

# APNIC Update

Philip Smith

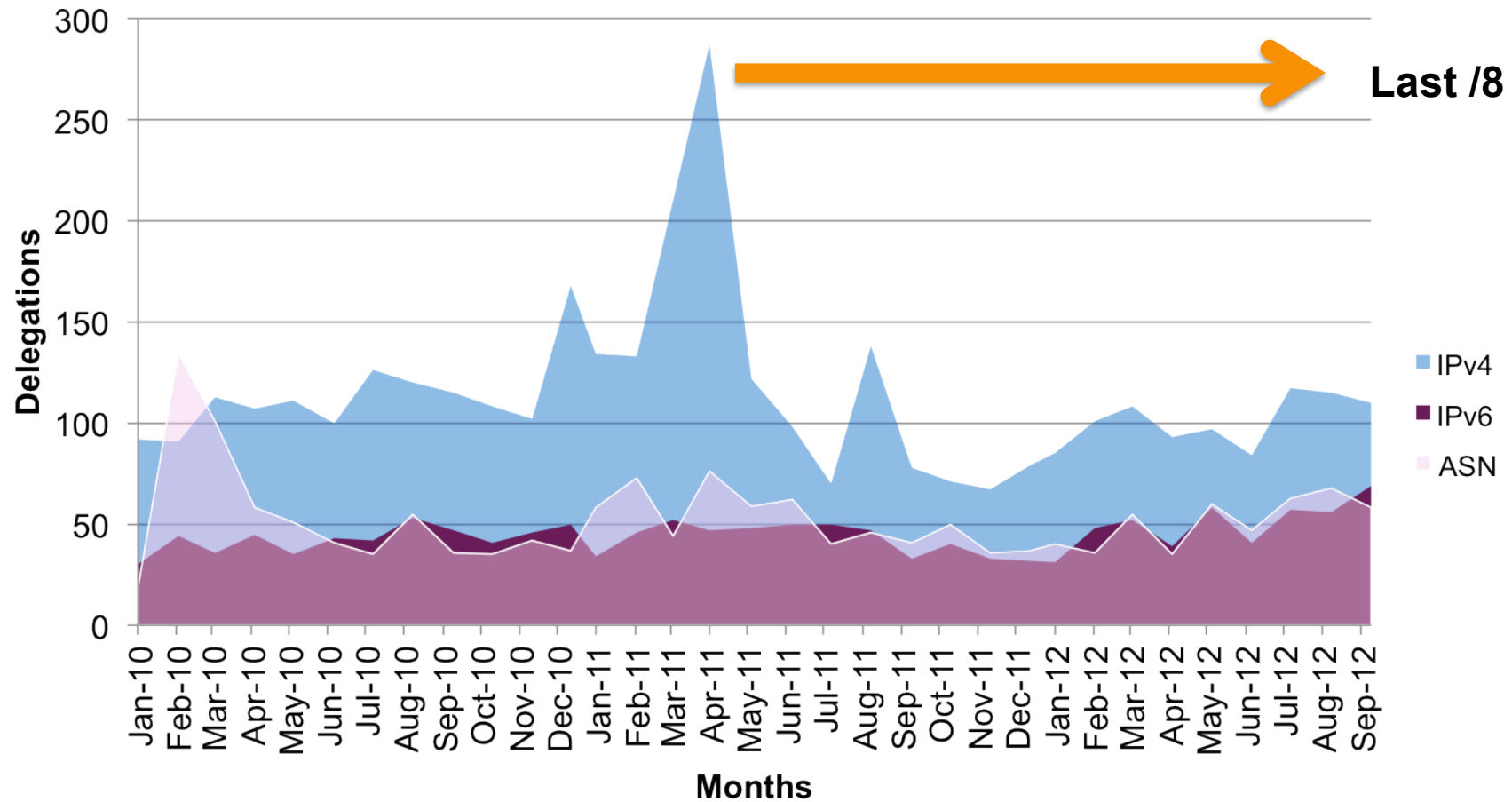
Learning and Development Director, APNIC

PacNOG 12 10 December 2012

**APNIC**

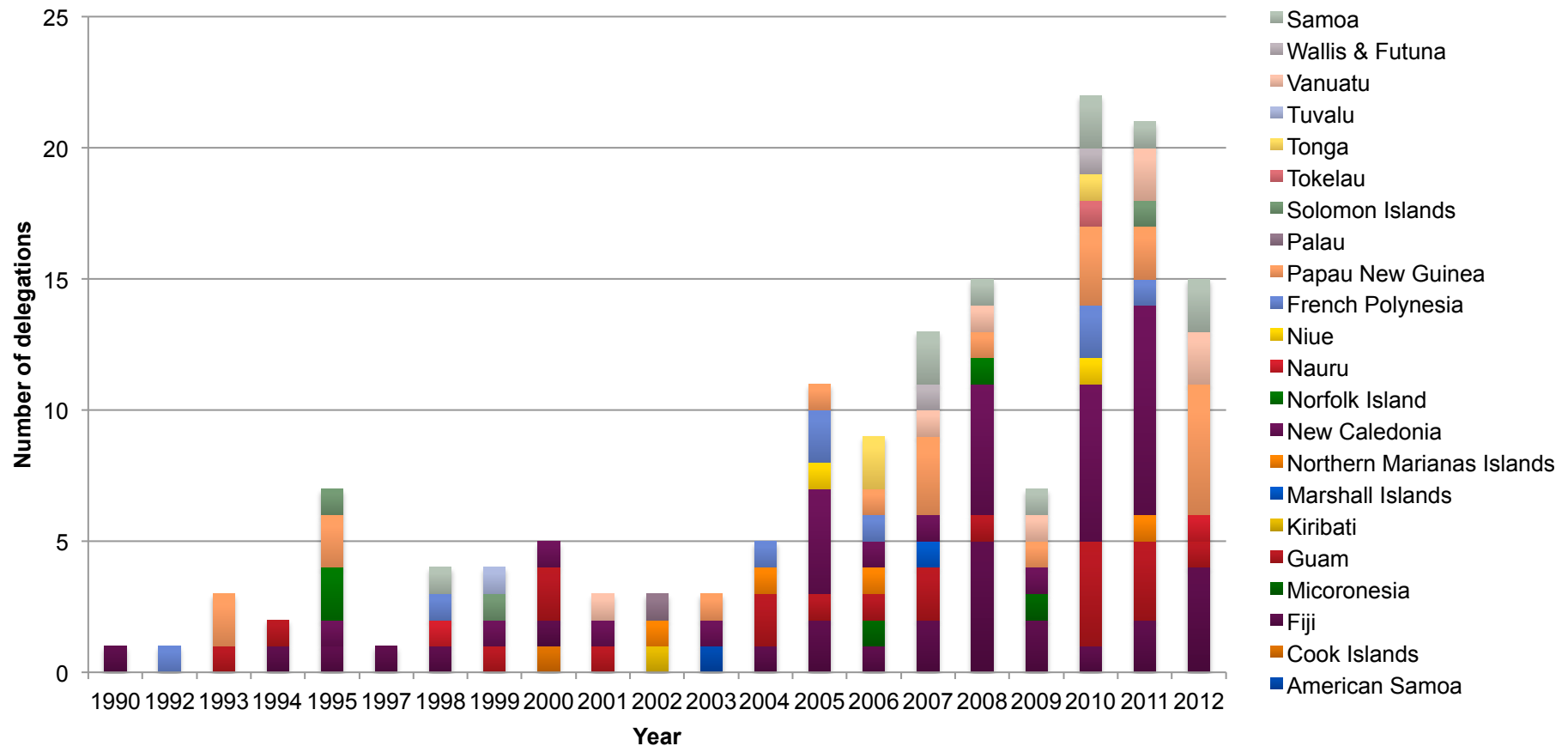


# Resource Delegations



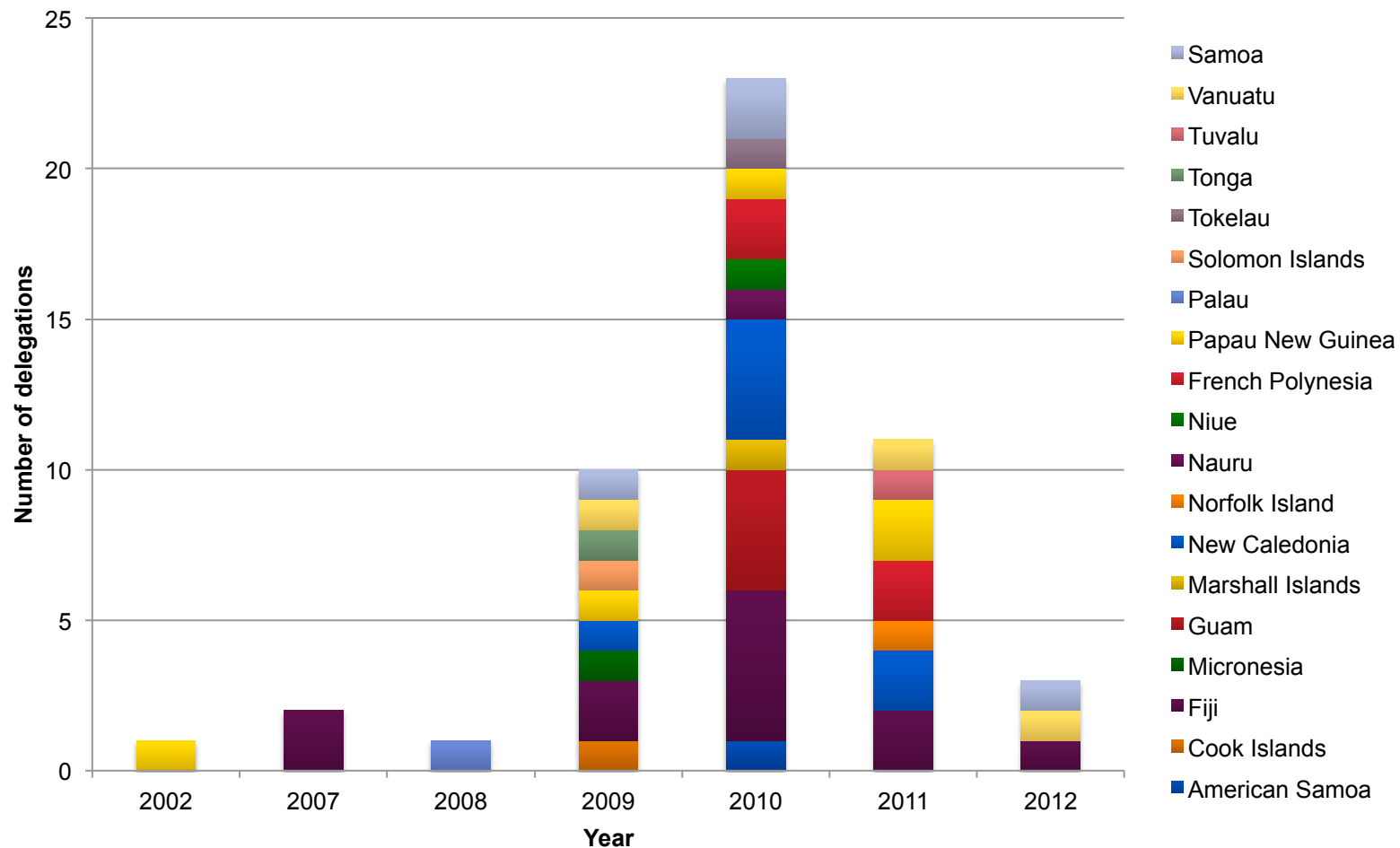
# Total IPv4 Delegations within Pacific

Number IPv4 delgations as 30 September 2012

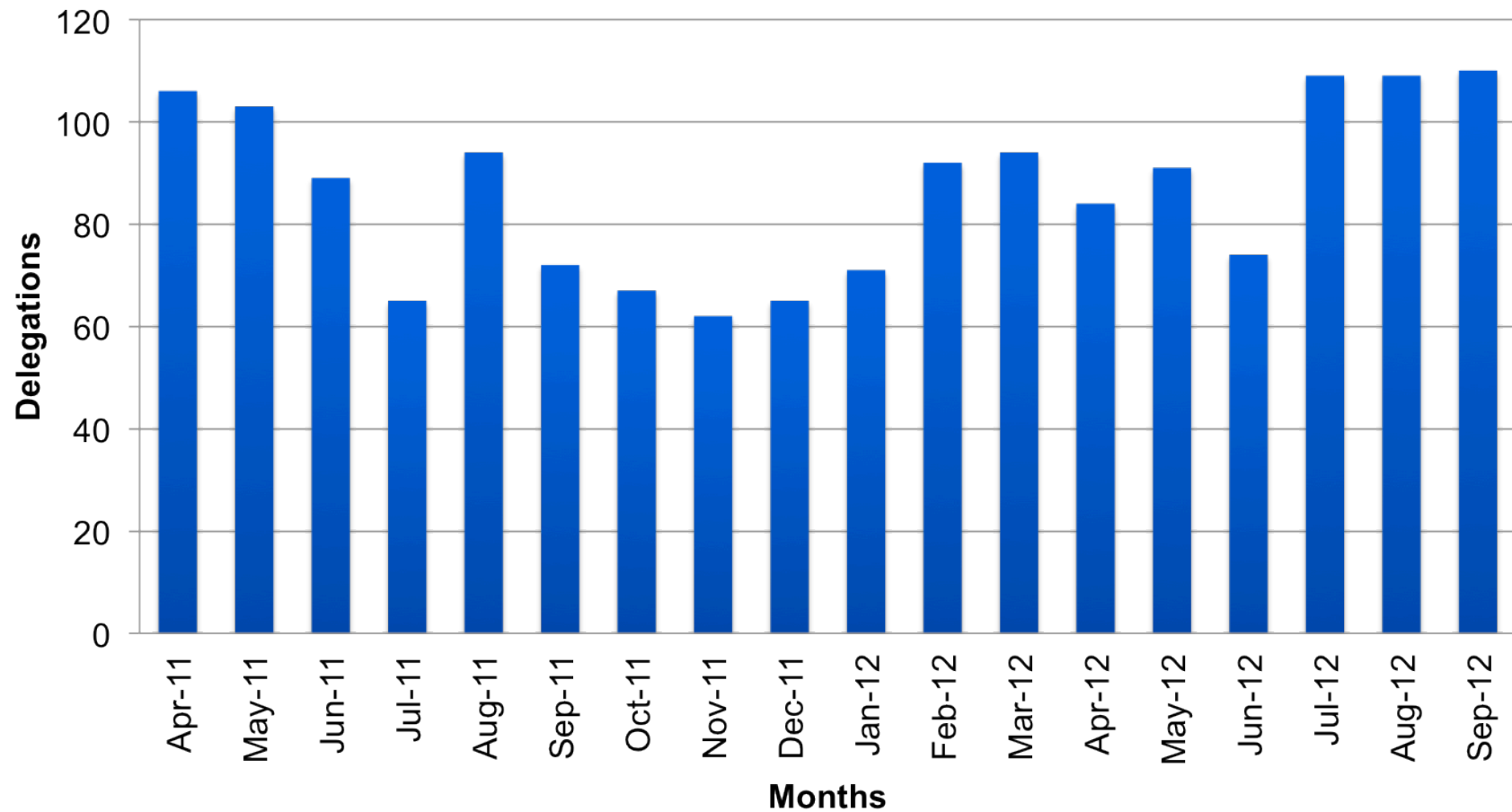


# Total IPv6 Delegations within Pacific

Number of IPv6 delegations as 30 September 2012



# Final /8 Delegation



As of 30 September 2012

# IPv4 Transfers

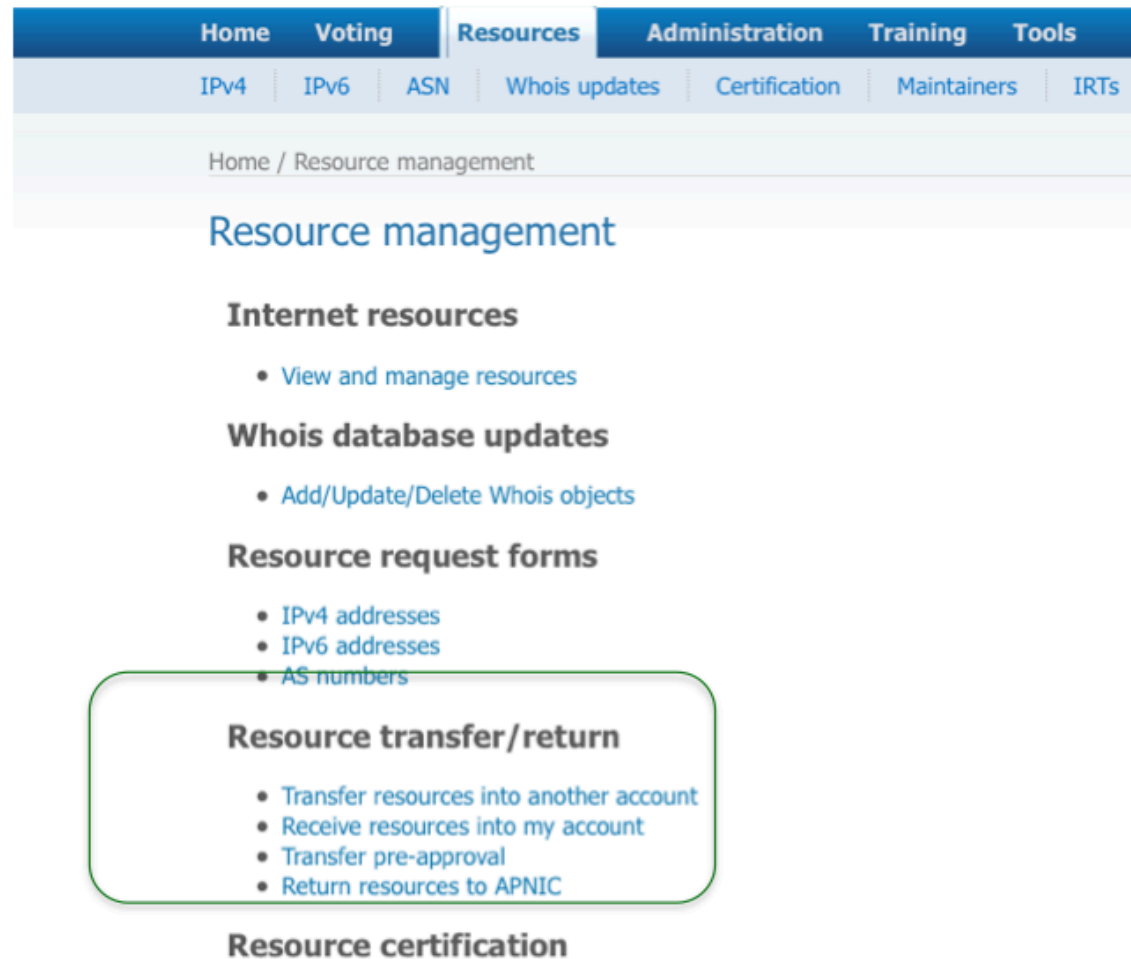
- Inter-RIR transfers now available
  - Currently between ARIN and APNIC regions
  - Transfer fee applies
  - Recipient must be able to demonstrate a need for addresses under normal APNIC allocation policies
- Agreed Inter-RIR transfer procedure by all RIRs
  - Jointly created by the respective Resource Services Managers
- IPv4 Transfers Listing Service
  - Pre-approved recipients list available
  - Opt-in anonymous listing
  - Source can contact recipient before a transfer is initiated

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

# Inter-RIR Transfer Summary

- Submit pre-approval request via MyAPNIC for evaluation
- Consider using APNIC IPv4 Transfer Listing Service after receipt of approval
  - <http://www.apnic.net/pre-approval-listing>
- Locate and reach agreement with source of IPv4 addresses outside of AP region
- Source initiates IPv4 transfer via respective RIR
  - Additional info: <http://www.apnic.net/transfer>

# 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 indicates '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](#)

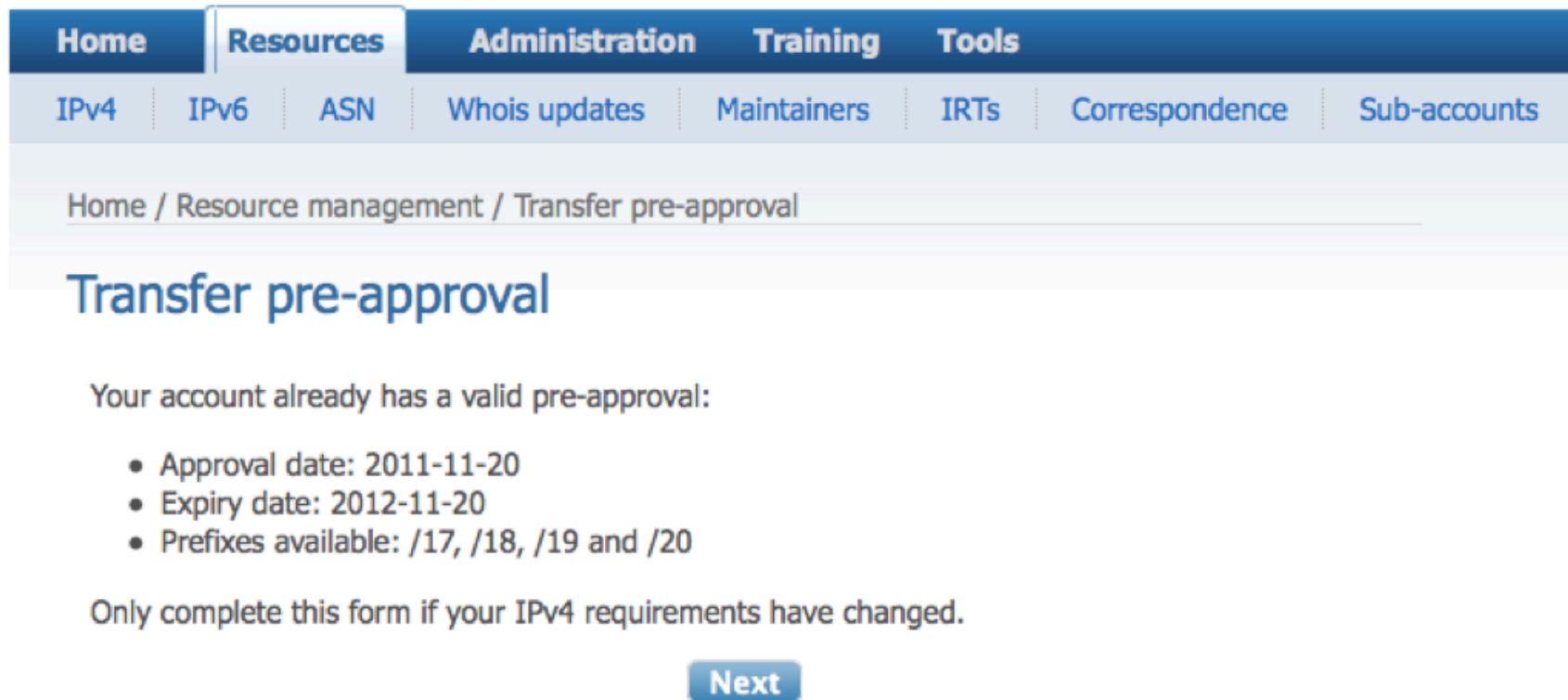
### Resource transfer/return

- [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 IPv4 Pre-approval page. The navigation bar at the top includes links for Home, Resources (which is the active tab), Administration, Training, and Tools. Under the Resources tab, 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 of details: "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 / 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

# Training

- Continuing focus on IPv6 deployment
  - Comprehensive face-to-face and eLearning sessions
- eLearning
  - One-hour modules
  - Delivered fortnightly in three time zones
  - New schedule for 2012
- Face-to-Face
  - Extensive hands-on exercises
  - Remote Training Lab to enable participants to build and configure networks
    - Lab upgraded in 2011 to resemble topology of an ISP with multiple operation regions

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

# APNIC Labs

- 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)

# APNIC Policies in 2012

- Implemented:
  - prop-102: Sparse allocation guidelines for IPv6 resource allocations
  - Implemented 20 August 2012
- Withdrawn by author:
  - prop-099: IPv6 reservation for large networks
- Abandoned:
  - prop-098: Optimizing IPv6 allocation strategies (simplified)
- Reached consensus at APNIC 34:
  - prop-101: Removing multihoming requirement for IPv6 portable assignments
  - Prop-104: Clarifying demonstrated needs requirement in IPv4 transfer policy
- Withdrawn by author at APNIC 34:
  - prop-103: A final IP address policy

# Information Society Innovation Fund

- 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 2012 with four new categories for both grants and awards:
  - Innovation on access provision
  - Innovation on learning and localization
  - Code for the common good
  - Rights

# APNIC's Engagement with the ITU

- One of the first Internet organizations to join as a Sector Member
- Participated in different ITU World and Plenipotentiary Conferences
  - Engaging with the ITU membership on IP addressing matters
- Active contribution with the NRO to the ITU IPv6 Group
  - Group recently closed as no current concerns identified with existing allocation model
- Co-organization of IPv6 workshop and migration strategies with ITU Regional Office Centre of Excellence since 2011

# APNIC@WCIT

- World Conference on International Communications
  - Consideration of changes to the International Telecommunication Regulations (ITRs)
  - Last updated in 1988
- APNIC has observed the WCIT preparatory process, regionally (through APT) and globally (through the CWG-WCIT)
- Special attention paid to two discussions:
  - Interconnection models supported by the ITRs
  - Number misuse in the ITRs
- APNIC's position - The ITRs have worked well for telephony, but are difficult to translate onto the Internet

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

# APNIC Survey

- Conducted by Professor Ang Peng Hwa, Singapore Internet Research Centre (SIRC) on behalf of the APNIC EC
- Received 1,333 valid responses from 67 economies
  - Valid responses were 67.9% higher than the previous Survey
- 70% of respondents reported high satisfaction vs 64% from the previous Survey

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



# APNIC Survey – Top Ten Priorities

## Future Planning

Priorities	Rating
Resource registration including APNIC Whois DB	5.59
Root server deployment in the region	5.49
Reverse DNS services	5.48
Internet community support	5.38
Training services	5.37
Research activities	5.32
Internet numbers resource transfers	5.25
Policy development facilitation	5.23
Internet number statistics	5.19
Secondary DNS services	5.17

Ratings from 1 to 7

# Upcoming Conferences

- APNIC 35, Singapore
  - 20 February to 1 March 2013 (with APRICOT 2013)



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

# Thanks

**APNIC**

