

APNIC Report

AP* Retreat, Sri Lanka

1 October 2016

APNIC Activities



Serving APNIC Members



Supporting Regional Internet
Development

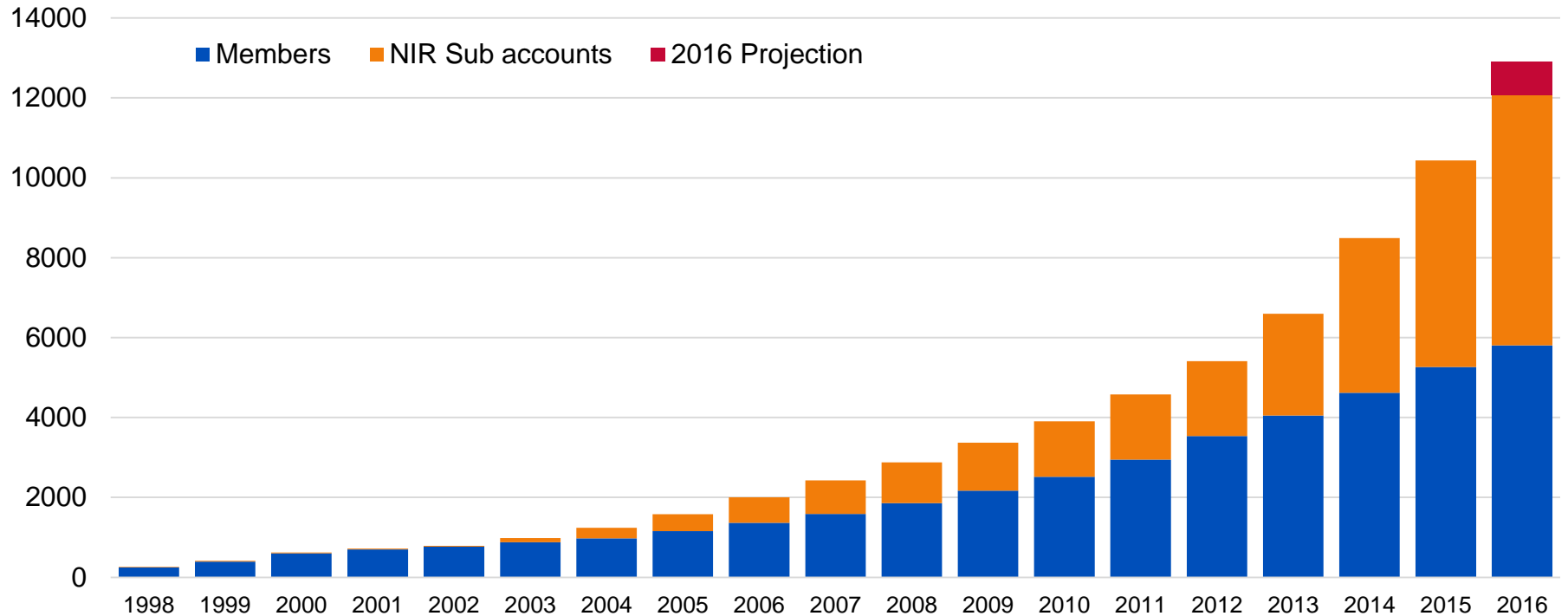


Cooperating with the Global
Internet Community





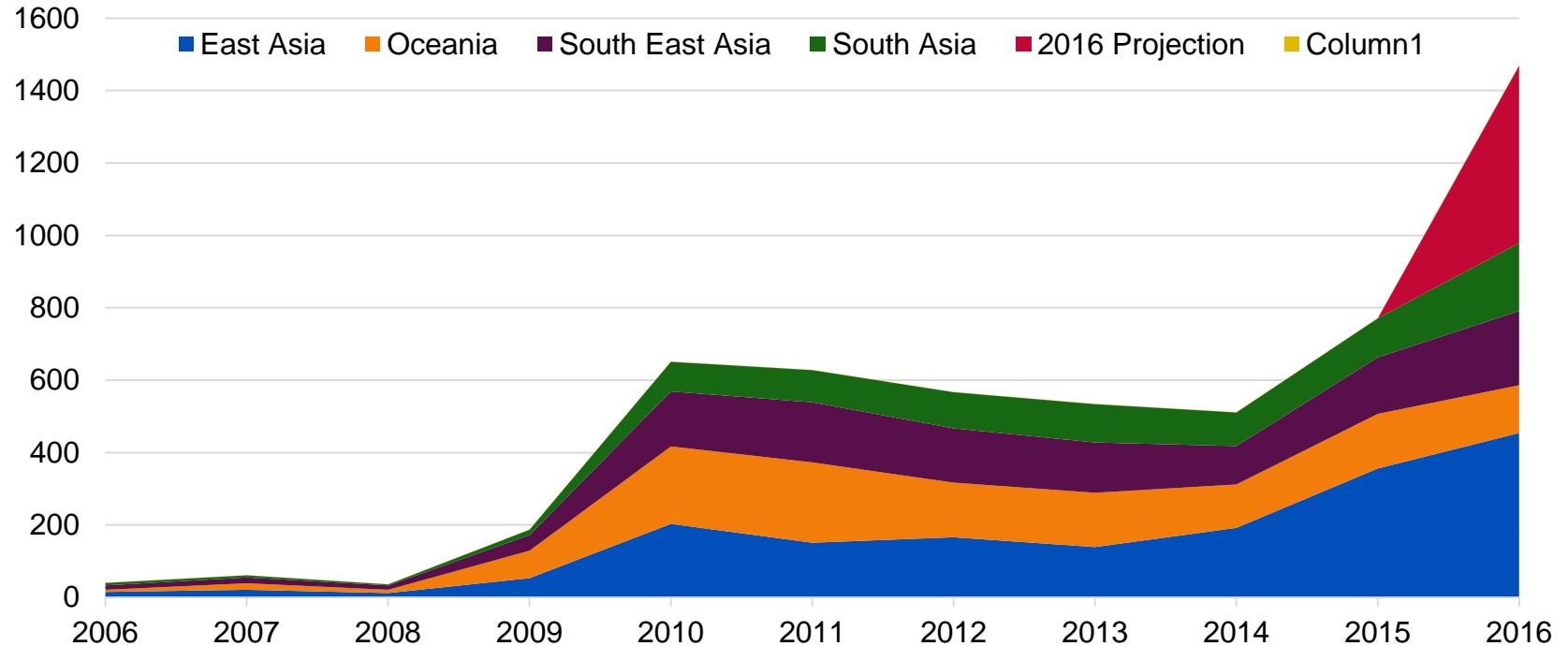
APNIC and NIR Membership



As at 31 August



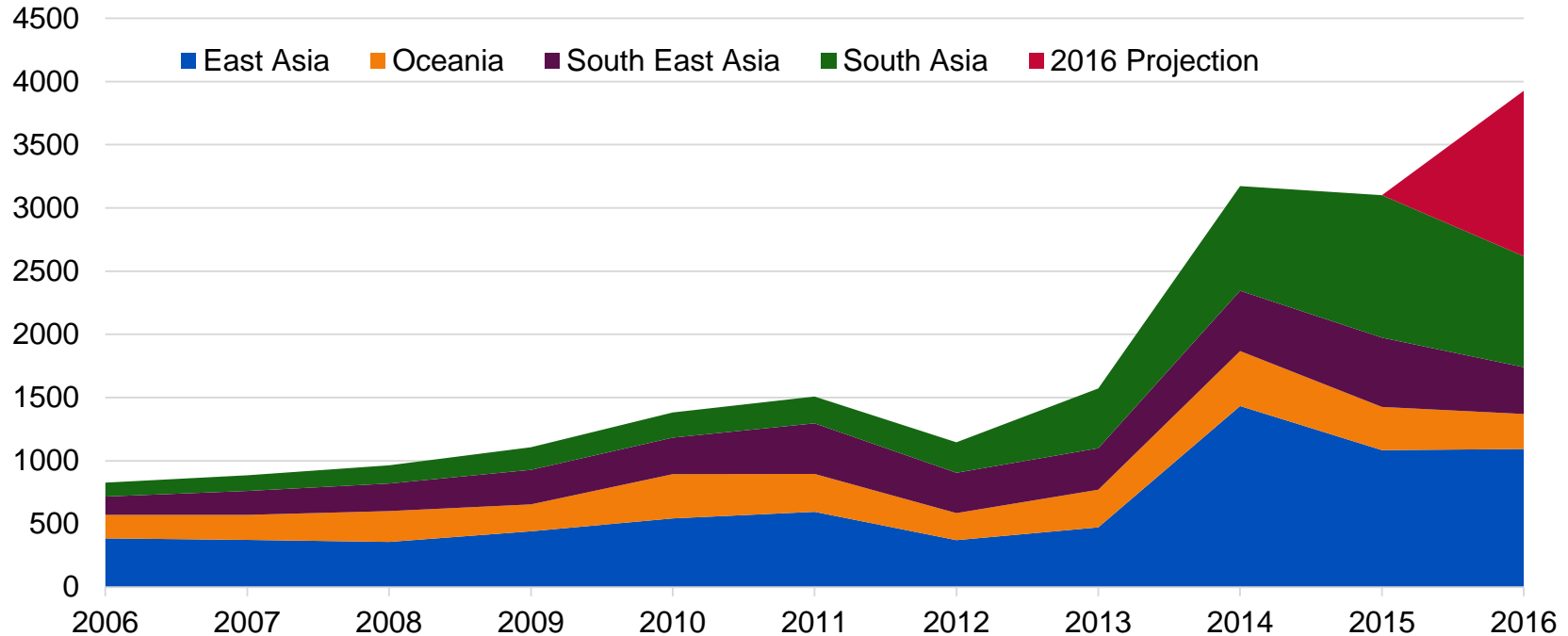
Annual IPv6 Delegations



As at 31 August



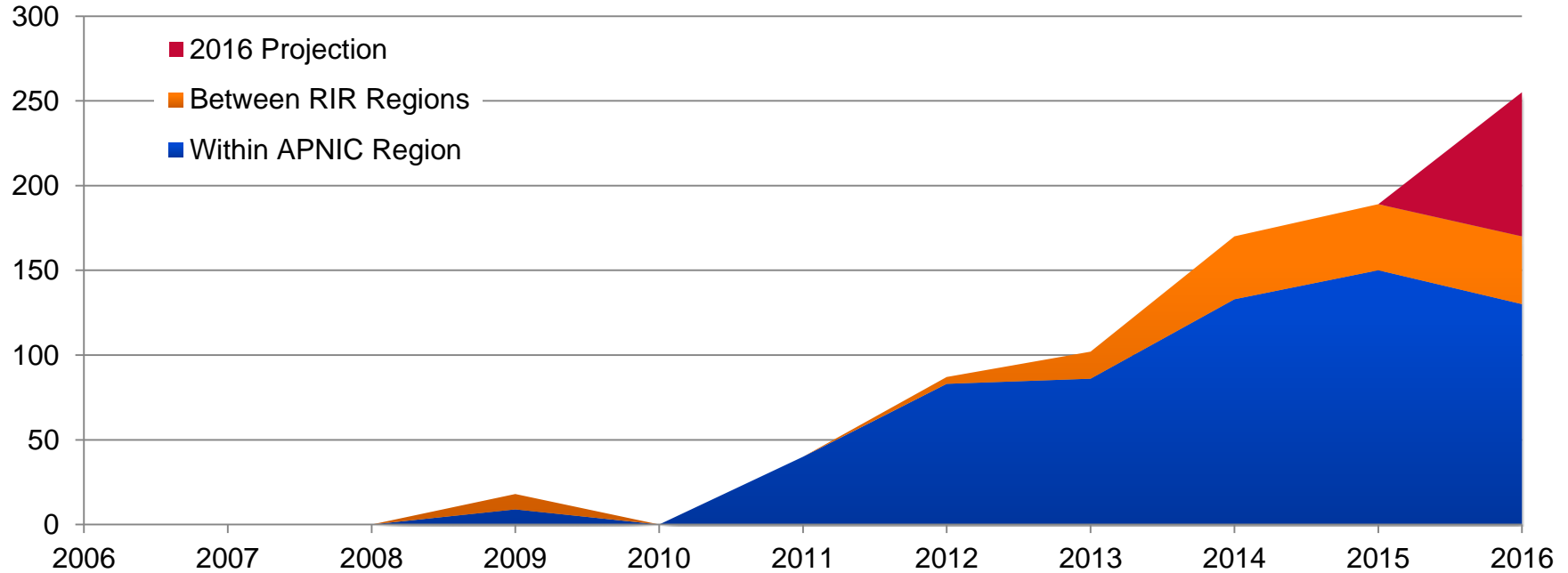
Annual IPv4 Delegations



As at 31 August



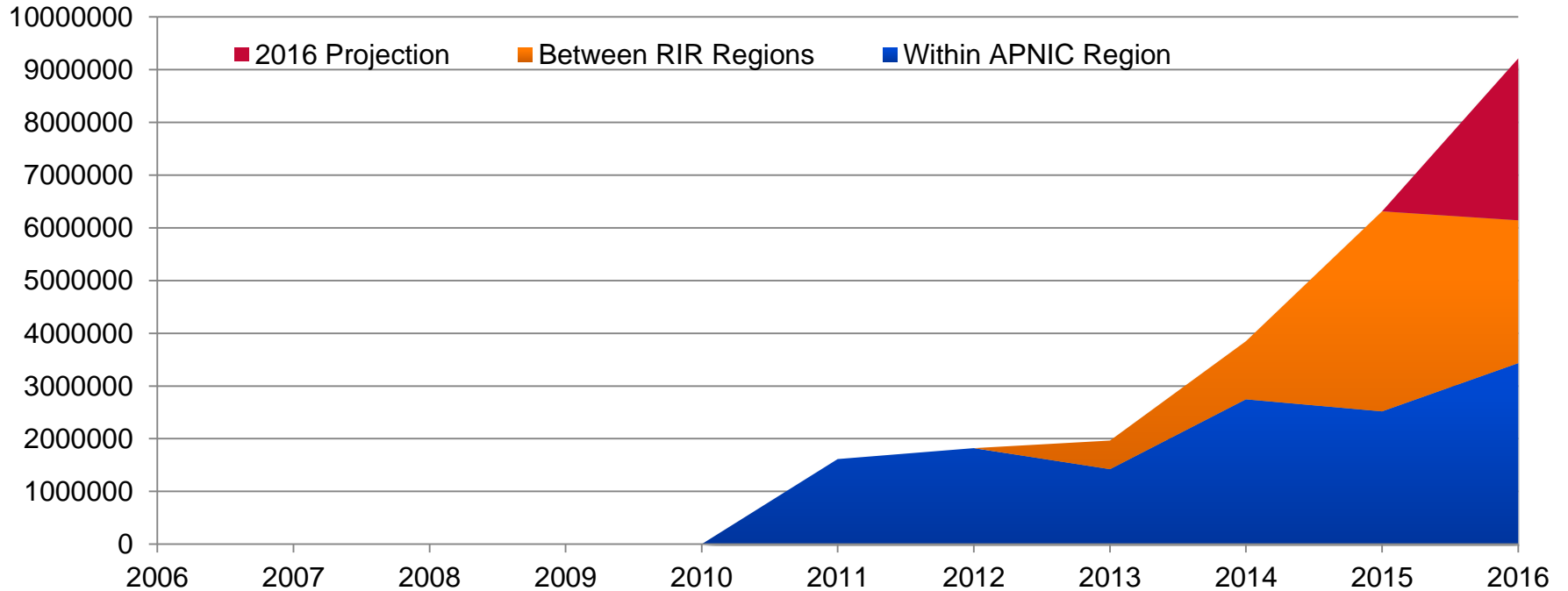
Annual IPv4 Transfers



As at 31 August

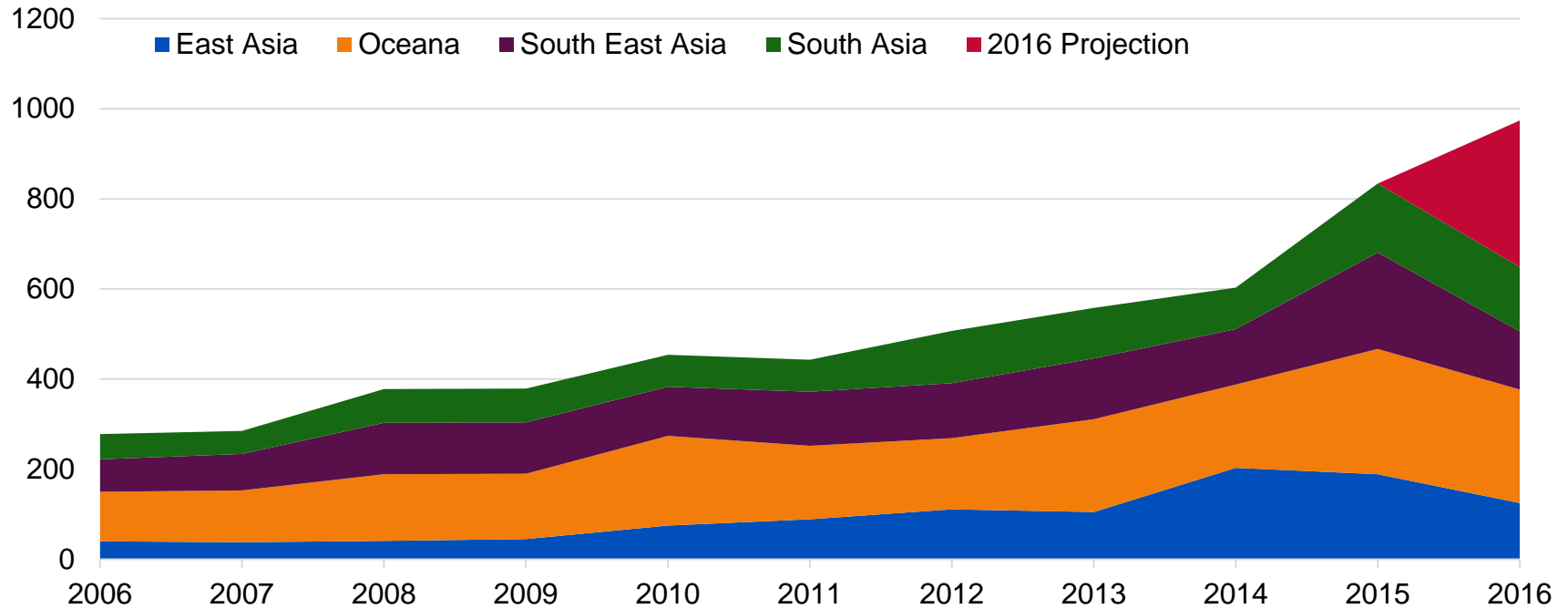


Total IPv4 Addresses Transferred





Annual ASN Assignments



As at 31 August



Routing Security



“Ready to ROA” campaign – hands-on sessions
to help Members create ROAs

Eight sessions completed + 5 planned

ROA stats (to date)

ROA-enabled Members	632
Numbers of ROAs created	442
Number of IPv4 addresses under ROAs (/32s)	7,751,680
Number of IPv6 addresses under ROAs (/56s)	2,182,106,624
% allocated space under ROAs (IPv4)	Q3: 0.90% (Q1: 0.78%)
% allocated space under ROAs (IPv6)	Q3: 0.26% (Q1: 0.22%)



Whois Data Quality Projects



- ✓ Monthly automated cleanup to remove 'orphaned' objects
- ✓ Whois check support for Members
- ✓ Easy invalid contact reporting

Q1 2017 - Mapping of Internet resources to organization object



Whois and Whowas Development

APNIC



APNIC Whois Search

To assist you with debugging problems, this whois query was received from IP Address:

2001:dc0:a000:4:78ee:f637:674b:7c88

If you experience problems with this form, try the legacy search form.

% APNIC found the following authoritative answer from: whois.apnic.net

% [whois.apnic.net]
% Whois data copyright terms <http://www.apnic.net/db/dbcopyright.html>

% Information related to 'AS4688 - AS4864'

```
as-block: AS4688 - AS4864
descr: APNIC ASN block
remarks: These AS numbers are further assigned by APNIC
remarks: to APNIC members and end-users in the APNIC region
admin-c: HK28-AP
tech-c: HK28-AP
mnt-by: APNIC-IR
mnt-lower: APNIC-IR
changed: hm-changed@apnic.net 20020926
changed: hm-changed@apnic.net 20030207
changed: hm-changed@apnic.net 20050309
source: APNIC
```

```
role: APNIC Hostmaster
address: 6 Cordelia Street
address: South Brisbane
address: QLD 4101
country: AU
phone: +61 7 3858 3100
fax-no: +61 7 3858 3199
e-mail: helpdesk@apnic.net
admin-c: AMS11-AP
tech-c: AN256-AP
```

- Upgrading Whois to version 4
 - APNIC's RDAP code integrated into RIPE codebase
 - Incorporating 'Org' object rules
- Whowas – development underway
 - Testing historical service API system; extending RDAP result format
 - Prototype user interface



New resource statistics directory



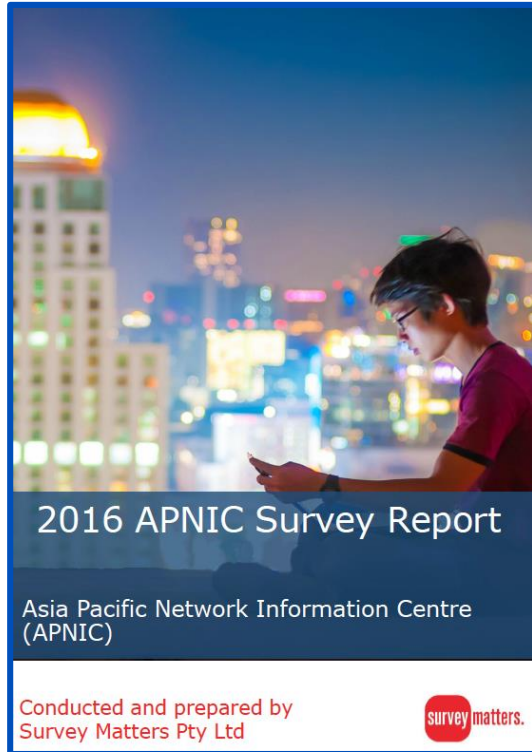
New web interface...

- IPv4/IPv6/ASN
- Region/Subregion/Economy
- More to come!

<http://stats.apnic.net>



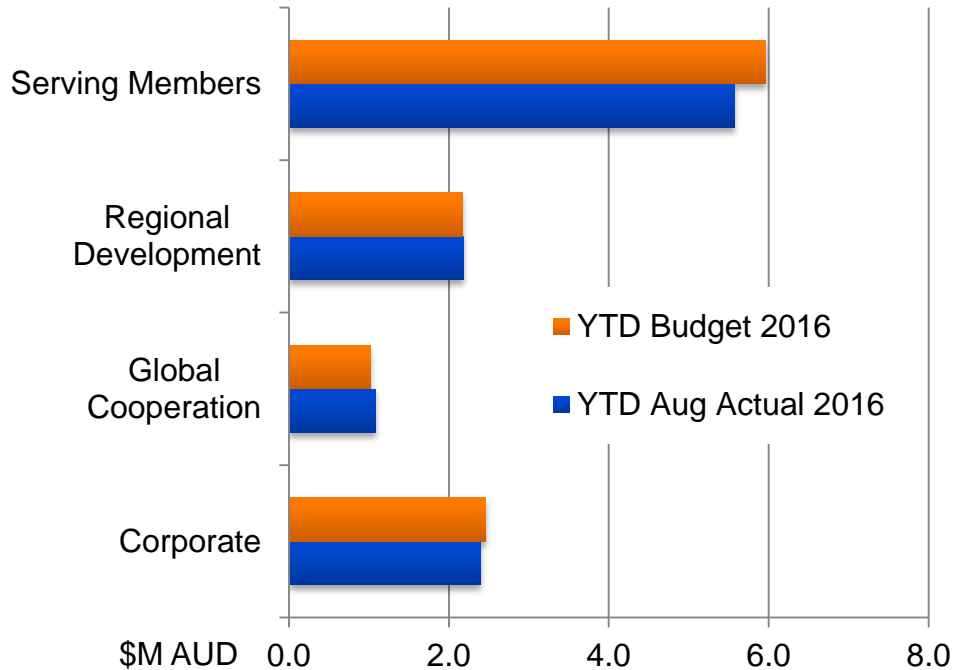
APNIC Survey 2016



- Thank you for your participation!
- Survey completed with 1,175 responses from 62 economies
- Presentation to EC and APNIC community this week during APNIC 42
- Full report and appendices will be available at www.apnic.net/survey



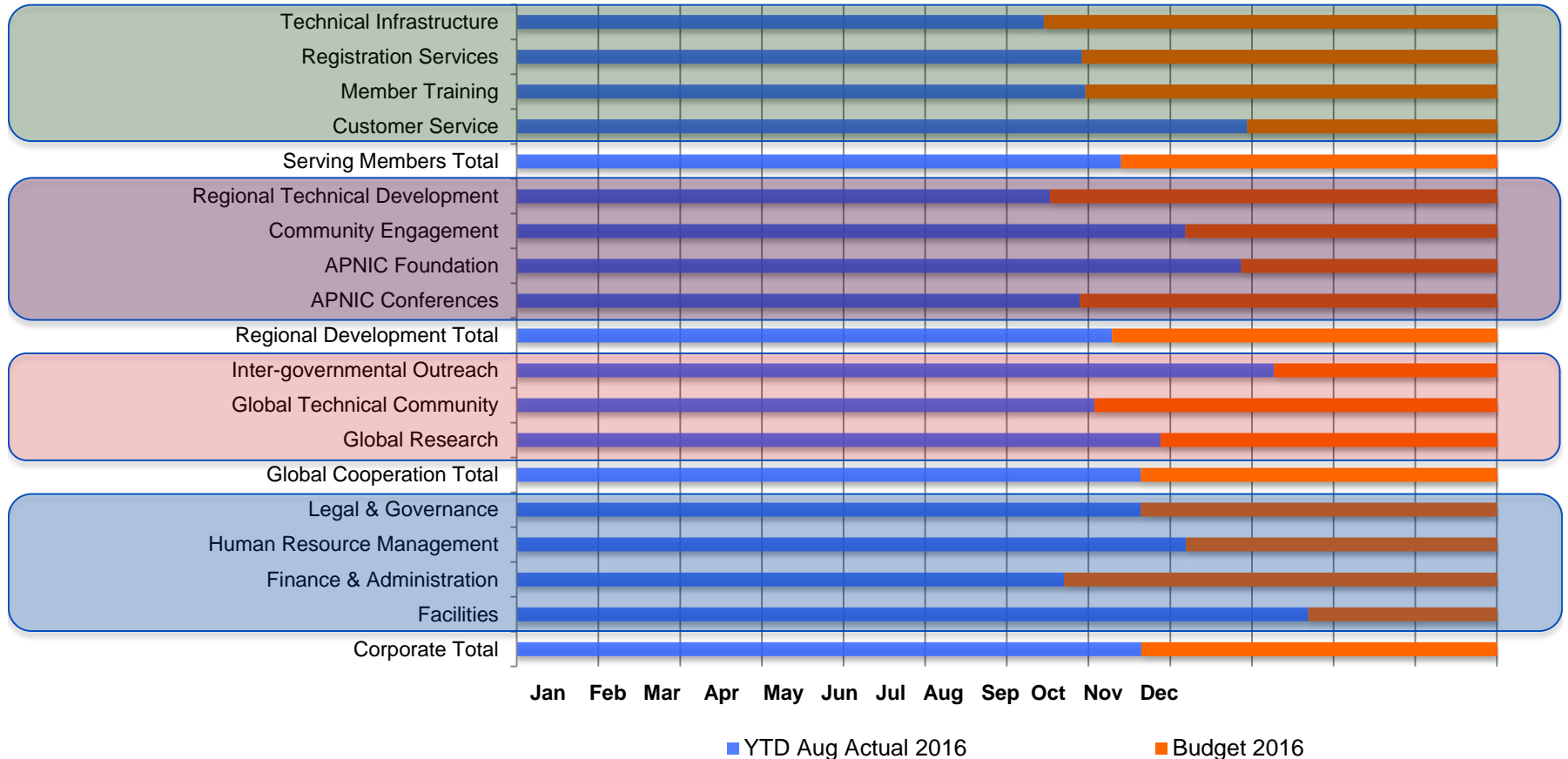
Budget planning



APNIC Activity areas

- Serving Members
- Regional development
- Global cooperation
- Corporate support

% Budget utilised by Activity 2016



APNIC Activities



Serving APNIC Members



Supporting Regional Internet
Development



Cooperating with the Global
Internet Community

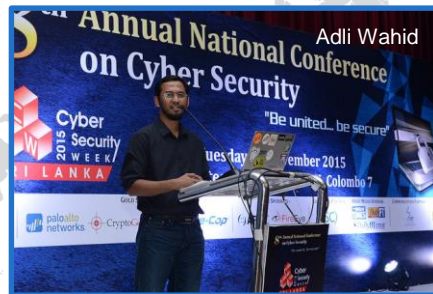


Training and Technical Assistance



- 39 face-to-face courses in 19 locations to 1,208 trainees
- 7 community trainers delivered 10 face-to-face courses
- 655 trainees in 90 eLearning sessions
- 104 YouTube videos; 101,434 views
- Training lab upgraded to simulate live multi-home ISP network
- Online APNIC Academy development underway
- 20 Technical Assistance presentations and engagements

Security Outreach



Building capacity and sharing best practice through security training and participation at 12 NOG and CERT events

Presented at LEA conferences in Malaysia and Republic of Korea

Provided training, advice and assistance in creation of new Tonga CERT

Invited FIRST to host Tech Colloquia with APRICOT 2016, SANOG 28, APNIC 42 + planned event with PACNOG 19

Paul Wilson joined GFCE Advisory Board – focus on security in Asia Pacific region

IPv6 Outreach

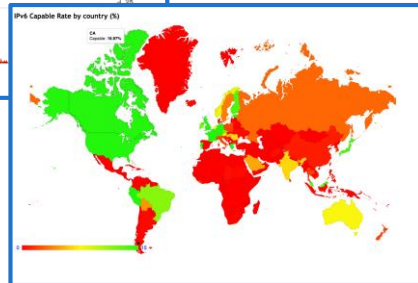
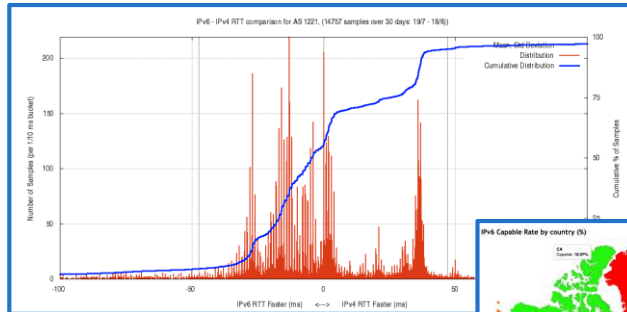


- 13 face-to-face IPv6 training sessions, reaching 306 trainees in nine economies
- 27 IPv6 elearning sessions reaching 195 trainees
- Promoting IPv6 with technical presentations at 17 regional events
- IPv6 joint training workshops with ITU in TH and KH
- Provided input to government policy makers to include IPv6 deployment in UN ESCAP's AP-IS plan
- Worked with Singapore IDA to develop IPv6 deployment strategies for ATRC



APNIC Labs

Research to help the APNIC community make informed technical decisions



- Over 7 million measurements per day, measuring IPv6, DNSSEC, DNS
- Providing critical data for DNS Root Zone key roll and ICANN's Universal Acceptance (IDN) program
- Providing measurement and testing support to operators planning IPv6 deployment
- Research presentations at 18 forums including IETF, RIRs, ICANN, DNS OARC, NOGs, OECD
- Geoff Huston continues to play an active role in the ICANN SSAC



Binding to an IPv6 subnet

By Joao Luis Silva Damas on 14 Sep 2016

Category: Tech matters

Tags: IPv4, IPv6, subnet



[← Blog home](#)



Women in ICT: Helping people communicate drives Indonesia's female network engineers

By Robbie Mitchell on 9 Sep 2016

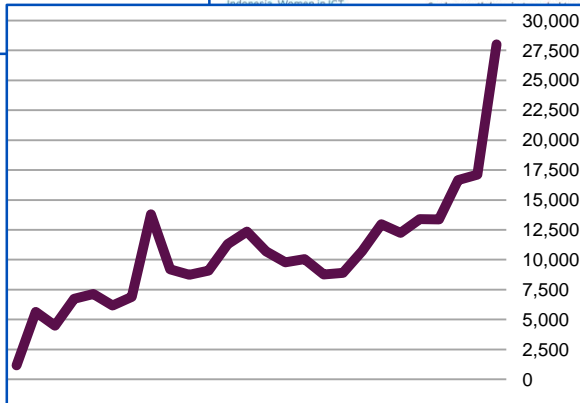
Categories: Community, Development

Tags: capacity development, Indonesia, Women in ICT



Earlier this year, the Association of Internet Service Providers in Indonesia (APII) announced that Internet penetration in Indonesia had now reached 40% of the population, or 100 million Internet users - up from 88 million in 2014.

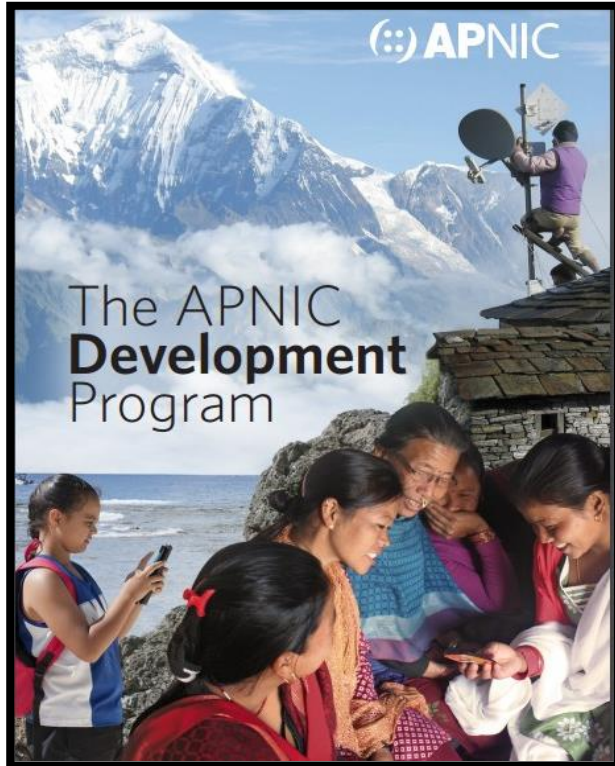
...ore jobs in the industry, opening the door for operators to build the network for the future. at telecommunication network and service Asia (Telkom), X with has also oper increase in job op



- Active source of community news and views – 248 posts including 52 guest posts
- Growing readership – 133,000 views in 2016, up 51%
- Submissions welcome!



Development Projects



Funds received...

- IDRC (CA) and SIDA (SE) small grants programme – AP
- JICA Security training and courseware development
- ASEAN/IDA IPv6 survey and workshop – SG/AP
- ITU Direct Country assistance – KH, and workshops – AP (IPv6)
- World Bank training – MM

APNIC Foundation



- Incorporation documents have been submitted for HK government approval
 - Application for registered charity status will begin following incorporation
- PriceWaterhouseCoopers Hong Kong appointed as company secretary
- Draft Foundation Board appointment process under consideration by the EC

10 INITIATIVES SELECTED

Australia, India, Myanmar, New Zealand, Pakistan, Philippines, Singapore, Thailand and Tonga



- 300+ applications for 2016 Grants
 - APNIC Internet Operations Research Grant
 - ISOC Cybersecurity Grant
 - Community Impact Grant
 - Technical Innovation Grant
- 10 projects selected from nine economies
- AUD 450k in project funding from supporters including ISOC, IDRC-CRDI, APNIC

APNIC Activities



Serving APNIC Members



Supporting Regional Internet
Development



Cooperating with the Global
Internet Community





Global Cooperation



With ICANN on APT prep process for WTSA and 2017 WTDC

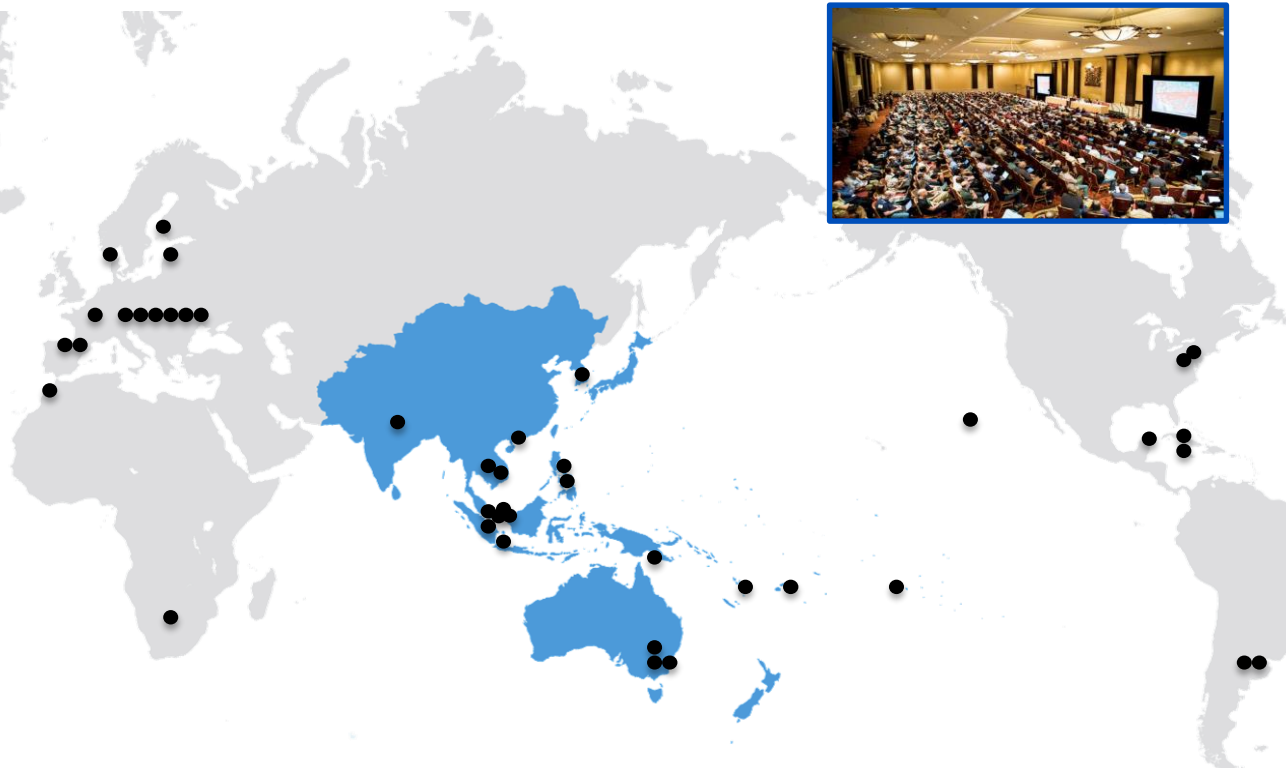
With LACNIC on IPv6 at APEC-TEL 53

With FIRST to host Tech Colloquia at four AP events

With ISOC, ICANN and RIPE on IPv6 panel at UNCTAD eCommerce Week

With NRO for IPv6 session at ITAC and OECD Ministerial Meeting

Paul Wilson joined GFCE Advisory Board





IANA Stewardship Transition

ICG

- Final proposal submitted to NTIA (March 2016)
- Passed NTIA criteria (June 2016)

SLA

- RIRs finalised the SLA with ICANN and signed at ICANN 56 (June 2016)

IPR Agreements

- Comment period closed 12 Sept – NRO confirmed the agreements met the requirements of numbers community



RIR Collaboration



- APNIC RDAP code incorporated into RIPE WHOIS version 4
- RPKI trust anchor coordination with NRO ECG
- Communications support for AFRINIC 24
- RIR staff visits to APNIC from LACNIC, AFRINIC, RIPE NCC
- Joint APNIC EC - RIPE Board meeting at RIPE 72
- Working with RIPE NCC to adopt RIPE Forum software
- Active NRO CG participation – engineering, registry, comms, finance, HR



Upcoming APNIC Conference



APRICOT 2017
APNIC 43



**HO CHI MINH CITY
VIETNAM**
20 February – 2 March 2017

Registration will open soon

2017.apricot.net

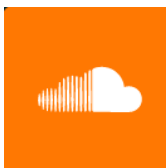
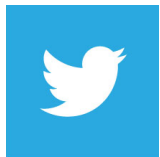


Later Conferences

- APNIC 44, Taichung, Taiwan
 - 7 to 14 September 2017
- APRICOT 2018, TBA
 - 19 February to 1 March 2018
- APNIC 46, Noumea, New Caledonia
 - 6 to 13 September 2018



Stay in Touch!



blog.apnic.net

apnic.net/social

THANK YOU