

# APNIC Update

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**APNIC**



# Overview

APNIC's vision:

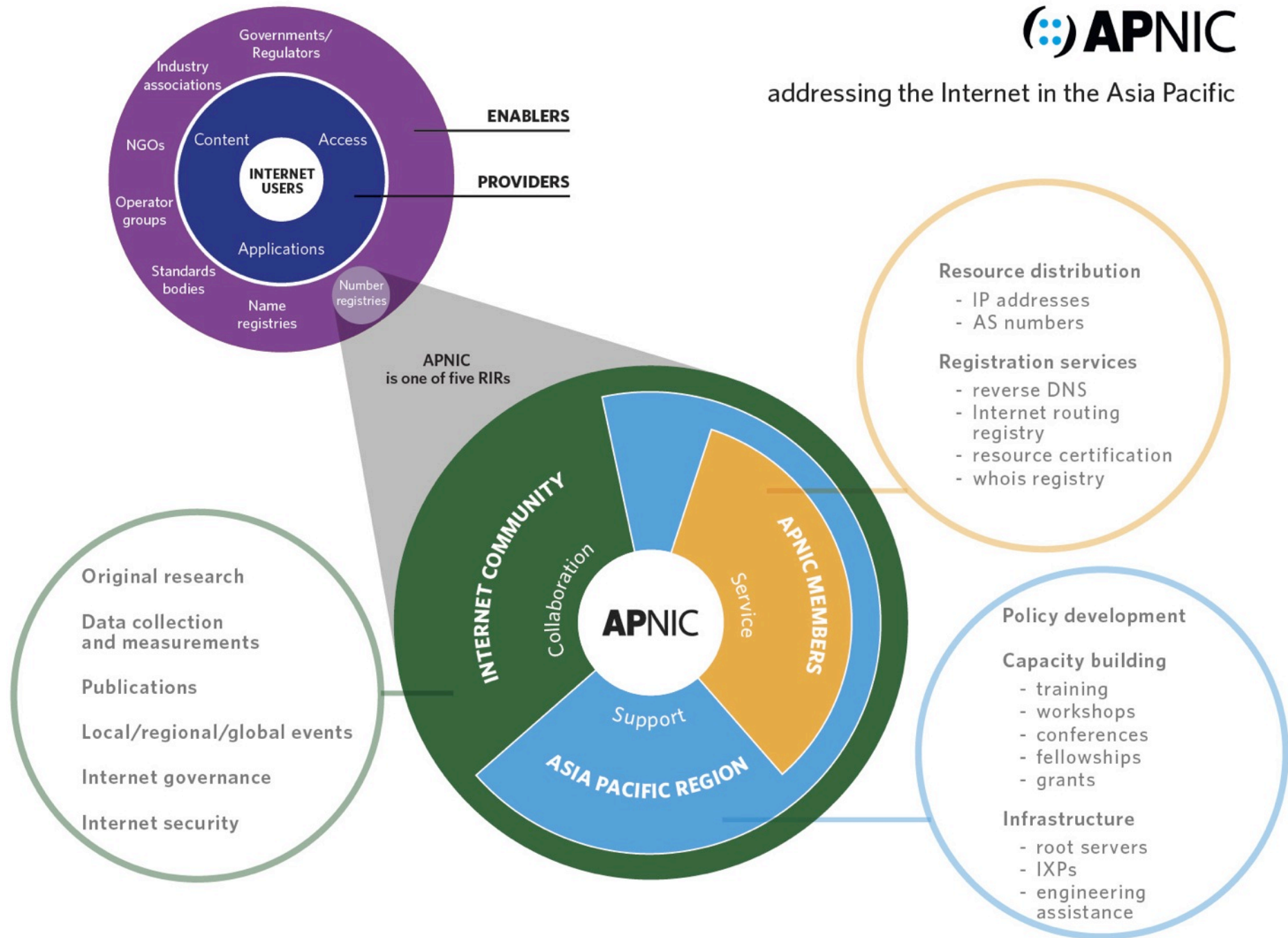
A global, open, stable, and secure Internet that serves the entire Asia Pacific community.

How we achieve this:

- Serving Members
- Supporting the Asia Pacific Region
- Collaborating with the Internet Community

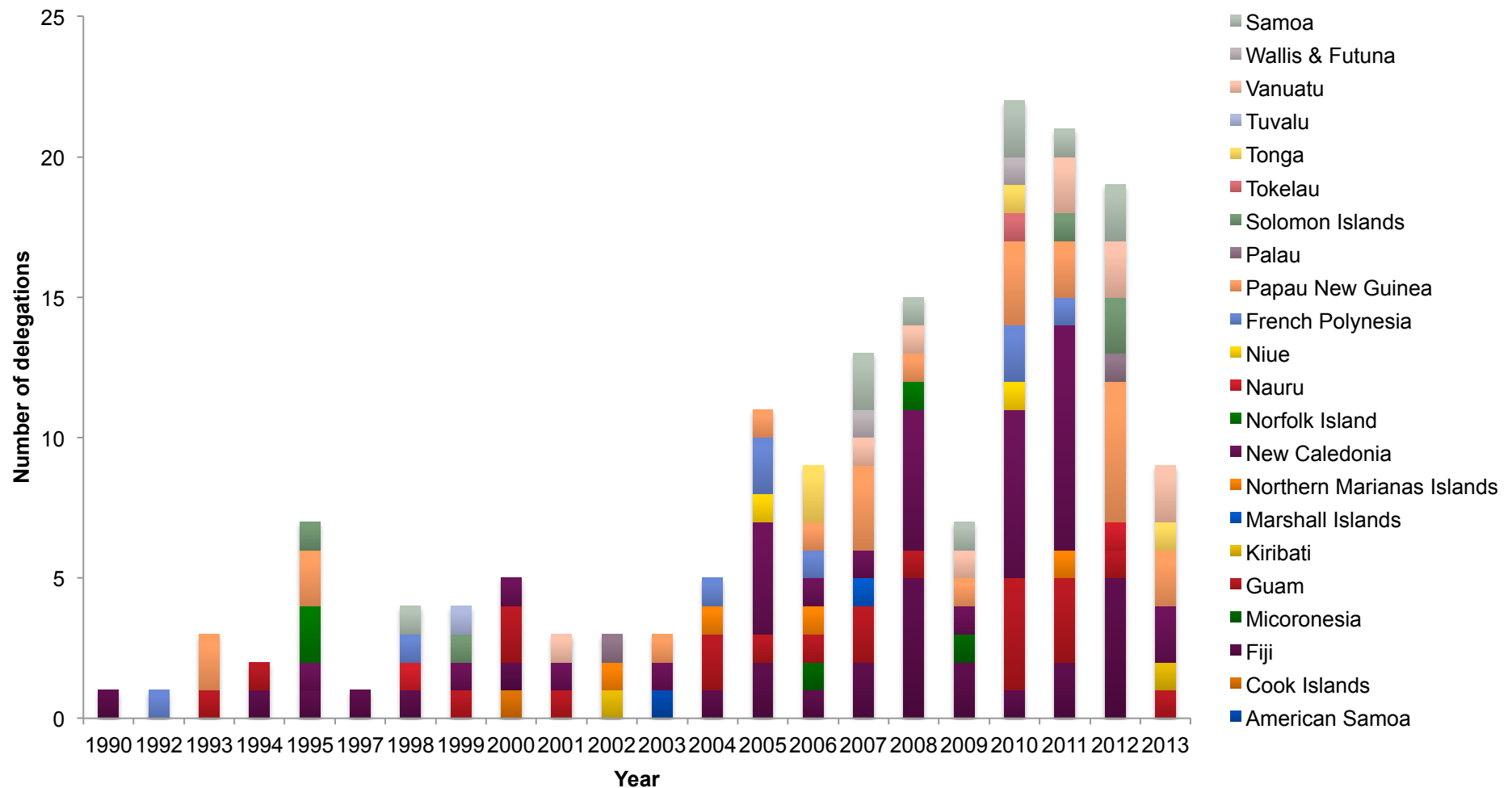


addressing the Internet in the Asia Pacific



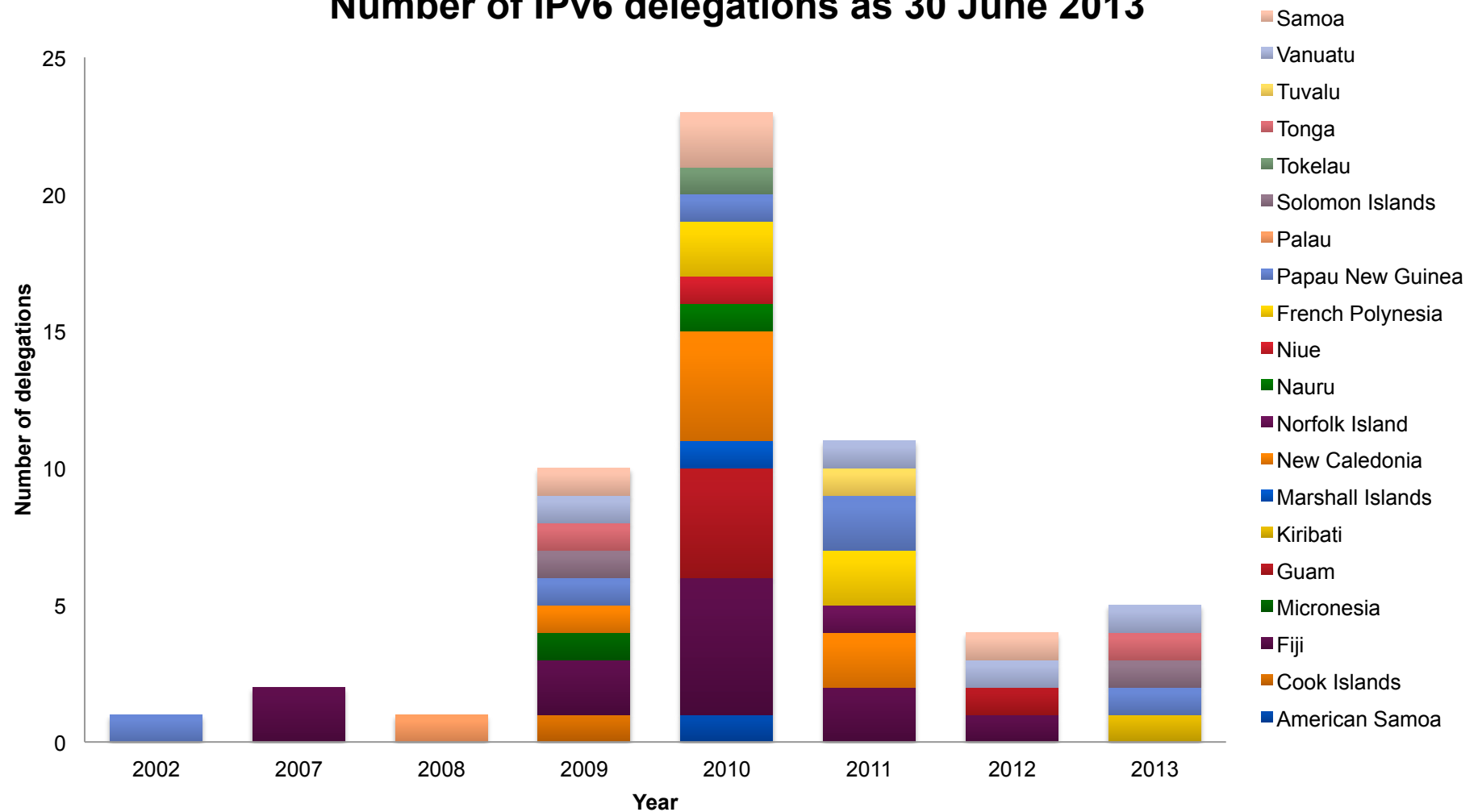
# Total IPv4 Delegations within Pacific

Number IPv4 delegations as 30 June 2013

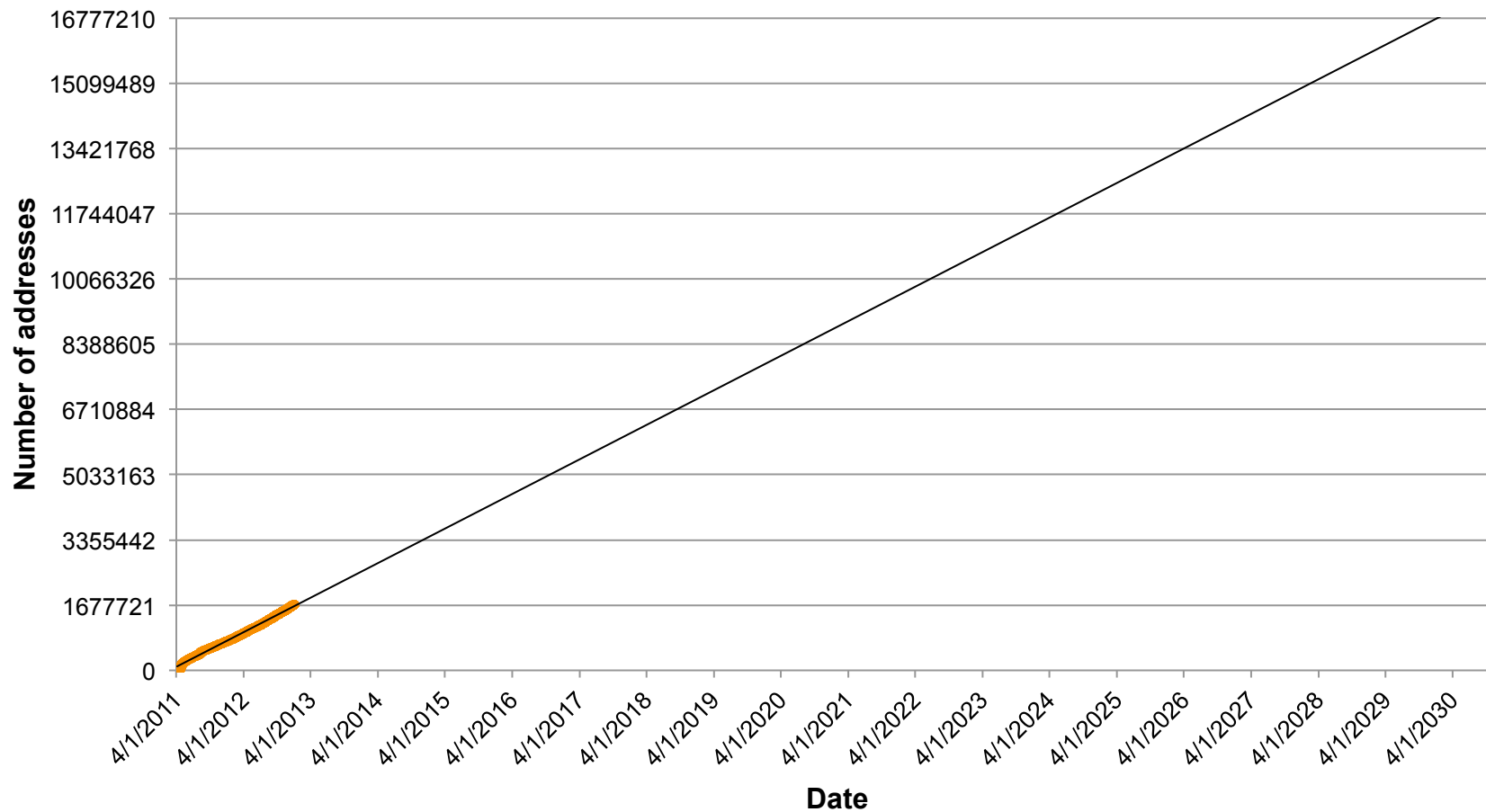


# Total IPv6 Delegations within Pacific

Number of IPv6 delegations as 30 June 2013



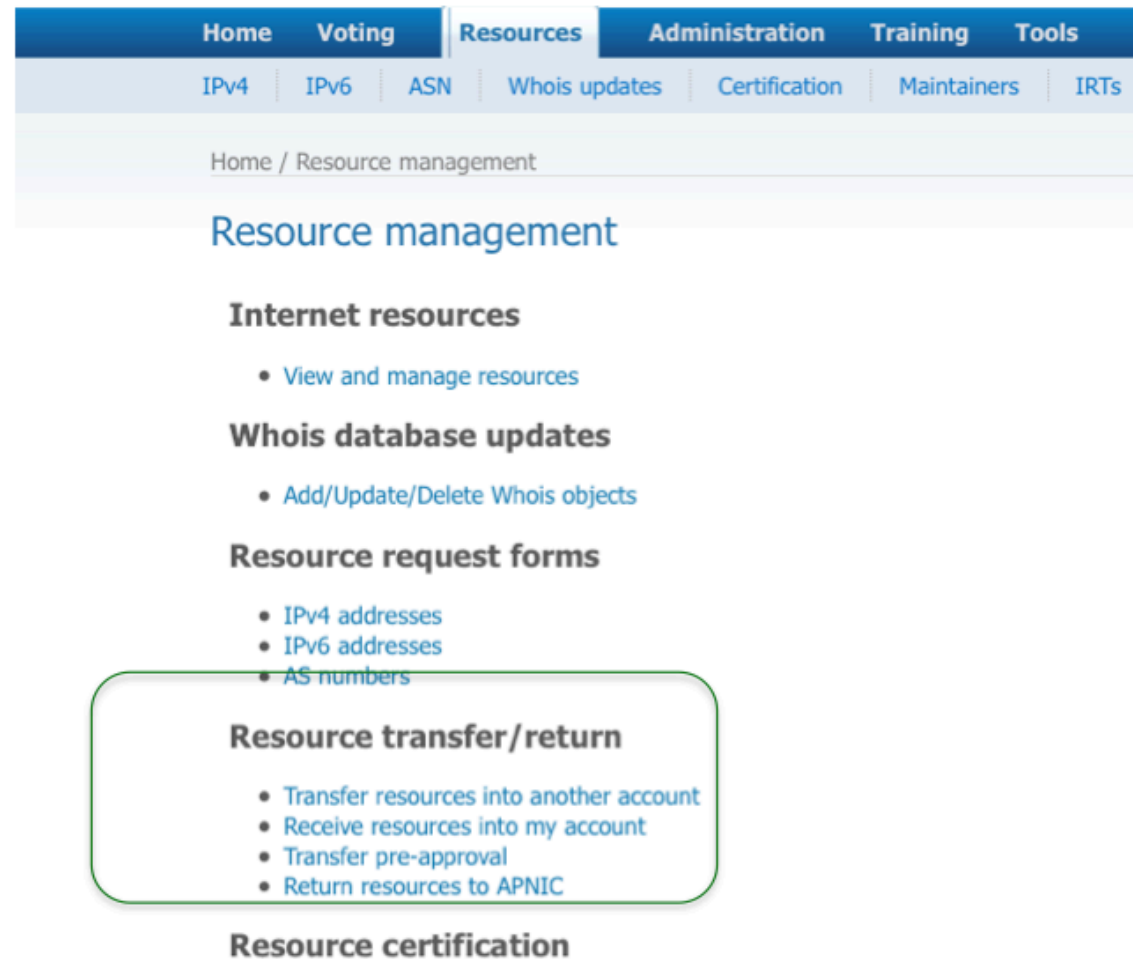
# IPv4 Last /8 Delegation Trend



# IPv4 Address Transfer Services

- Support for intra and inter-RIR transfers
- Pre-approval service, with opt-in anonymous listing
- Broker listing; four registered so far
- [apnic-transfers@apnic.net](mailto:apnic-transfers@apnic.net) mailing list
- Public transfer log
- Transfer fees applied
  - 20% of the transferred block's annual fee (other holdings not included in the calculation)
  - Payable by the recipient, or by the source if transferred out of the APNIC region

# Supporting IPv4 Transfers



The screenshot shows the APNIC website's 'Resource management' section. The navigation bar at the top includes 'Home', 'Voting', 'Resources' (which is active), 'Administration', 'Training', and 'Tools'. Below this, a secondary bar lists 'IPv4', 'IPv6', 'ASN', 'Whois updates', 'Certification', 'Maintainers', and 'IRTs'. The breadcrumb trail reads 'Home / Resource management'. The main heading is 'Resource management'. Under 'Internet resources', there is a link to 'View and manage resources'. Under 'Whois database updates', there is a link to 'Add/Update/Delete Whois objects'. Under 'Resource request forms', there are links for 'IPv4 addresses', 'IPv6 addresses', and 'AS numbers'. The 'Resource transfer/return' section, which is highlighted with a green border, contains links for 'Transfer resources into another account', 'Receive resources into my account', 'Transfer pre-approval', and 'Return resources to APNIC'. The 'Resource certification' section is partially visible at the bottom.

Home Voting Resources Administration Training Tools

IPv4 IPv6 ASN Whois updates Certification Maintainers IRTs

Home / Resource management

## Resource management

### Internet resources

- [View and manage resources](#)

### Whois database updates

- [Add/Update/Delete Whois objects](#)

### Resource request forms

- [IPv4 addresses](#)
- [IPv6 addresses](#)
- [AS numbers](#)

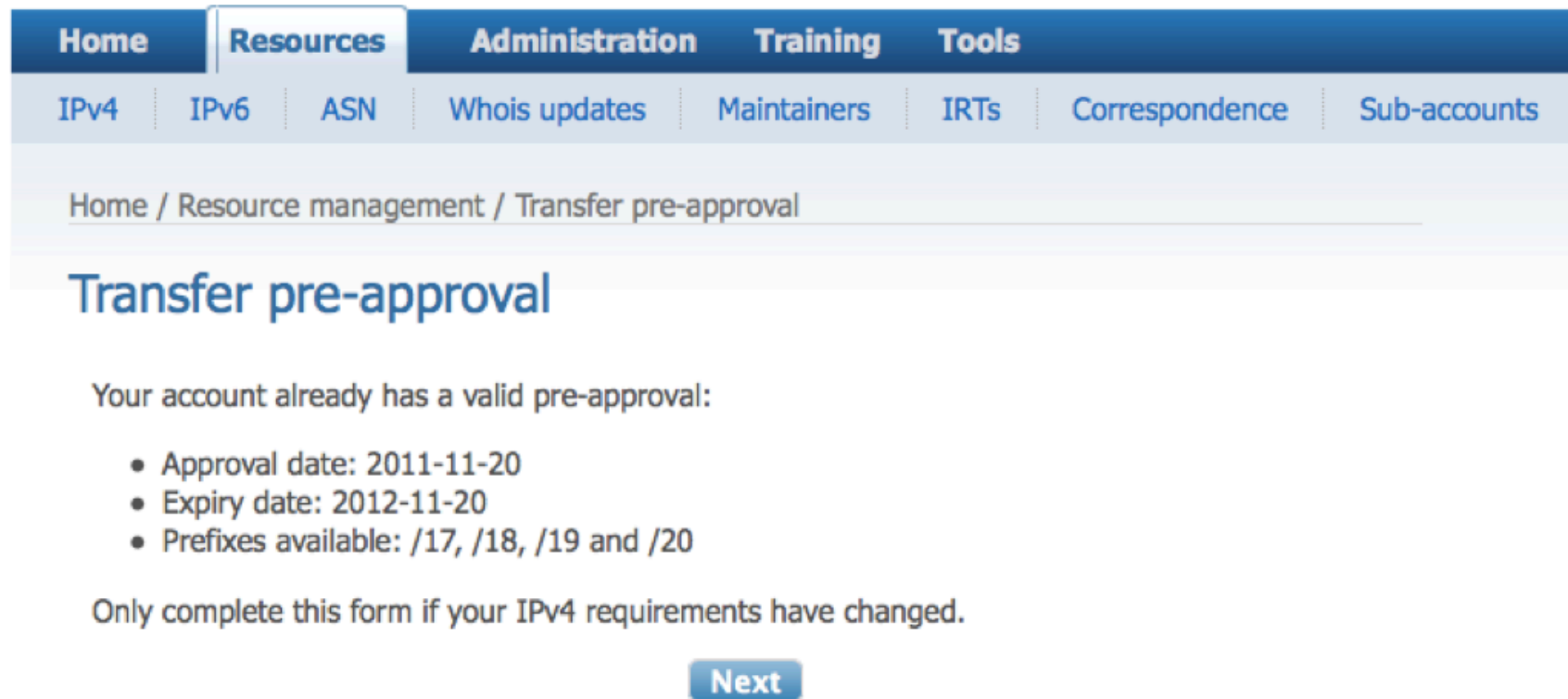
### Resource transfer/return

- [Transfer resources into another account](#)
- [Receive resources into my account](#)
- [Transfer pre-approval](#)
- [Return resources to APNIC](#)

### Resource certification



# IPv4 Pre-approval



The screenshot shows the APNIC website's navigation menu with tabs for Home, Resources, Administration, Training, and Tools. Under Resources, there are links for IPv4, IPv6, ASN, Whois updates, Maintainers, IRTs, Correspondence, and Sub-accounts. The breadcrumb trail indicates the path: Home / Resource management / Transfer pre-approval. The main heading is "Transfer pre-approval". Below this, a message states: "Your account already has a valid pre-approval:". This is followed by a bulleted list: "Approval date: 2011-11-20", "Expiry date: 2012-11-20", and "Prefixes available: /17, /18, /19 and /20". A note below the list says: "Only complete this form if your IPv4 requirements have changed." At the bottom of the content area is a blue button labeled "Next".

Home Resources Administration Training Tools

IPv4 IPv6 ASN Whois updates Maintainers IRTs Correspondence Sub-accounts

Home / Resource management / Transfer pre-approval

## Transfer pre-approval

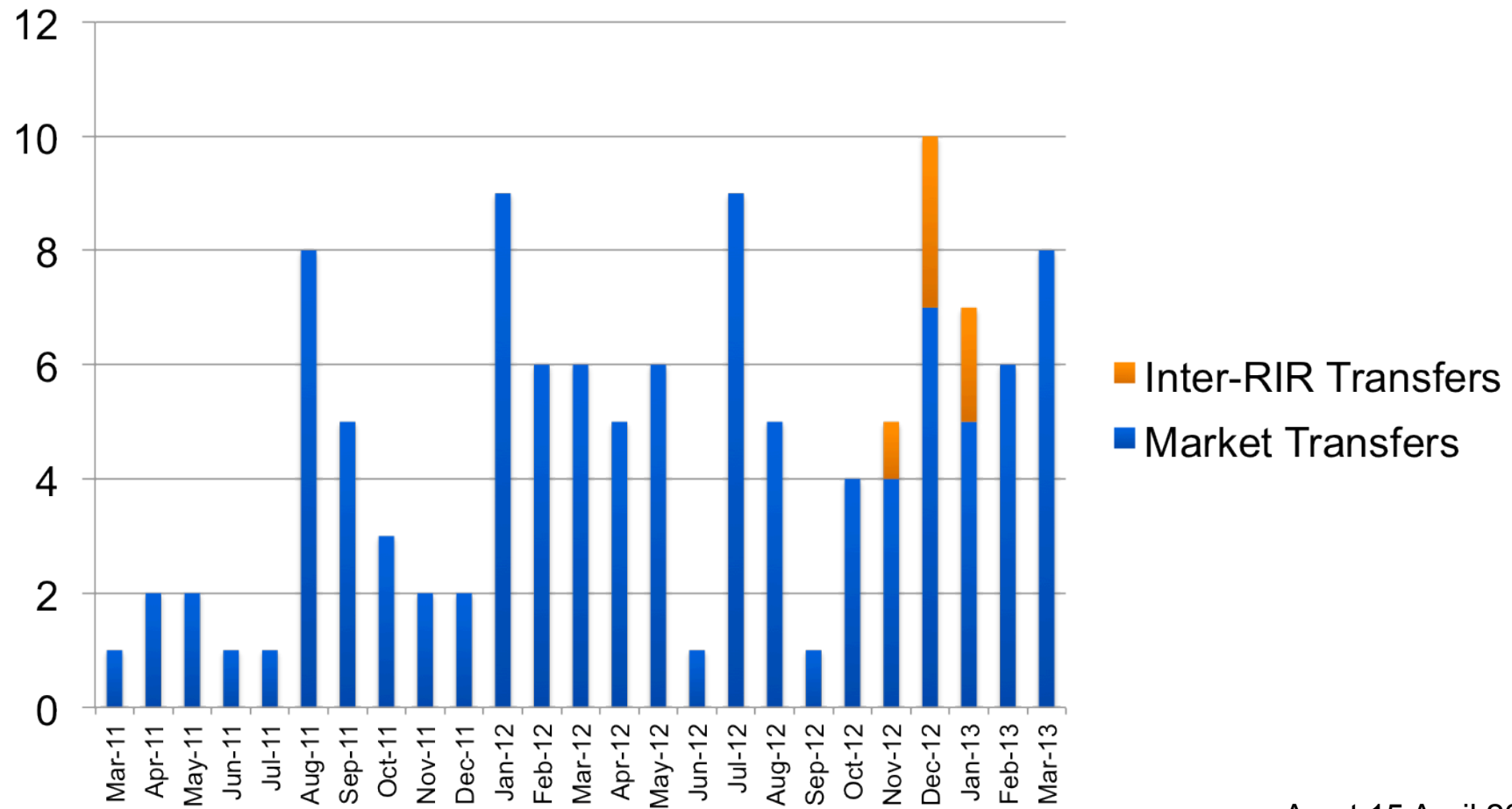
Your account already has a valid pre-approval:

- Approval date: 2011-11-20
- Expiry date: 2012-11-20
- Prefixes available: /17, /18, /19 and /20

Only complete this form if your IPv4 requirements have changed.

Next

# IPv4 Market Transfers



As at 15 April 2013

# Training

- Continuing focus on IPv6 deployment
  - Comprehensive face-to-face and eLearning sessions
  - IPv6 eLearning day (first Wednesday of every month)
- eLearning
  - Every Wednesday in three time zones
  - 24 modules (1 hour duration per module)
  - Enhanced schedule for 2013
- Face-to-Face
  - Extensive hand-on exercises
  - Physical and Virtual Training Labs to enable participants to build and configure networks
- New training website

[training.apnic.net](http://training.apnic.net)

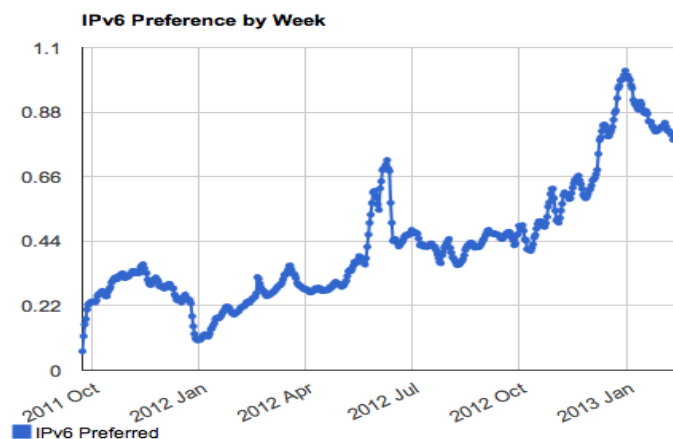
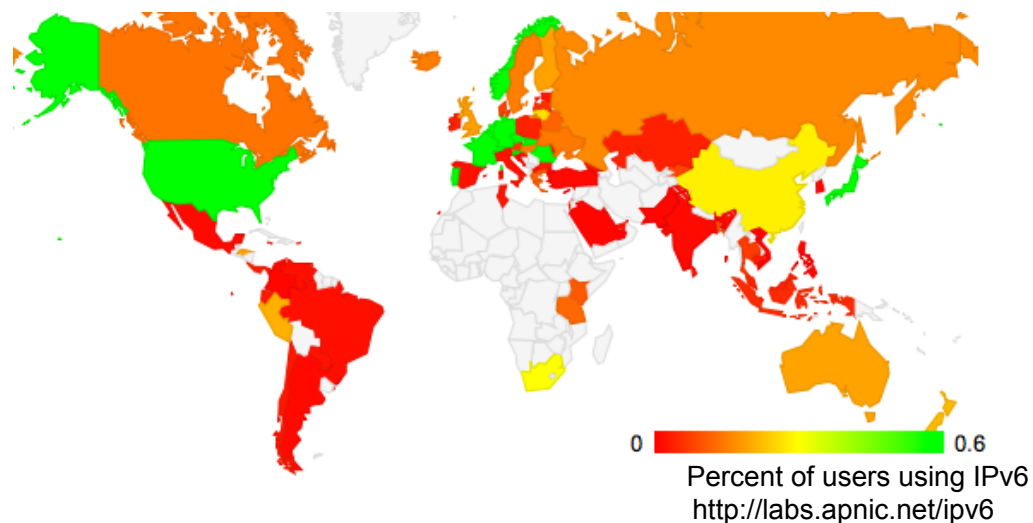
# APNIC Labs: IPv6 measurement

- IPv6 Capability Tracker
  - Google Analytics tracking tool to enable website operators to measure client IPv6 capabilities
- Measuring IPv6
  - Measuring the end-to-end capability of IPv6 clients per economy
  - Readiness data at end-user level for various intergovernmental organizations and economies
- IPv6 preference by AS Number
  - Measures IPv6 client capability per autonomous system
- IPv4 address report
  - Measuring IPv4 free pool address exhaustion

[www.labs.apnic.net](http://www.labs.apnic.net)

[www.blabs.apnic.net](http://www.blabs.apnic.net)

# Measuring IPv6



We've been conducting a large scale IPv6 measurement across the Internet to provide baseline data about the rate of deployment of IPv6 across countries and individual networks

Economy	ASN	AS Name	# samples	v6 capable	v6 preferred
US	AS19782	INDIANAGIGAPOP - Indiana University	1566	100	100
CN	AS37944	CNNIC-CSTNET-AP CHINA SCIENCE AND TECHNOLOGY NETWORK	1354	100	100
CN	AS23910	CNGI-CERNET2-AS-AP China Next Generation Internet CERNET2	7060	100	100
JP	AS9607	BBTOWER BroadBand Tower, Inc.	255	96.0784	96.0784
NZ	AS24226	CATALYST-IT-AS-AP Catalyst IT	830	94.3373	93.9759
JP	AS55394	GREE-NET GREE, Inc.	519	93.6416	71.0983
AU	AS38083	CURTIN-UNI-AS-AP Curtin University	715	89.6503	88.951
US	AS3596	MICROSOFT-CORP-AS - Microsoft Corp	1113	74.9326	72.4169
ID	AS17553	IPBNET-AS-AP Bogor Agricultural University	251	74.9004	60.9562
AU	AS4608	APNIC-AP Asia Pacific Network Information Centre	629	73.6089	70.9062
NZ	AS58666	NASL-AS-AP Network Access Services Limited	206	69.4175	61.165
US	AS5661	USF - UNIVERSITY OF SOUTH FLORIDA	295	69.1525	65.4237
US	AS1312	VA-TECH-AS - Virginia Polytechnic Institute and State Univ.	480	67.7083	62.7083
CZ	AS197451	VUTBR-AS Brno University of Technology	416	64.6635	59.375
GB	AS786	JANET The JNT Association	223135	63.1044	52.4337
US	AS15169	GOOGLE - Google Inc.	12414	60.9312	18.9866
NO	AS57963	LYNET-INTERNETT-AS Lynet Internett AS	326	58.8957	55.2147
US	AS2055	LSU-1 - Louisiana State University	266	58.2707	55.2632
NZ	AS17649	DMZGLOBAL-AP DMZGlobal Ltd	239	58.159	54.3933
US	AS6621	HNS-DIRECT-AS - Hughes Network Systems	2041	56.8349	56.1979
US	AS6263	NDIN - State of North Dakota; ISD	249	56.6265	54.6185
CN	AS17672	CHINATELECOM-HE-AS-AP asn for Hebei Provincial Net of CT	2706	54.139	51.2565
NZ	AS18119	ACSDATA-NZ ACSData	931	53.4909	52.3093
US	AS1351	UVM-EDU-AS - University of Vermont	242	53.3058	45.8678
CN	AS4538	ERX-CERNET-BKB China Education and Research Network Center	4868	50.4314	47.6787
JP	AS2500	WIDE-BB WIDE Project	208	50	49.0385
HK	AS4528	HKU-AS-HK The University of Hong Kong	635	48.6614	44.5669

# ISIF Asia

- A grants program aimed at stimulating creative solutions to ICT development needs in the Asia Pacific region
- Now part of the Seed Alliance for Internet development and digital innovation
  - Joint effort with LACNIC (Frida) and AfriNIC (Fire), with generous support from the IDRC and possible funding from SIDA
- New round of funding launched in 2013 categories for both grants and awards:
  - Innovation on access provision
  - Innovation on learning and localization
  - Code for the common good
  - Rights

# ISIF Asia

- Grant proposal writing workshop
  - Held in Vanuatu 28 – 29 June 2013
  - Goal to provide participants with skills required to seek funding from potential donors with effective grant proposals
  - Attendees were nominated by Pacific organizations
- Workshop held in partnership with the Vanuatu Internet Exchange (VIX) and Inveneo
- Pacific to receive additional support for capacity development to improve quality of project proposals presented to potential donors, sponsors, or investors

# Upcoming Conferences

- APNIC 36: Xi-an, China
  - 20 to 30 August 2013



- APRICOT 2014 Bangkok, Thailand
  - 18 to 28 February 2014 (includes APNIC 37)



# Thanks

Elly Tawhai

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**APNIC**

