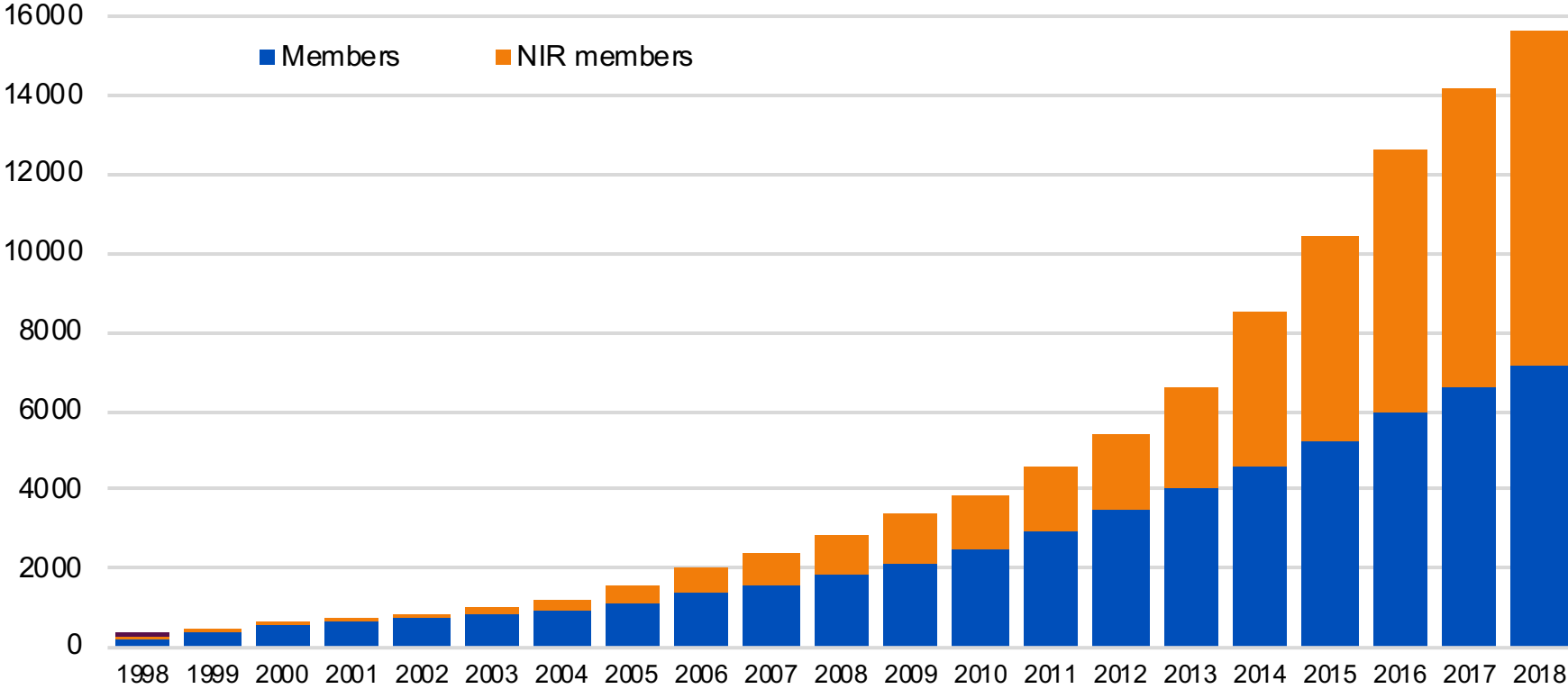# APNIC Update

ARIN 43
9 April 2019
Bridgetown, Barbados
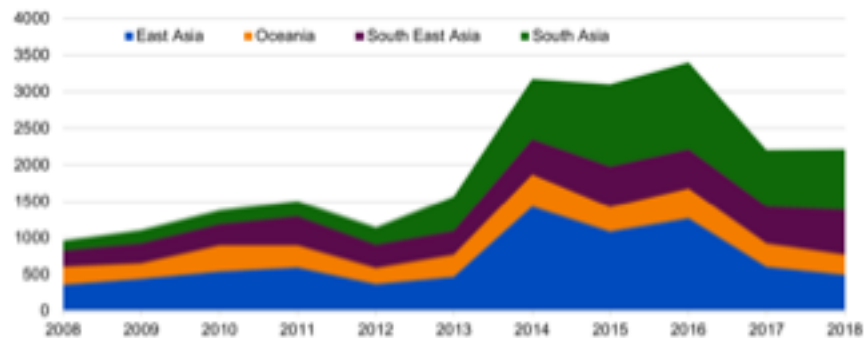
*"A global, open, stable and secure Internet that serves the entire Asia Pacific community"*
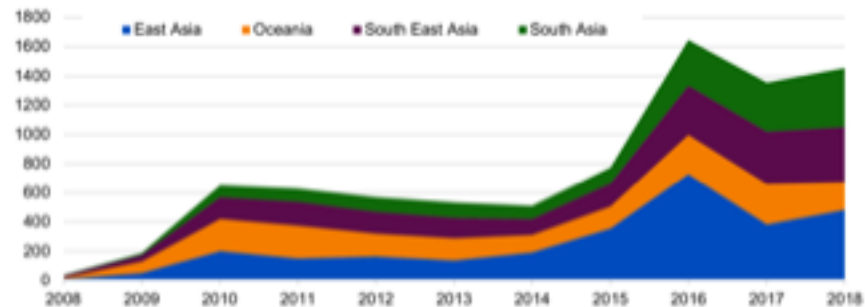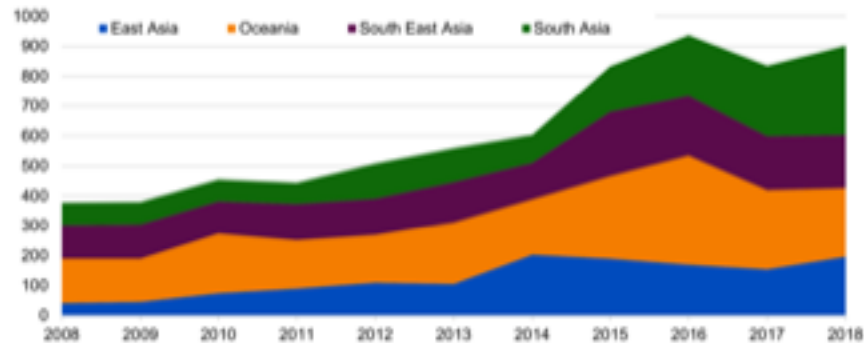
# Membership
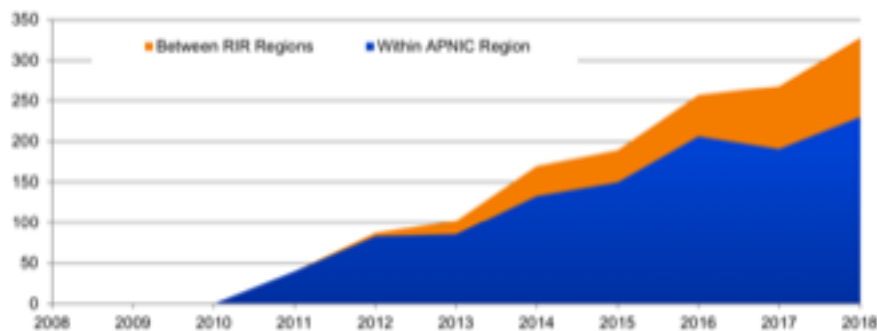


As at 31 Dec

# IPv4 Delegations



# IPv6 Delegations



# ASN Delegations



# IPv4 Transfers
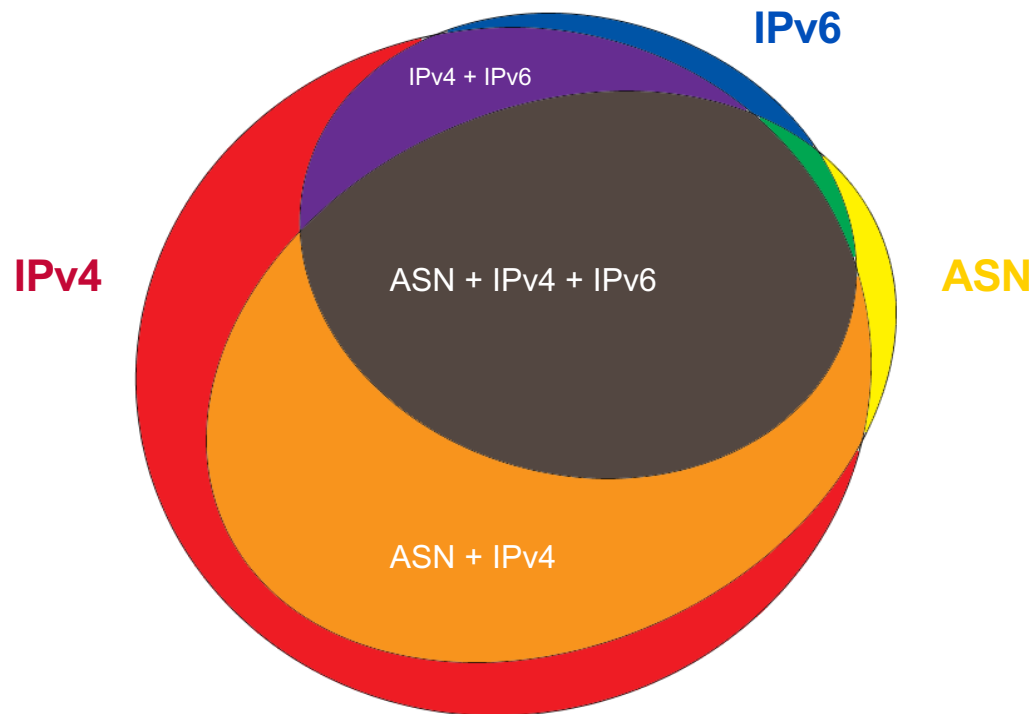
# Resource Holdings



| Member resource holdings | |
|---|---|
| **ASN** | 76% |
| **IPv4** | 96% |
| **IPv6** | 62% |

As at 31 Mar

# APNIC Survey 2018

- Every 2 years since 1999
  - 10$^{th}$ survey completed Sep 2018
  - Regional focus groups, interviews and online survey
  - Major input into APNIC board planning processes
  - EC response published Dec 2018
- Independent, anonymous
  - Currently conducted by Survey Matters, Australia
- 1,241 valid responses – 31% non-English
- 97% of responses from Asia Pacific
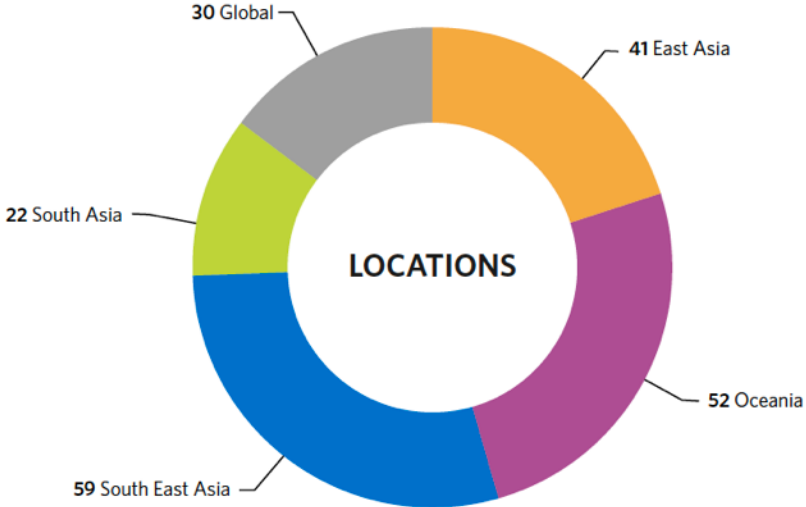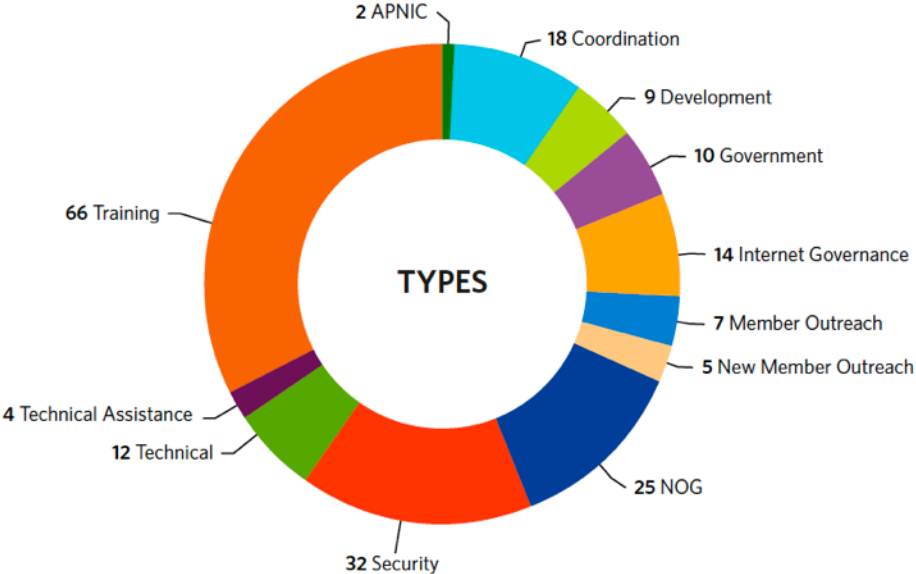- Thanks to all who responded!

apnic.net/survey

# Policy Proposals

| Proposals | Status |
|---|---|
| prop-118: No need policy in APNIC region | Proposal abandoned. |
| prop-124: Clarification on IPv6 sub-assignments | **Did not reach consensus** and returned to mailing list for further discussion. |
| prop-125: Validation of "abuse-mailbox" and other IRT emails | **Reached consensus** at APNIC 46; implementation in 2019. |
| prop-126: PDP Update | **Did not reach consensus** and returned to mailing list for further discussion. |
| prop-127: Change maximum delegation size of 103/8 IPv4 address pool to a /23 | **Reached consensus** in the APNIC 47 Policy SIG and AGM. |
| prop-128: Multihoming not required for ASN | **Reached consensus** in the APNIC 47 Policy SIG and AGM. |
| prop-129: Abolish waiting list for unmet IPv4 requests | **Reached consensus** in the APNIC 47 Policy SIG and AGM. |

# External Engagement Summary



TYPES

- 2 APNIC
- 18 Coordination
- 9 Development
- 10 Government
- 14 Internet Governance
- 7 Member Outreach
- 5 New Member Outreach
- 25 NOG
- 32 Security
- 12 Technical
- 4 Technical Assistance
- 66 Training

LOCATIONS

- 30 Global
- 41 East Asia
- 52 Oceania
- 59 South East Asia
- 22 South Asia

# Training & TA


Trainees at PacNOG 2018

| | 2018 | 2019 |
|---|---|---|
| Face-to-face training | 66 | 7 |
|     Economies | 35 | 3 |
|     Trainees | 2,156 | 168 |
| Community Trainers | 15 | 15 |
| eLearning sessions | 66 | 9 |
|     Trainees | 365 | 79 |
| TA sessions | 9 | - |
|     Members | 5 | |

training.apnic.net

# Technical Community



BhutanNOG, June 2018

- **NOGs**: Participated in 21 NOGs
- **Root servers**: F at PNG IXP; F in FJ relocated to IXP; K at BTIX, K at TPIX
- **IXPs**: VN, MM, PNG, MN, FJ, TL, BN including IXP-DB, APIX, Peering Asia, IXP Manager
- **Sponsorships**: 17 regional events plus 17 NOGs
- **R&E**: trainings at APAN 45/46; with GEANT and MYREN; AARNET; joined eduroam Wi-Fi community
- Internet Directory portal updated

# Security


Adli Wahid

- 38 security engagements

- Contributed to new CERTs in PNG and Vanuatu

- PNG's 'Enhancing National Cybersecurity and Network Quality of Service' project ahead of APEC

- Security training - 23 face-to-face and 19 eLearning sessions

- FIRST TC events at APRICOT 2018 & 2019 and APNIC 46 (Adli Wahid @ FIRST Board)

- DASH – Dashboard for AS Health

apnic.net/security

# APNIC Conferences



APRICOT 2019
APNIC 47
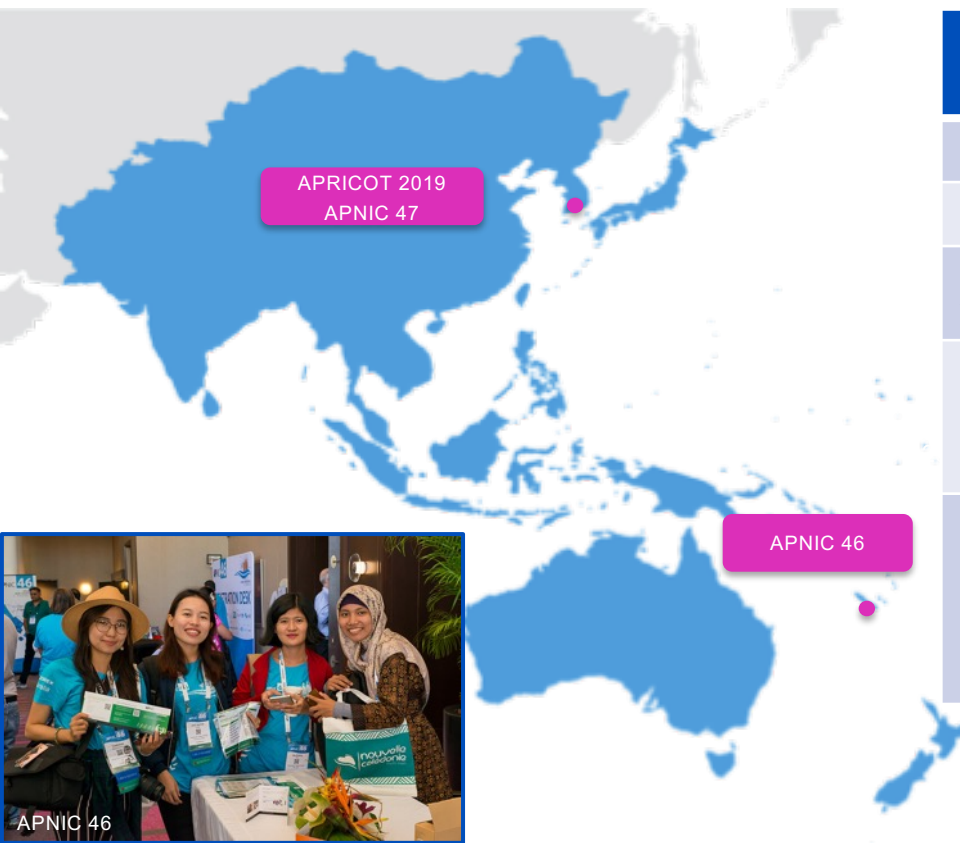
APNIC 46

APNIC 46

| | APNIC 46 | APRICOT 2019 |
|---|---|---|
| Delegates | 305 | 714 |
| Economies | 46 | 57 |
| APNIC Member orgs | 92 | 153 |
| Remote participants<br>• Adobe Connect<br>• YouTube | 194<br>2,022 views | 196<br>3,757 views |
| Fellowships<br>• Gender<br>• Economies<br>• Type | 62<br>24 F, 38 M<br>17<br>50 P / 6 Y / 7 R | |

conference.apnic.net

# RPKI

'Validation Reconsidered'

- Reduce sensitivity to isolated or transient errors
- Adopted as RFC8360

'Anysign' Function

- RTA = Resource Tagged Attestation
- Proof-of-concept to enable RPKI signing of any document or object eg. LOA for service provisioning
- OID request submitted to IANA

apnic.net/rpki

| | 1/1/2018 | 31/12/18 | Δ | 28/2/19 | Δ |
|---|---|---|---|---|---|
| **Members with certs** | 13.0% | 21.9% | **68%** | 22.4% | **2%** |
| **Members with ROAs** | 7.4% | 11.3% | **52%** | 11.6% | **2%** |
| **IPv4 under ROAs** | 3.3% | 6.1% | **85%** | 6.6% | **8%** |
| **IPv6 under ROAs** | 0.9% | 5.6% | **522%** | 7.2% | **22%** |

# APNIC Academy



- Relaunched August 2018
  - Virtual labs
  - New partner courses (MANRS, Network Forensics and Analysis, IoT Security Challenges)
  - New PDP course
- Free public access
  - Enrolled: 1,537
  - Certified: 1,042
- New courses coming soon

academy.apnic.net

# blog.apnic.net



- Numbers community news and views – not just APNIC!
- 1.4m views since inception
- 2018: 371 posts, 40,064 views/mth
- 50% posts authored by the community

- Story idea? Contact us!

# APNIC Foundation

*'To have a global, open, stable and secure Internet that is affordable and accessible to the entire Asia Pacific community'*

apnic.foundation

- Purpose: To increase APNIC development activities without relying on Member funds
- Two staff seconded from APNIC
- Board members appointed: Edward Tian (CN),
  Sharad Sanghi (IN), Sylvia Sumarlin (ID), Michael Malone (AU), Danish Lakhani (PK)
- First AGM and board meeting May 2018; Sylvia Sumarlin elected Chair
- Over AUD 1M in funding secured in first year
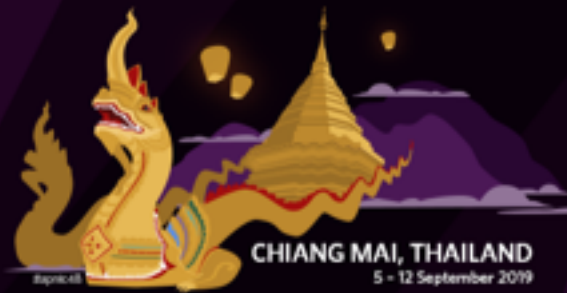
Chiang Mai, Thailand
5-12 September 2019

Hosted by

# APNIC Update

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