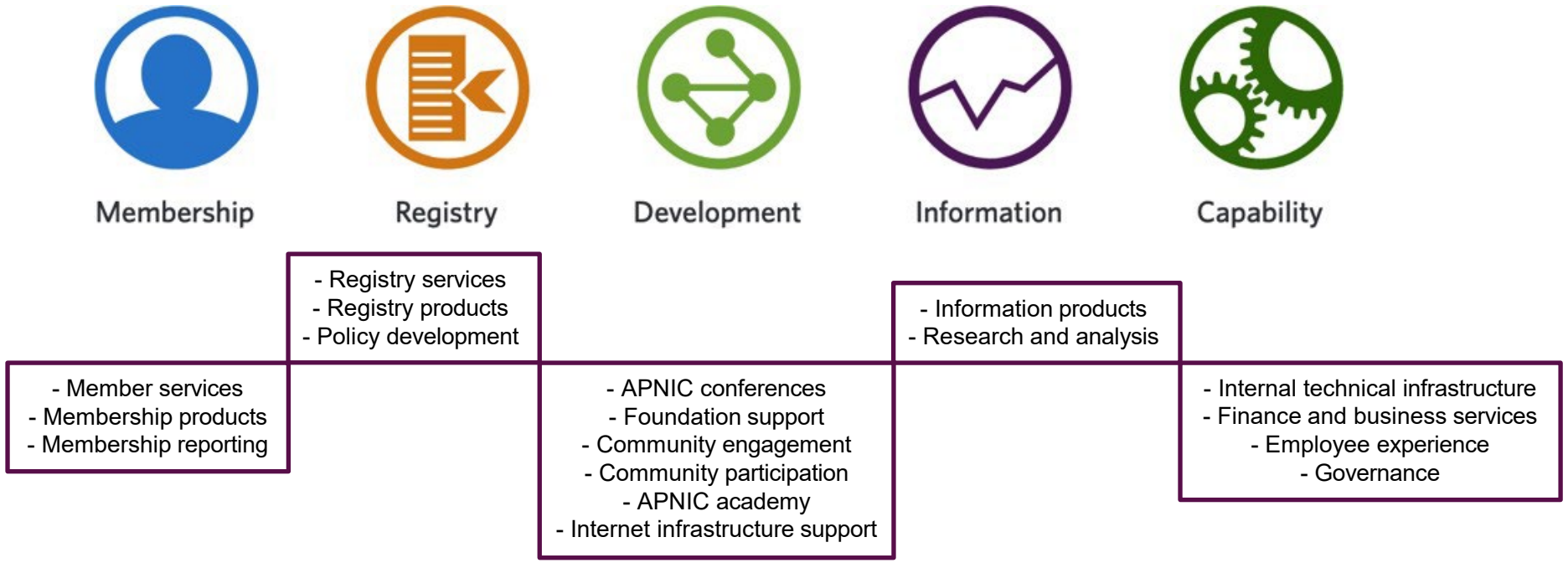
The following proposal was not put for consensus and will go back to the mailing list:

- prop-149: Change of maximum delegation for less than /21 total IPv4 holdings
  - increasing the maximum IPv4 delegation size for new APNIC account holders from a /23 to a /22

https://www.apnic.net/community/policy/

2023 APNIC Activity plan

- Structured under **five pillars** and **18 workstreams**
- 2023 plan is the last of four-year planning cycle
- New planning cycle starts from 2024

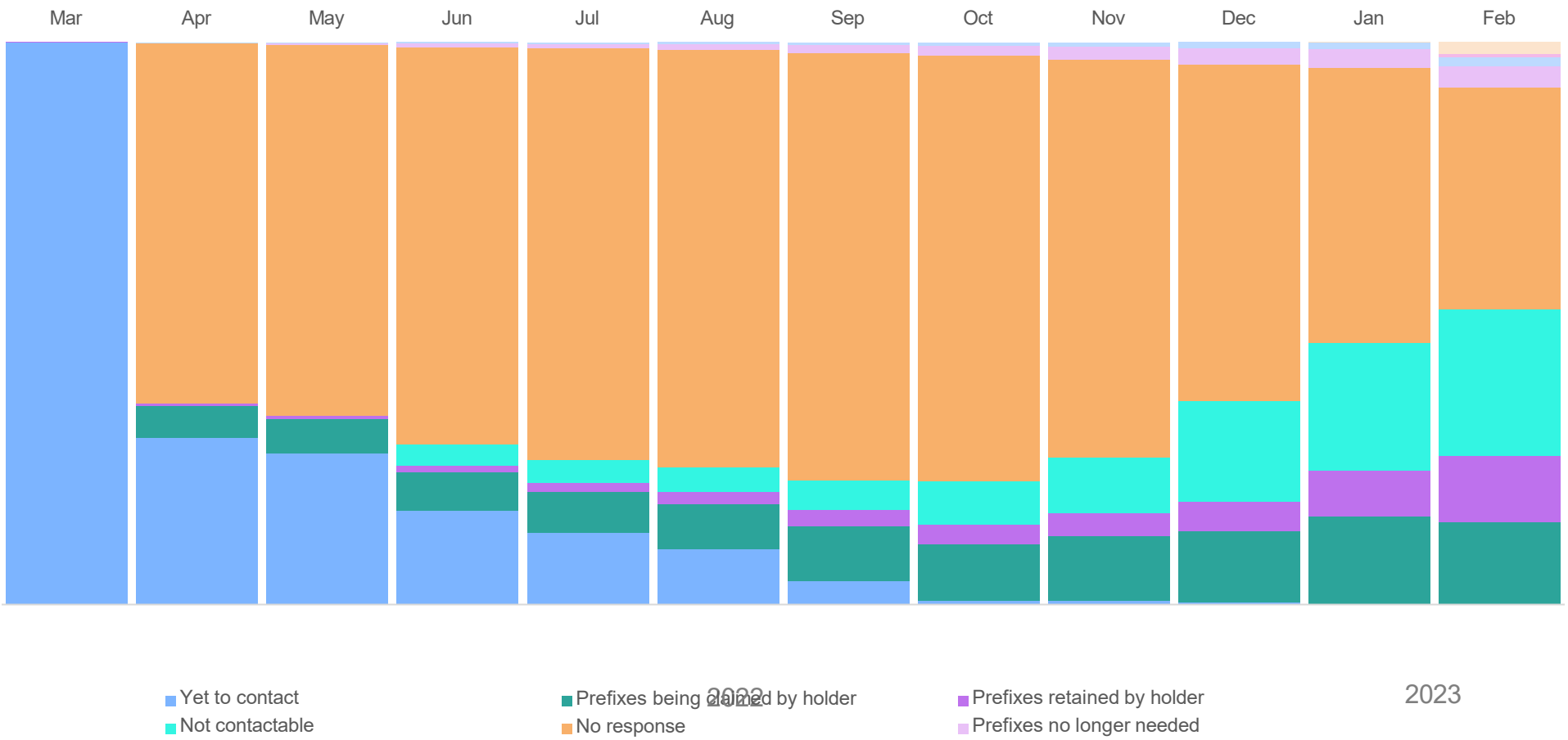


2022/23 Highlights

- APNIC Survey — 37 interviews in 26 economies – 1,622 respondents, 61% new: www.apnic.net/survey
- Historical Resource Management (HRM) project
- New MyAPNIC dashboard and overhauled the architecture
- Route management pre-validation
- Orbit, our community platform supporting and enabling community discussion: orbit.apnic.net
- 30 tech community events
- 22 NOGs — sponsorship, speakers, training and technical support

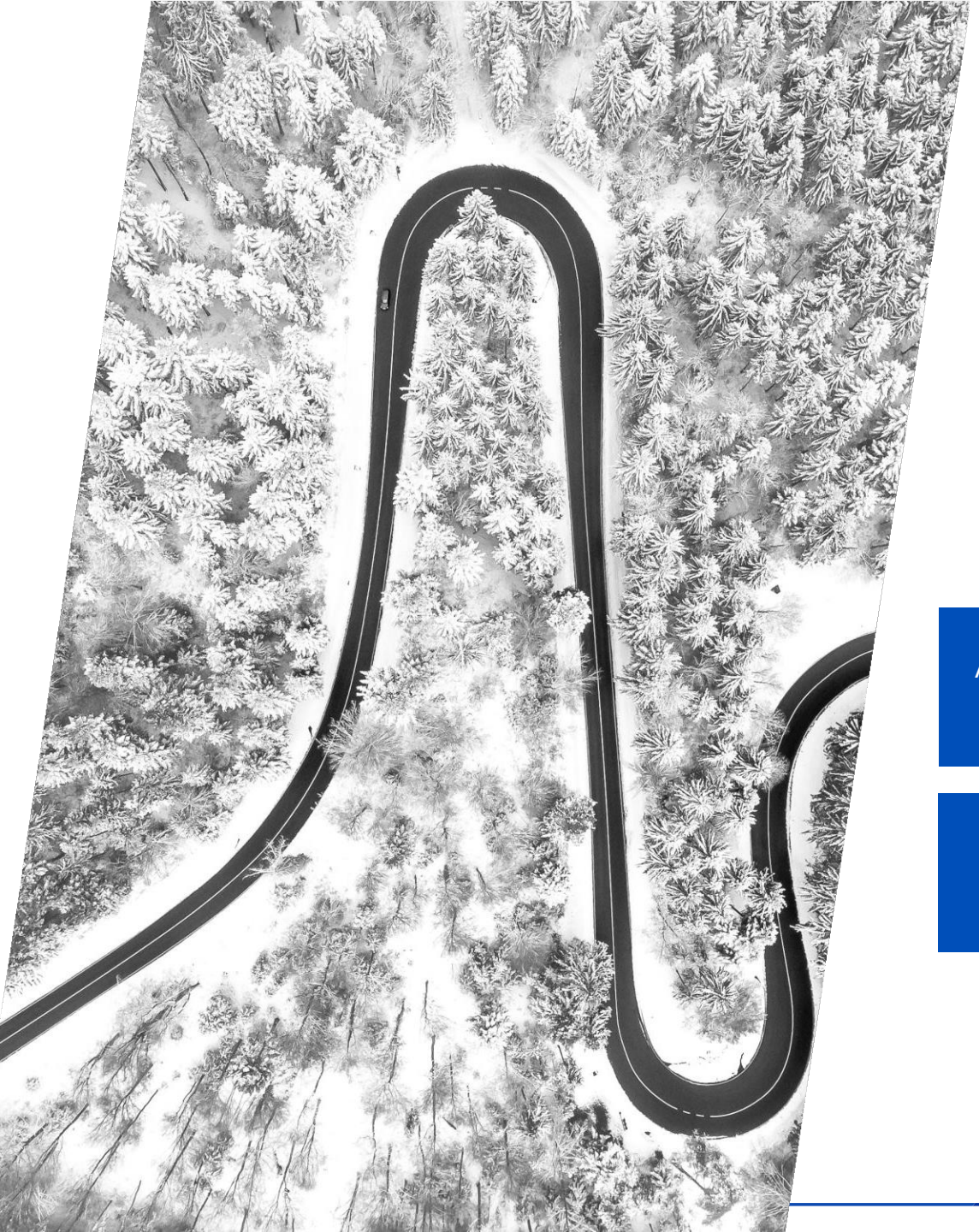
Historical Resource Project case outcome

March 2022 to Feb 2023



- 7.3 million IPs
- 3,932 prefixes
- 3,355 cases

www.apnic.net/historical-about



Roadmap

https://roadmap.apnic.net

	Website refresh – 23/24	
Alternative Whois Authorization	RPKI Signed Checklists (RSCs)	2FA mandatory from June 23
Registry API	Changes to Account Contacts to improve Identity & authentication	Implement new payment gateway

Alfredo Verderosa

Chief Services Officer

LACNIC Update

Our Next Speaker

LACNIC Update

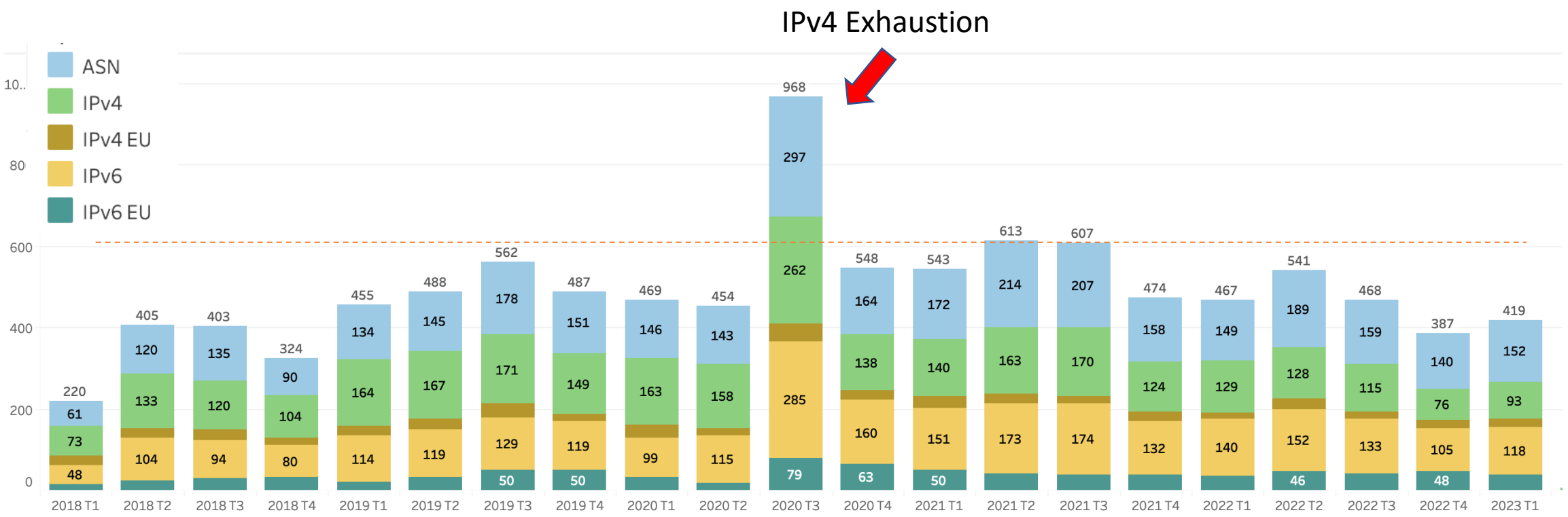
ARIN 51 - April 2023

Agenda

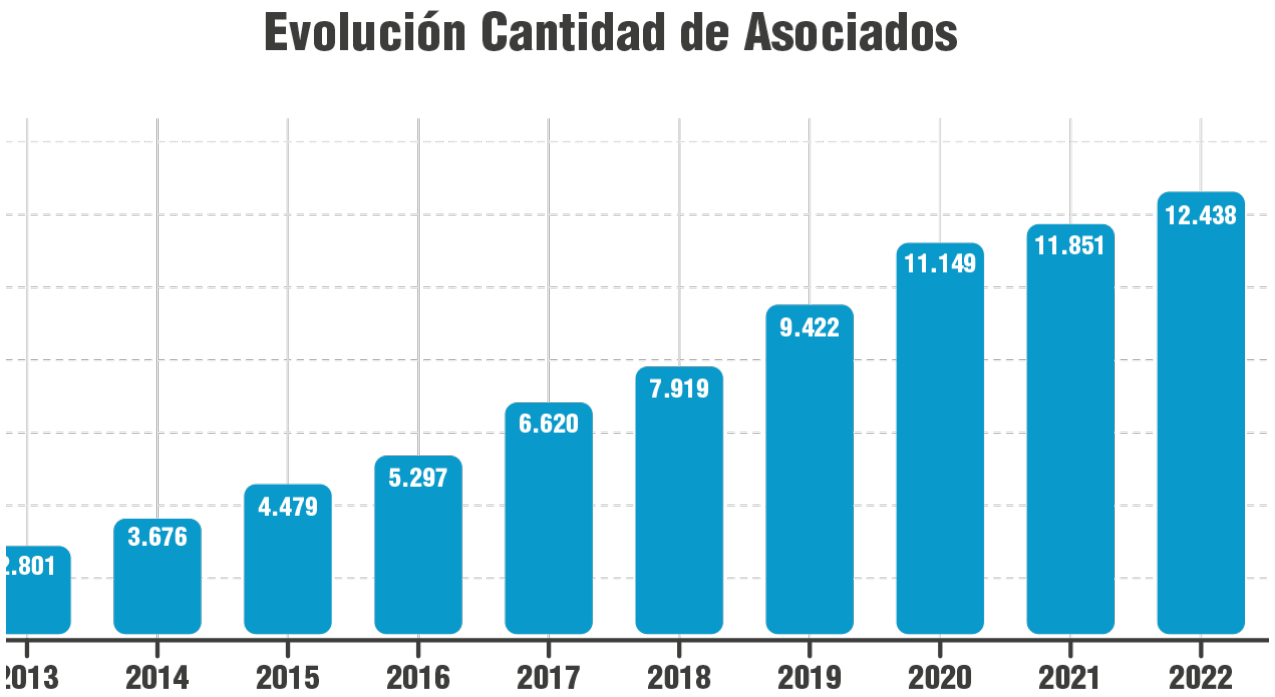
- INR requests post IPv4 Exhaustion
- Waiting list
- Resource transfer statistics
- Relevant policies (abuse contact, ROAs)
- Campus
- Upcoming event

IPv4 Exhaustion

- More than two years after IPv4 exhaustion, INR request levels remain at pre-exhaustion levels

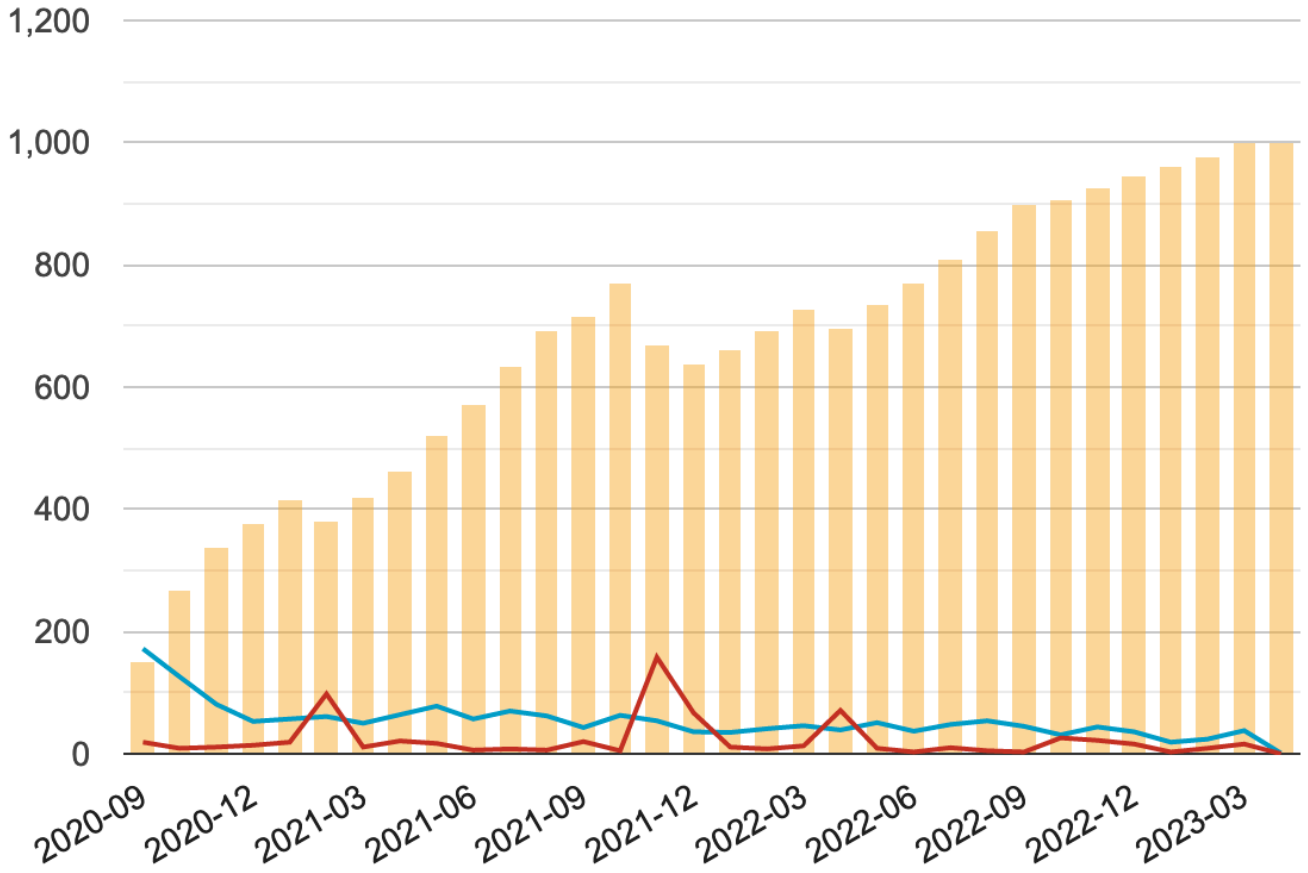


Membership Base



- The number of members has continued to grow, but at a slower pace than before IPv4 exhaustion (5% in 2022 vs 18% in 2020)
- Today we have more than 1,000 IPv6-only members who joined us in the past few years

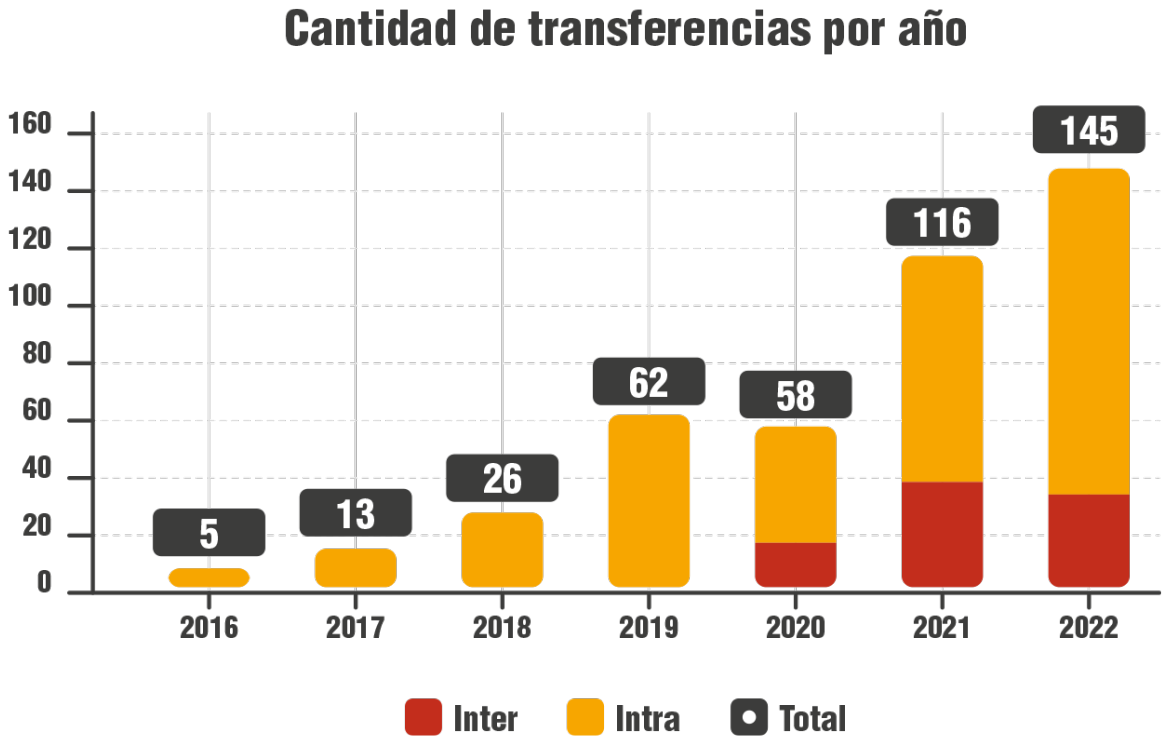
Waiting List



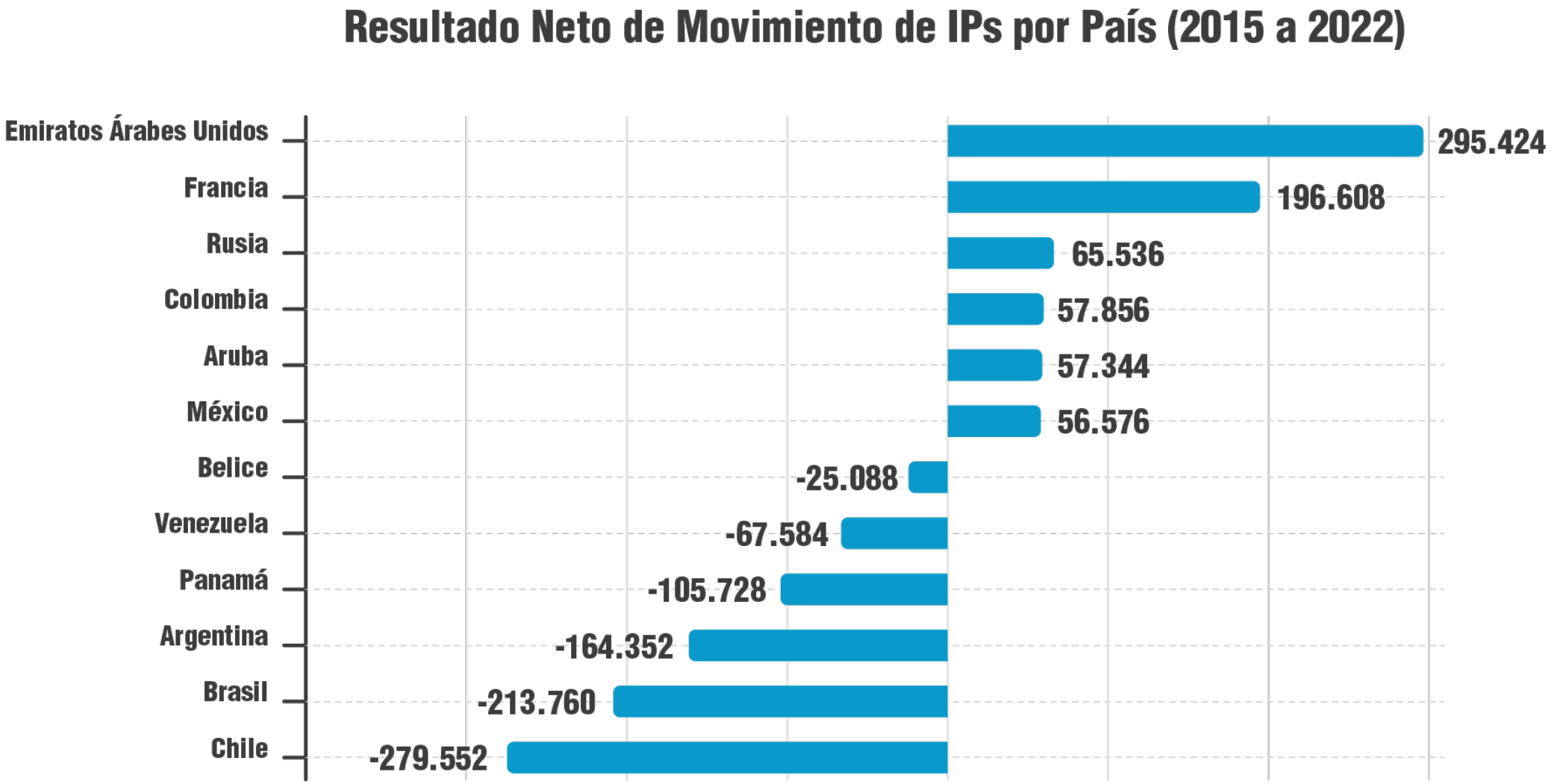
- Created in august 2020. Since 2021, only members are allowed to register on the list
- Waiting times have increased because the number of requests received each month cannot be met with the space recovered or returned to LACNIC
- Based on resource recovery behavior, we estimate that the last request on the IPv4 waiting list will receive resources in 2030
- The organizations that are currently receiving addresses from the recovered address space had to wait an average of 780 days.

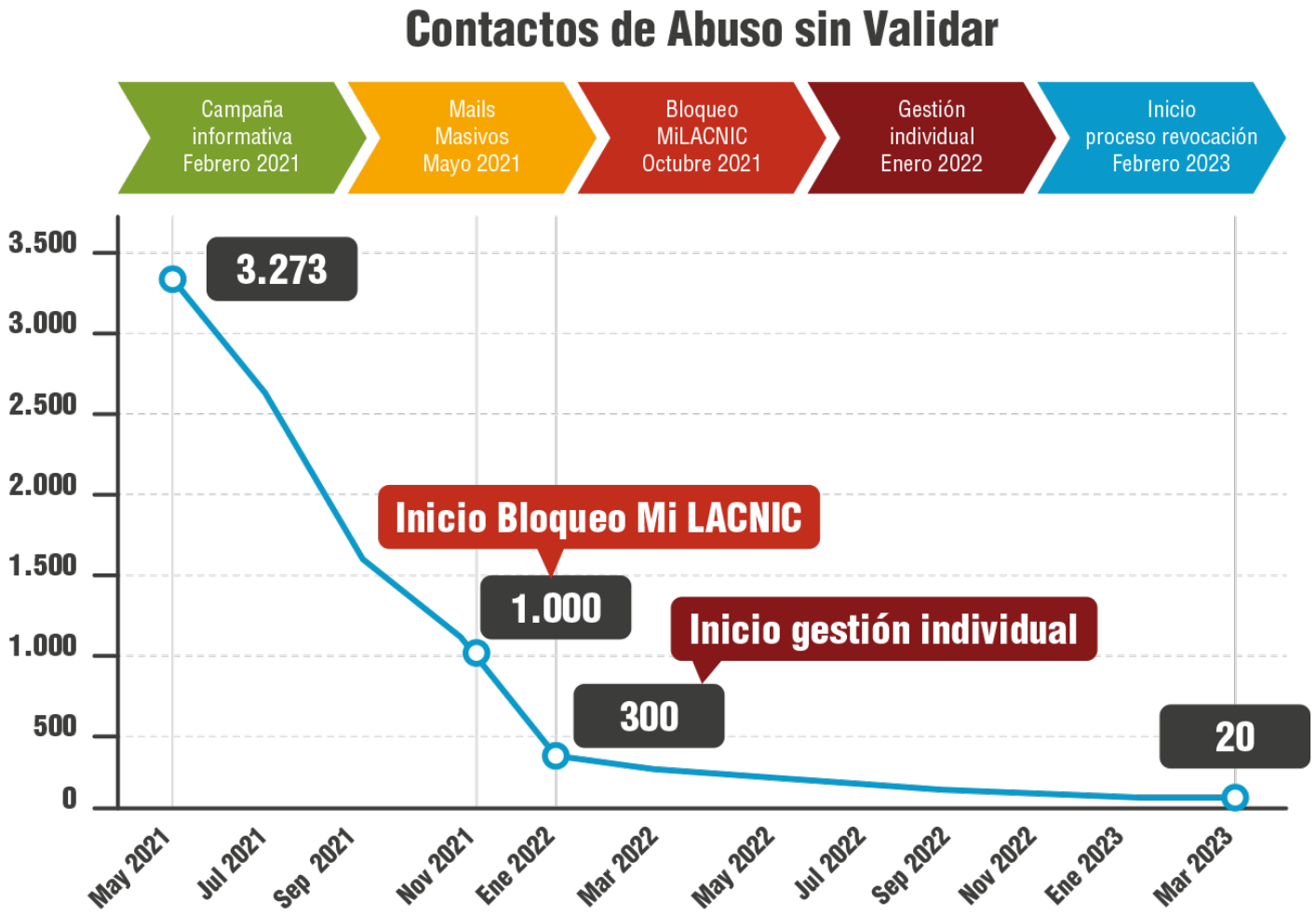
Transfers

- Low number of transfers compared to other RIRs
- However, in recent years transfers have steadily increased
- The highest number of inter-RIR transfers are outgoing transfers to RIPE



Transfers


Resultado Neto de Movimiento de IPs por País (2015 a 2022)
Emiratos Árabes Unidos
295.424
Francia
196.608
Rusia
65.536
Colombia
57.856
Aruba
57.344
México
56.576
Belice
-25.088
Venezuela
-67.584
Panamá
-105.728
Argentina
-164.352
Brasil
-213.760
Chile
-279.552



POC Validation Policy

- 99.9 POC validated in the last 2 years
- 20 orgs began the revocation process
- A new cycle will begin in May

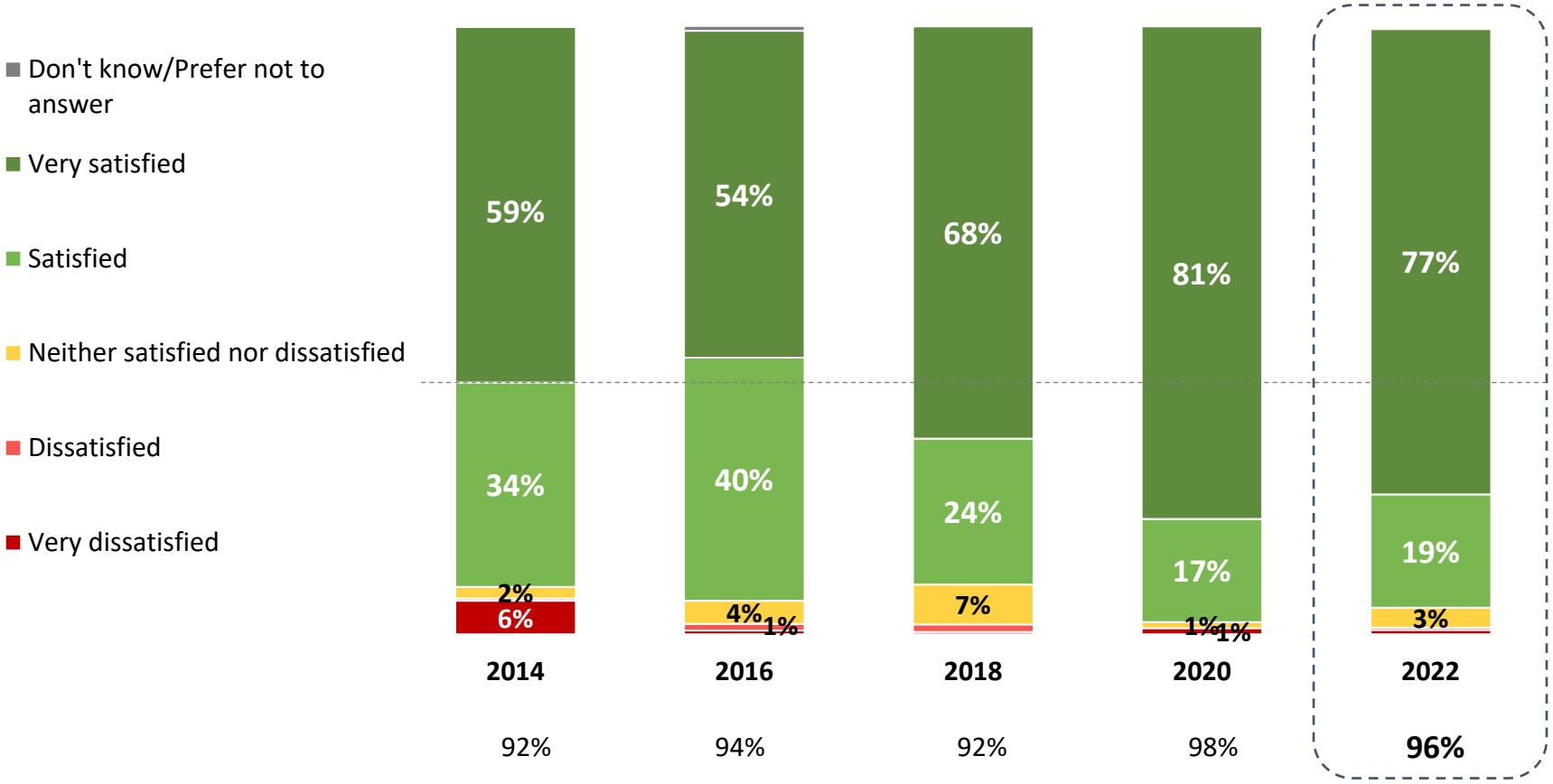
LAC-2020-10: Authorize Recipients of Delegated Blocks to Create ROAs

- Recipients of “delegated” IPv4 / IPv6 blocks will now be able to create RPKI ROAs in hosted mode without the need to ask the resource holder to create them.

- The complete list of proposals is available at https://politicas.lacnic.net/politicas/list

2022 Customer Satisfaction Survey

Overall, how satisfied are you with LACNIC?



Overall, LACNIC members expressed **very good levels of satisfaction**, **practically reaching ideal scores**.

These levels have been **maintained** across the measurements carried out since 2014, which means that users **value and approve the work that is done**.

Source: Total number of surveyed members in 2014, 2016, 2018, 2020 and 2022

lacnic 39

8-12 Mayo / Mérida, México

lacnic

Juntos transformemos Yucatán
GOBIERNO DEL ESTADO

Marco Schmidt

Registration Services Manager

RIPE NCC Update

Our Next Speaker

RIPE NCC
RIPE NETWORK COORDINATION CENTRE

RIPE NCC Update

Marco Schmidt
Registration Services Manager

Plans for the Year Ahead

- Our Activity Plan and Budget 2023 is now online:

  https://www.ripe.net/publications/docs/ripe-786

- Aligns with our Five-Year Strategy published in December 2021:

  https://www.ripe.net/publications/news/announcements/ripe-ncc-strategy-2022-2026-published

Priorities for 2023

- Be resilient in the face of political, legislative and regulatory changes that have the potential to affect our operations
- Secure Internet number resources by developing and operating a resilient, externally auditable and secure Resource Certification Trust Anchor and promote RPKI usage
- Be a centre of excellence for data, measurements and tools that provide insight on the Internet and its operations
- Maintain necessary levels of security and compliance with best practices and applicable regulations
- Maintain a healthy organisational culture with engaged staff aligned with the organisational values

What we've been working on

Registry

- Number of LIRs on IPv4 Waiting List is growing (1,093 as of 4 April)
  - https://www.ripe.net/manage-ips-and-asns/ipv4/ipv4-waiting-list
- We have strengthened our compliance and due diligence efforts
  - Automated sanctions checks
  - Enhanced due diligence, e.g. requesting notarisation
- Extra attention to our members in distressed areas
  - Supporting members in Ukraine, Turkey, Syria

RPKI Update

- RPKI is one of our main focus areas for 2023
- Our four goals for the year are:
  - Improve resilience through better geographic distribution
  - Improve the user experience through new UI
  - Enhance compliance by undertaking an ISAE3000 audit and publishing our findings
  - Work with other RIRs for more unified maintenance of RPKI data
- We plan to launch “Publish in Parent” soon to provide more resilience to the RPKI ecosystem

E-learning and Certification

- RIPE NCC Certified Professionals: BGP Security Associate exam is now live
- RIPE NCC Academy has new content:
  - IPv6 Fundamentals e-learning course
  - BGP Security e-learning course
  - Internet Governance e-learning course
  - ‘Why RPKI?’ microlearning course

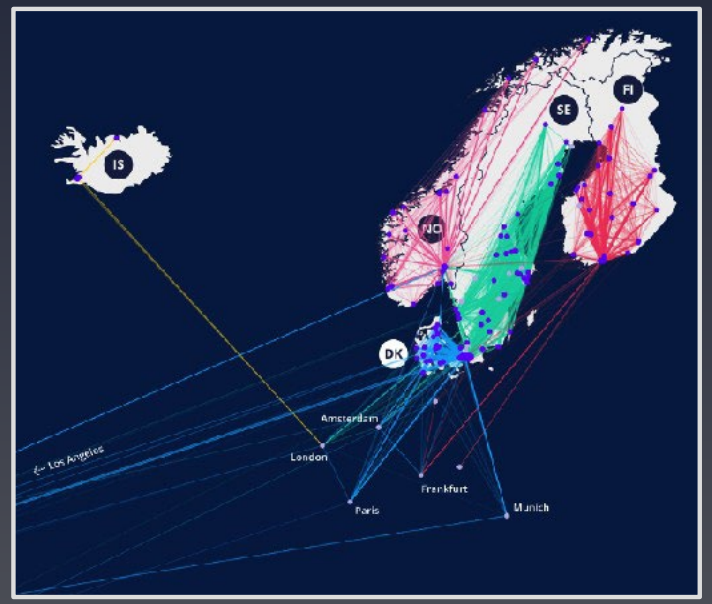
RIPE Atlas

- Building a better network:
  - We have more than 11,900 probes spread out across 5,500+ ASNs in 170 countries
  - We have begun distributing new version five hardware probes to maintain the network
- Improved sponsorship model:
  - Our goal is to cover at least the top five ASNs from all 6 underrepresented regions
  - We have improved our sponsorship packages with more benefits, exposure and incentives

https://atlas.ripe.net/get-involved/become-a-sponsor/

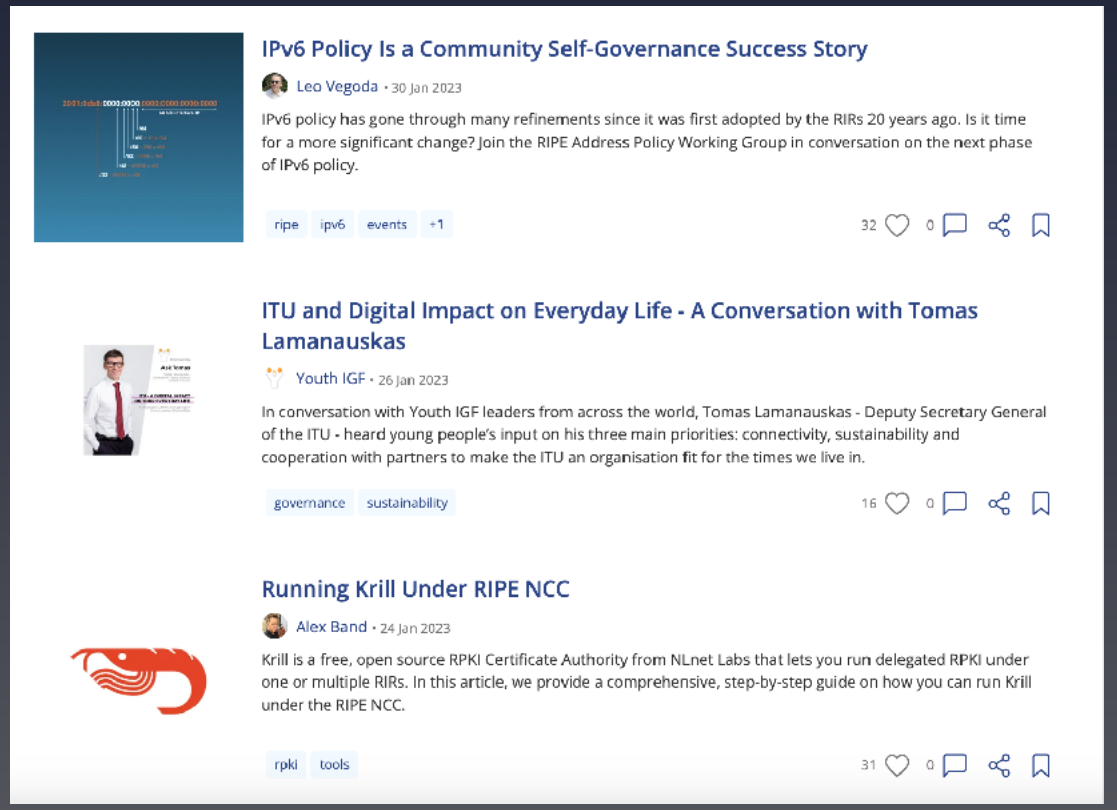
Internet Country Reports

- Two reports in 2022
  - Bulgaria, Moldova and Romania
  - The Nordic Region
- Analyse the Internet landscape in each region
  - Market landscape, competition, potential for growth
  - Address space, transfers, IPv6 deployment
  - Routing, traffic exchange and routing security
  - Domestic and international connectivity
  - Access to the DNS



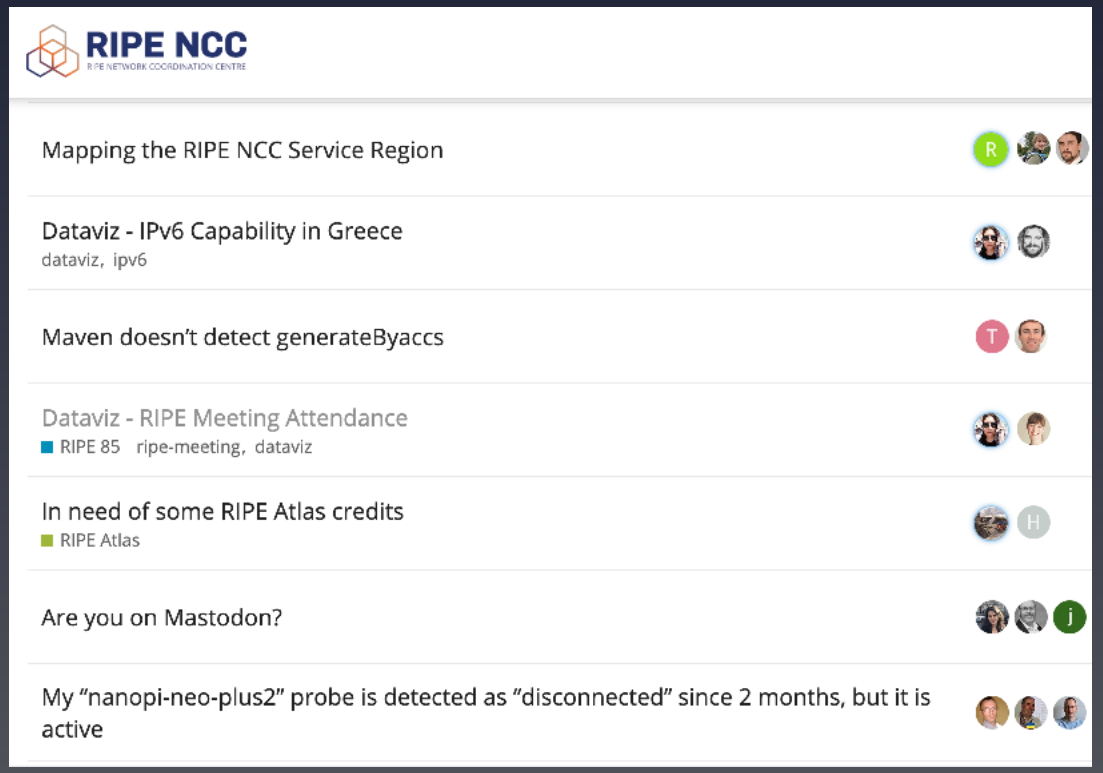
RIPE Labs

- Ideas and perspectives from RIPE NCC staff and the wider RIPE community
- Over 18,000 monthly readers
- Launched a podcast in 2022
- Topics include network operations, measurements and statistics, Internet governance and more



RIPE NCC Forum

- Our new platform for engaging with members
- A place for informal discussions, building connections, quick questions and technical support
- Open to all, accessible without an account



Language Support

- New translation wiki: https://translated.ripe.net/
- Languages: Turkish, Farsi, Spanish, Italian, Russian and Arabic
- Initial focus on practical information for members
- Also translating some of our published materials, such as our Internet Country Reports

Expanding Our Regional Outreach

- Focus on more regional outreach in the past year
- Central Asia Peering and Interconnection Forum (CAPIF)
  - Almaty, Kazakhstan
- RIPE NCC Days
  - Tashkent, Uzbekistan
- Internet Measurement Days
  - Serbia and Georgia
- Community decided to halt Eurasian Network Operators Group (ENOG) meetings, but we continue to host other events in the region

2
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1

Community Projects Fund

- The RIPE NCC has a fund of €250,000 each year to support projects that work for the “Good of the Internet”
- Examples of projects we’ve funded include:
  - Internet Standards Observatory
  - ARTEMIS Lite
  - Virtual School of Internet Governance
  - RPKI Ecosystem Health Monitoring
  - Internet Health Report
- https://www.ripe.net/support/cpf

2022


Join us at
RIPE 86
Rotterdam, Netherlands
22 - 26 May 2023

Questions

David Dong

IANA Services Specialist

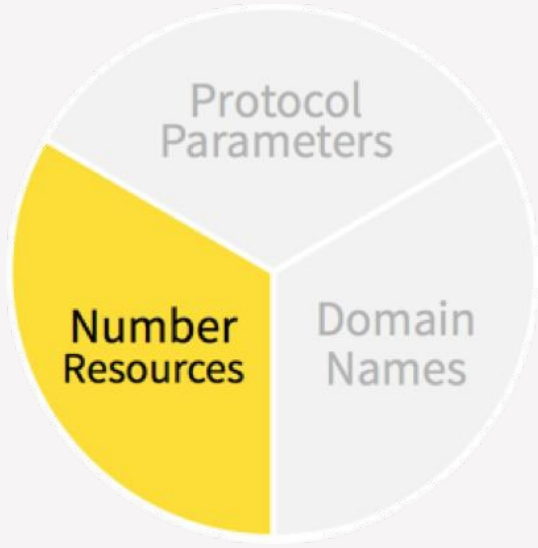
IANA Number Services Update

Our Next Speaker

IANA Numbering Services Update

David Dong
IANA Services

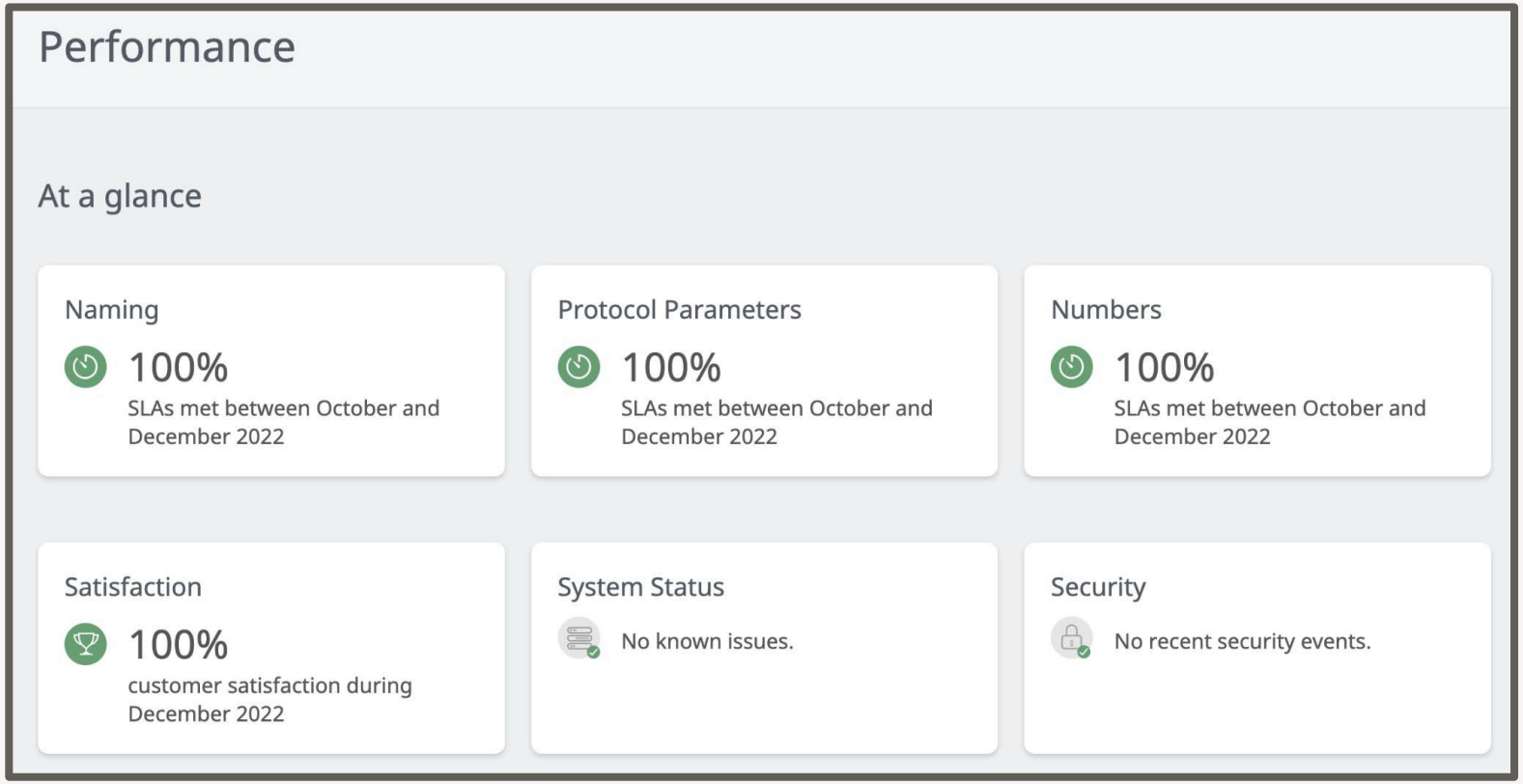
ARIN 51
April 2023



PTI | An ICANN Affiliate

SLA Performance

IANA consistently meets its Service Level Agreements (SLA) in all areas: Numbers, Naming & Protocol Parameters



https://iana.org/performance

Customer Satisfaction for 2022

Engagement Surveys

Sent annually to key stakeholders to respond to strategic questions on community engagement.

Highest rated statement: 4.8/5
"IANA acknowledges when they have made an error as it relates to its customers and stakeholder groups."

Lowest rated statement: 3.7/5
"I know how to escalate my concerns within the IANA team."

Satisfaction Surveys

Sent to requestors of services following completion of request.

Overall satisfaction rate*: 91%
(34.4% response rate)

Information Security Audits

- IANA has had 12 consecutive years of exception-free audits
- These information security audits, conducted by a third-party auditing firm, evaluate IANA's service organization controls (SOCs) against the "Trust Services Principles and Criteria"
- Both the SOC2 and SOC3 audits demonstrate that IANA remains committed to ensuring the security and stability of the Internet's unique identifier systems
- The audits also strengthen key operations within IANA through ever-evolving controls and maturing department practices
- For more information about our audit program and to view previous reports, please see **https://www.iana.org/about/audits**

Key Signing Ceremonies

Four public key ceremonies conducted during 2022, protecting the trust anchor for the domain name system (the Root Zone KSK).

Updates

- Resumed standard operating procedures (post pandemic)
- Replacing Trusted Community Representatives (TCRs)
- Completing maintenance deferred during pandemic

Upcoming

- Updates to Ceremony Operating Environment to deploy new signing software
- Community study into changing cryptographic algorithm in the DNS root zone
- Generation of a new key for the next trust anchor rollover

Trusted Community Representatives (TCRs)

- TCRs colloquially known as Internet “keyholders”
- Volunteers oversee how ICANN and IANA keep the cryptographic keys to the Internet safe
- TCRs are expected to be trusted by the community, and convey confidence in our operations through their oversight
- They are expected to report back to their communities on how the ceremony was performed, as well as provide suggestions on improving operations
- We select TCRs to be a mix of relevant backgrounds and experiences; Asia Pacific is currently under-represented
- Volunteers can submit a statement of interest at https://www.iana.org/tcr
- More info on selection criteria: https://www.iana.org/help/tcr-criteria

Ongoing and Upcoming Work

- IANA RDAP Server
- Reporting on new RIR Service Level Agreements
- Planning phase of the algorithm rollover study and the next key rollover
- June: Engagement begins on FY25 Operating Plan & Budget

Thank you!

Questions and feedback
welcome to
iana@iana.org

Eddie Diego

Policy Analyst

Regional Policy Update

Our Next Speaker

Regional Policy Update

Eddie Diego | *Policy Analyst*

This report contains proposals from…

- **African Network Information Center (AFRINIC)**
  - The continent of Africa
- **Asia-Pacific Network Information Centre (APNIC)**
  - Eastern Asia, Australia, New Zealand, and neighboring countries
- **Latin America and Caribbean Network Information Centre (LACNIC)**
  - Latin America and parts of the Caribbean region
- **Réseaux IP Européens Network Coordination Centre (RIPE NCC)**
  - Europe, Russia, the Middle East, and Central Asia

AFRINIC

#	Proposal Summary	Draft	ID	Date	Status	Remarks	Version(s)
1	AFRINIC Number Resources Transfer Policy	D3	AFPUB-2020-GEN-006-DRAFT03	2021 Nov 22	Consensus	Awaiting Ratification by Board	
2	RPKI ROAs for Unallocated and Unassigned AFRINIC Address Space	D3	AFPUB-2019-GEN-006-DRAFT03	2021 Apr 19	Ratified	Awaiting Implementation	
3	Abuse Contact Policy Update	D7	AFPUB-2018-GEN-001-DRAFT07	2021 May 17	Consensus	Awaiting Ratification by Board	
4	Policy Compliance Dashboard	D2	AFPUB-2021-GEN-003-DRAFT02	2021 Nov 9	Consensus	Awaiting Ratification by Board	
5	Abuse Contact Policy Update	D8	AFPUB-2018-GEN-001-DRAFT08	2022 May 15	Under Discussion		

APNIC

- **Reached consensus at APNIC 55**:
  - prop-147: Historical Resources Management
  - prop-150: ROA/whois object with Private, Reserved, and Unallocated (reserved/available) Origin ASN
  - prop-151: Restricting non-hierarchical as-set
- **Under discussion**
  - prop-148: Leasing of Resources is not Acceptable
  - prop-149: Change of maximum delegation for less than /21 total IPv4 holdings
- **Pending implementation**
  - prop-145: Single Source for Definitions

LACNIC

Date published	ID	Status	Version	Current state date
14/09/2022	LAC-2022-1: Unify Texts That Apply to Both IPv4 and IPv6	Implemented	2	8/2/2023
17/08/2022	LAC-2022-4: PDP Chair Elections	Implemented	1	20/12/2022
20/09/2022	LAC-2021-5: Update End-User and End-Site Definitions	Did not reach consensus	2	29/11/2022
20/09/2022	LAC-2020-3: Impact Analysis Is Mandatory	Did not reach consensus	4	29/11/2022
16/08/2022	LAC-2022-3: Managing Recovered Resources that were originally part of the Reserve for Critical Infrastructure	Board Ratification	1	28/11/2022
12/04/2023	LAC-2023-1: Consensus Clarification	In discussion	1	12/04/2023

RIPE NCC

	Initial Discussion	Comment & Review	Concluding
2023-01 Reducing IXP IPv4 assignment default size to a /26	4 April 2023 Awaiting Decision from Proposer		
2023-02 Minimum Size for IPv4 Temporary Assignments		Open for Discussion Until 2 May 2023	
2023-03 Voluntary Transfer Lock	6 April 2023 Awaiting Decision from Proposer		

References

Regional Policy Pages

- AFRINIC:
  - https://afrinic.net/policy/proposals
- APNIC:
  - https://www.apnic.net/community/policy/proposals/
- ARIN:
  - https://www.arin.net/participate/policy/drafts/
- LACNIC:
  - https://politicas.lacnic.net/politicas/list
- RIPE NCC:
  - https://www.ripe.net/participate/policies/current-proposals/current-policy-proposals

NRO Comparative Policy Overview

- www.nro.net/policies/rir-comparative-policy-overview

Thank You

Open Microphone

Thank you for joining us today!

Thank you to our sponsors

Join us for one more day

19 April 2023

Breakfast

8:00 AM ET

Meeting Begins

9:00 AM ET


ARIN 51
POWERED BY PARTICIPATION