



ASO Report

Louie Lee

Chair, ICANN ASO Address Council

ICANN 40

San Francisco, CA, United States

18 March 2011



Ceremony for Allocation of Last Five /8s
3 February 2011



er Resource Policy Development Activi



Louie Lee

Chair, ICANN ASO Address Council

ICANN 40
San Francisco
16 March 2011

The ASO is a supp



Agenda

1. **About the ASO: MoU, Global Policy, Address Council**
 2. **Policy Development Process**
RIR PDP: Principles, Roles, Basic Steps
Global PDP
 3. **IANA Update**
 4. **NRO Update**
 5. **Impact of IANA's IPv4 Free Pool Exhaustion**
 6. **Regional Activities: AfriNIC, APNIC, ARIN, LACNIC, RIPE**
 7. **Global Number Policy and Global Proposals**
 8. **Closing: Questions and Answers, How to Participate**
- Please ask questions at the end of each section.*



IPv4 Depletion Situation Report

Each RIR received its last /8 from IANA on 3 February 2011.

The IANA free pool of IPv4 addresses has reached 0%.

While each RIR currently has IPv4 addresses to allocate, it is impossible to predict when each RIR will run out.

er Resource Policy Development Activi



Louie Lee
Chair, ICANN ASO Address Council
ICANN 40
San Francisco
16 March 2011

The ASO is a supp



Action Plans

What does this mean for:

- Broadband Access Providers?
- Internet Service Providers?
- Internet Content Providers?
- Enterprise Customers?
- Equipment Vendors?
- Government Organizations?

er Resource Policy Development Activi



Louie Lee

Chair, ICANN ASO Address Council

ICANN 40
San Francisco
16 March 2011

The ASO is a supp

32

Global Policy for IPv4 Allocations by the IANA Post Exhaustion

- Allows IANA to receive address space from the RIRs
- Allows IANA to allocate space back to the RIRs
- Status:
 - AfriNIC – Discussed/presented and sent back to the list for more discussion
 - APNIC – Abandoned
 - ARIN – Adopted
 - LACNIC – Discussed/presented and sent back to the list for more discussion
 - RIPE – Withdrawn

Global Policy for post exhaustion IPv4 allocation mechanisms by the IANA

- Allows IANA to receive address space from the RIRs
- Allows IANA to allocate space back to the RIRs
- Status:
 - AfriNIC – To be submitted
 - APNIC – Discussed/going to last call
 - ARIN – Recently proposed
 - LACNIC – To be submitted
 - RIPE – To be submitted

Recent Regional Policy Proposal Activities (Spring 2011)

Global IPv4 policies (8)

- AfriNIC (2), APNIC (2), ARIN (2), LACNIC (1), RIPE (1)

Other IPv4 policies: allocation, reclamation, transfer (28)

- AfriNIC (4), APNIC (7), ARIN (9), LACNIC (6), RIPE (2)

IPv6 address allocation policies (4)

- APNIC (2), ARIN (1), LACNIC (1)

WHOIS changes policies (7)

- AfriNIC (2), ARIN (2), LACNIC (1), RIPE (2)

Total: 47 policies

Subscribe to the RIR policy list(s)

- No membership requirements

Attend RIR meetings

- In person (open, nominal fee)
- Remote (free)



Internet Number Resource Policy Development: Participation is Easy!

The Number Resource Organization (NRO) encourages all stakeholders to get involved and participate in the development of Internet number resource policy. These policies govern how the Regional Internet Registries (RIRs) distribute and manage IPv4 and IPv6 address space and Autonomous System Numbers.

<http://nro.net/about/rirs.html>

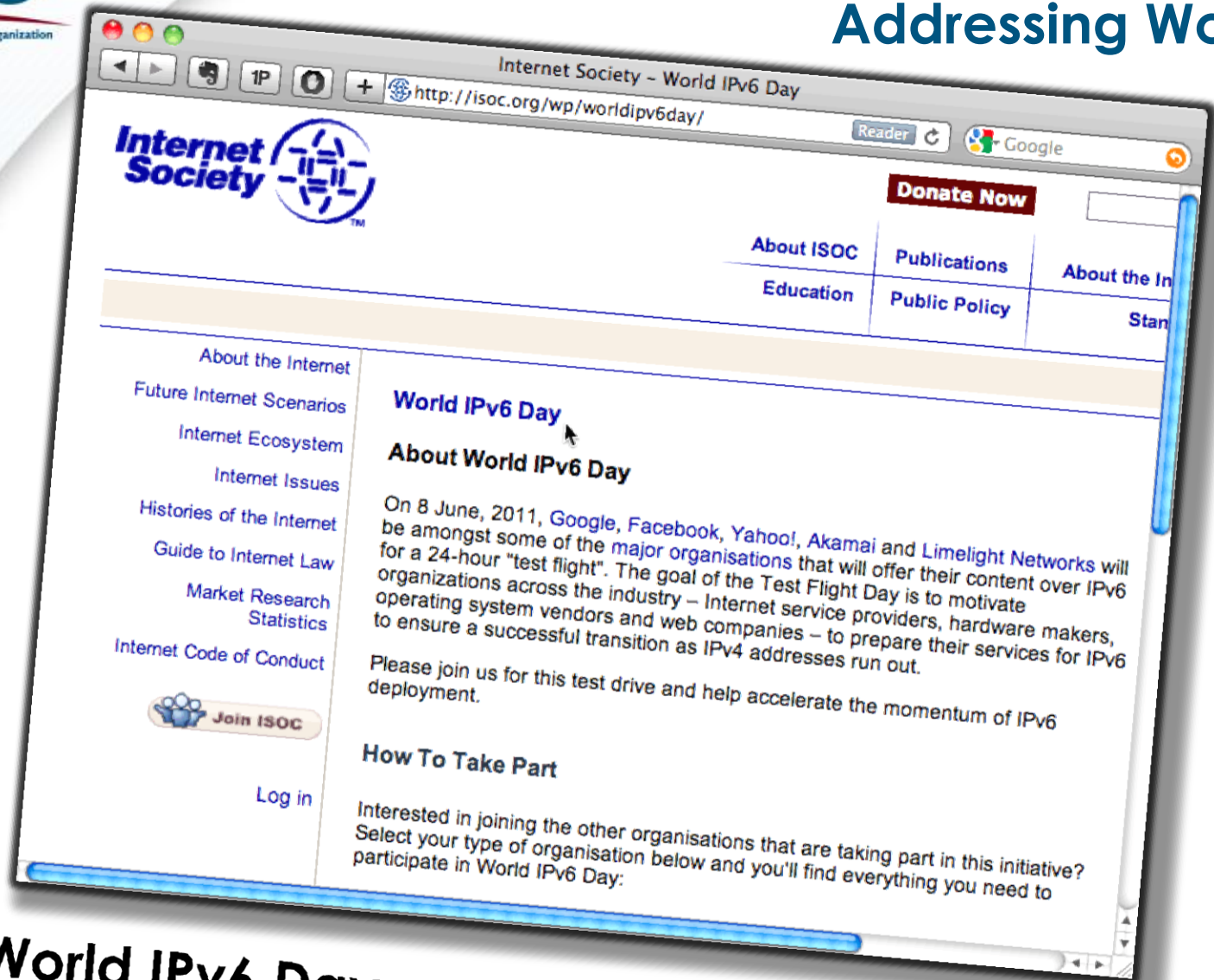
RIR policy forums are open to everyone. Anyone can propose a policy or argue for or against a policy proposal, so everyone's voice can be heard. All policy proposals, discussions, and debates are conducted publicly on email lists and at open policy meetings. Decisions are based on the consensus of all participants. There are several ways to get involved:

- 1. Read the Policy Proposals Under Discussion**
Proposals are available for anyone to read. To find out what's currently under discussion in your region, see:
Afrinic - <http://www.afrinic.net/policy.htm>
APNIC - <http://www.apnic.net/policy/proposals>
ARIN - <https://www.arin.net/policy/proposals>
LACNIC - <http://lacnic.net/en/politicas>
RIPE NCC - <http://www.ripe.net/ripe/policies/proposals>
- 2. Discuss Policy Proposals on RIR Mailing Lists**
Each RIR maintains an open mailing list devoted to the discussion and development of the policies in its region. No membership is required.
Afrinic - <https://lists.afrinic.net/mailman/listinfo/cgi/rpd>
APNIC - <http://mailman.apnic.net/mailman/listinfo/sig-policy>
ARIN - <http://lists.arin.net/mailman/listinfo/arin-ppml>
LACNIC - <https://mail.lacnic.net/mailman/listinfo/politicas>
RIPE NCC - <http://www.ripe.net/mailman/listinfo/address-policy-wg>
- 3. Attend RIR Public Policy Meetings**
Each RIR hosts regular open policy meetings where anyone interested in number resource policy can meet to discuss policy issues, share technical knowledge and best practices, and collaborate on solutions to maximize the growth and utility of the Internet. Remote participation options are also widely available.
<http://nro.net/meetings>
- 4. Propose a Policy Idea**
Internet number resource policy development starts when people just like you see a way that Internet number resource management and distribution could be improved. If you have an idea, contact your local RIR to find out more about how you can submit your idea for community consideration.

Your participation is a critical part of the continued success of the bottom-up policy development process and the sustained growth of the Internet. By staying actively involved, participants define how RIRs distribute the Internet number resources that organizations need for their networks and their customers, thereby ensuring the health and success of the Internet into the future and beyond.

Afrinic **APNIC** **ARIN** **LACNIC** **RIPE NCC**

www.nro.net



World IPv6 Day
8 June 2011



**Thank you.
Questions?**

Louie Lee

louie@louie.net

Chair, ICANN ASO Address Council