First Timers' Orientation

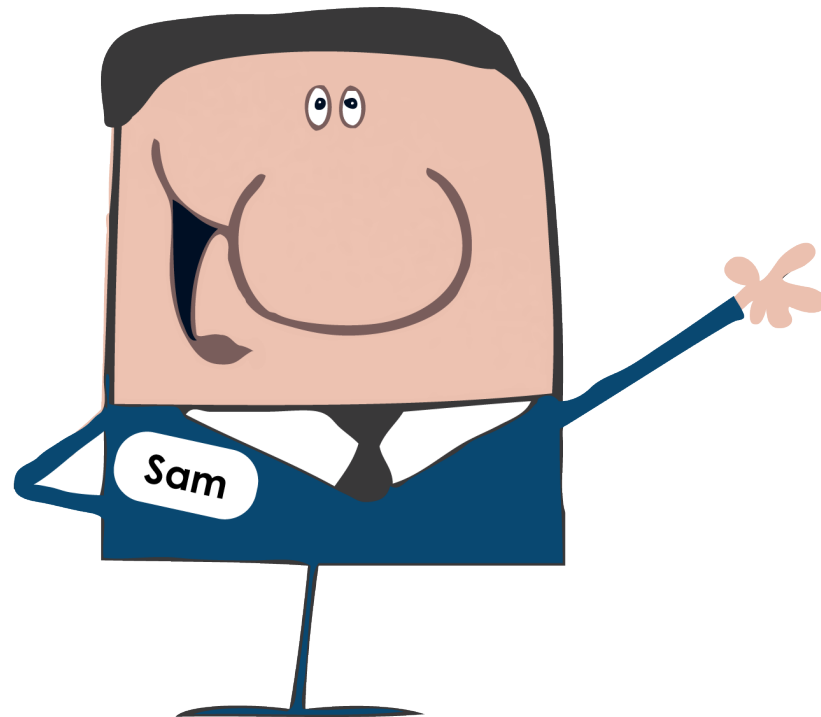Richard Jimmerson
Chief Information Officer

First Timers' Orientation

- Brief introductions
- ARIN and the Internet registry system
- Policy development at a glance
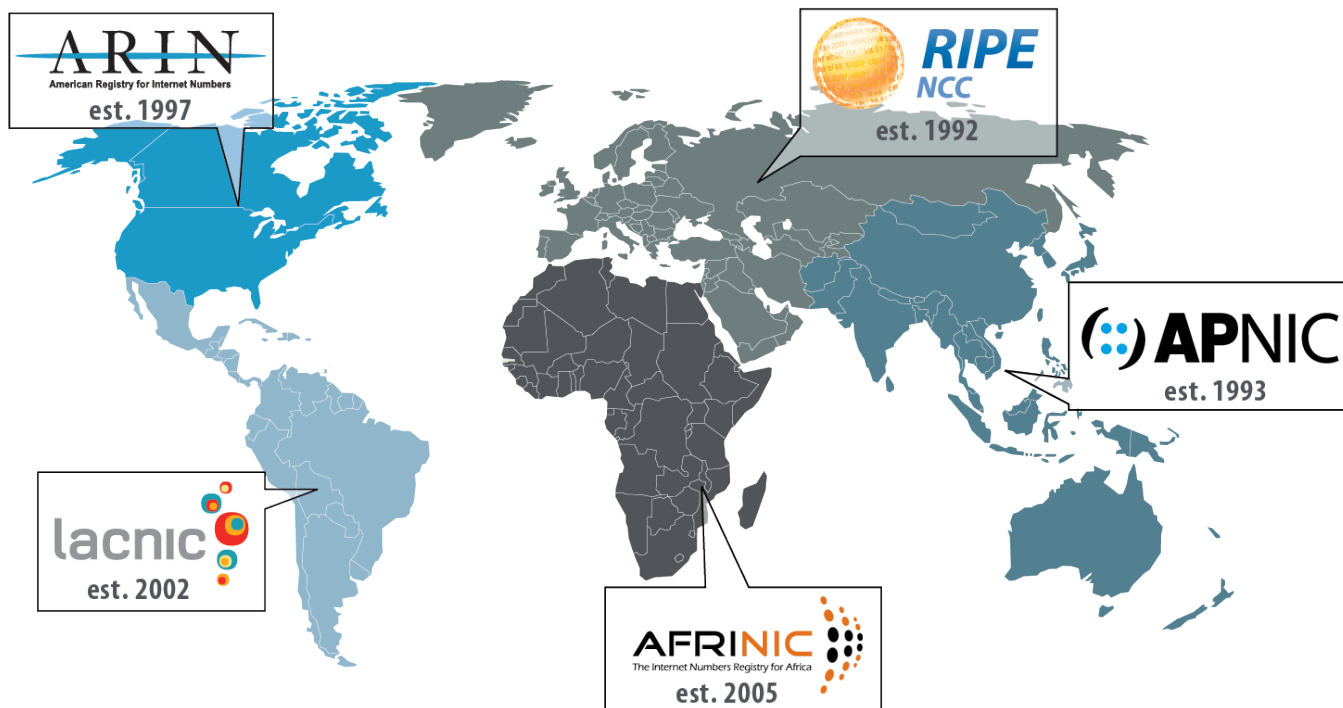- What's ahead and how to participate
- Q&A at your table

Self-introductions

Regional Internet Registries (RIRs)

- The system began in 1992

- There are five RIRs:

Who Provisions IP Addresses and ASNs?

ICANN IANA	• Top level technical coordination of the Internet Names, Numbers, Root Servers • Manage global unallocated IP address pool • **Allocate number resources to RIRs**

RIR	• Manage regional unallocated IP address pool
	     • **Allocate number resources to ISPs/LIRs**
	     • **Assign number resources to End-users**

ISP/LIR	• Manage local IP address pool for use by customers and for infrastructure
	     • **Allocate number resources to ISPs**
	     • **Assign number resources to End-users**

ARIN's Service Region
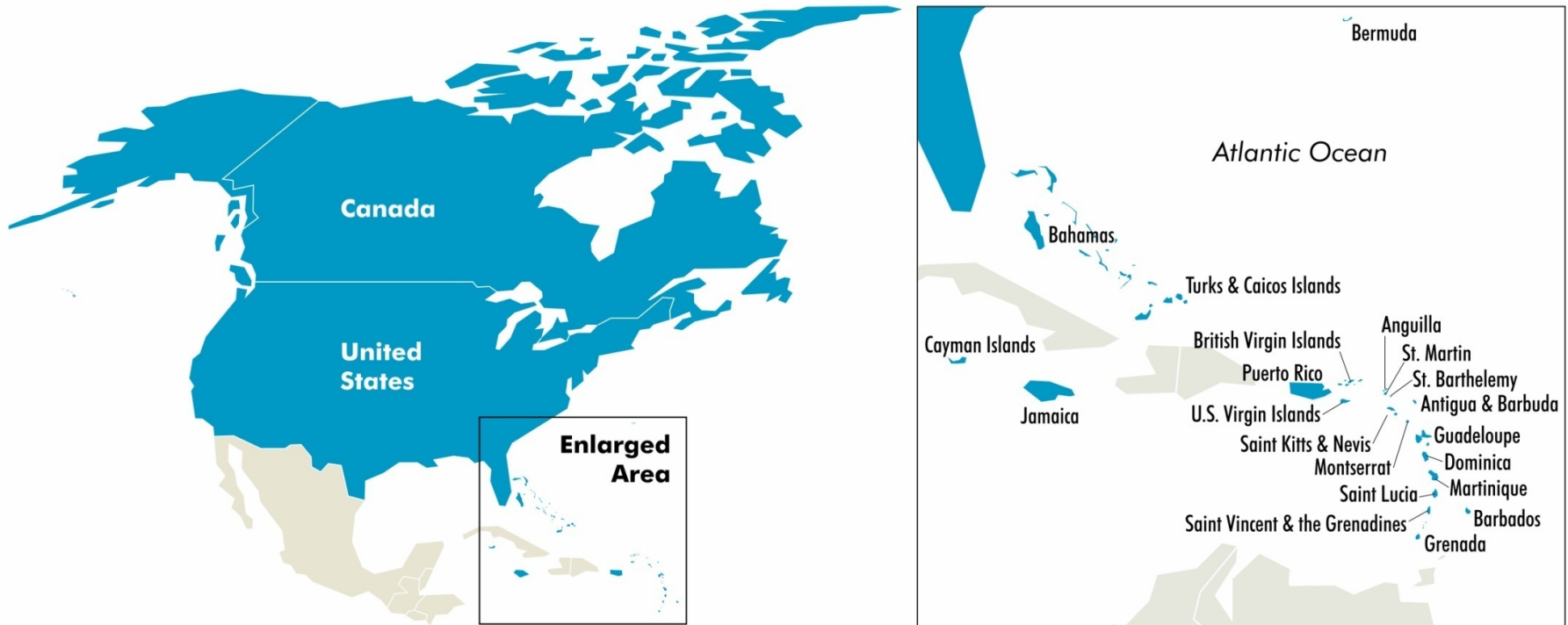
ARIN's region includes Canada, many Caribbean and North Atlantic islands, US Minor Outlying Islands and the United States.

ARIN's Mission

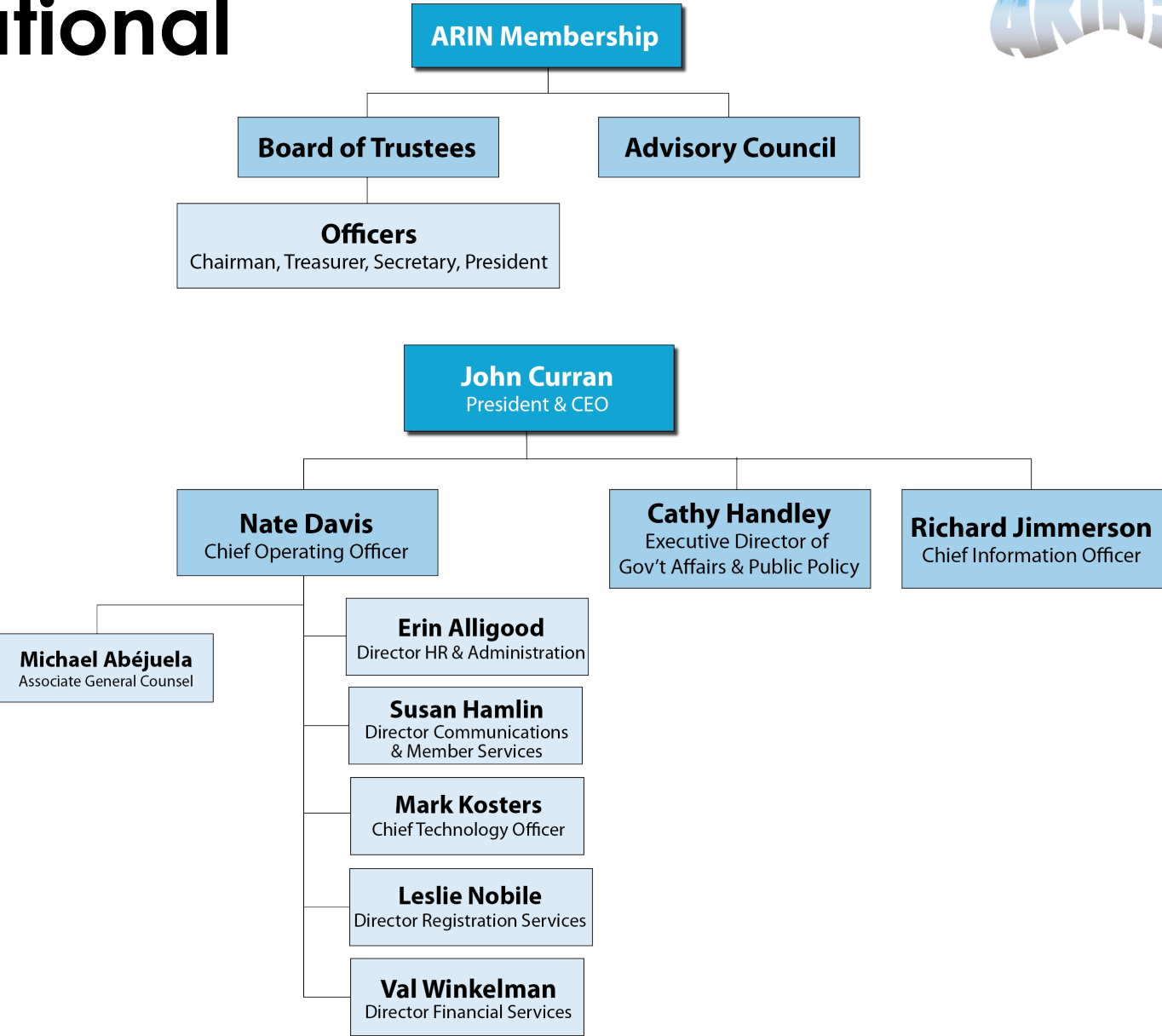ARIN, a nonprofit member-based organization supports the operation of the Internet through:

- the management of Internet number resources throughout its service region;

- coordinates the development of policies by the community for the management of Internet Protocol number resources; and

- advances the Internet through informational outreach.

ARIN Structure

Nonprofit	Membership Organization	Community-regulated

• Fee for services, not number resources
 	
• 100% community funded
	• Broad-based
	  - Private sector
	  - Public sector
	  - Civil society
		• Community developed policies
		
		• Member-elected executive board
		
		• Open and transparent

Organizational Chart

ARIN Membership

Board of Trustees

Advisory Council

Officers
Chairman, Treasurer, Secretary, President

John Curran
President & CEO

Nate Davis
Chief Operating Officer

Cathy Handley
Executive Director of
Gov't Affairs & Public Policy

Richard Jimmerson
Chief Information Officer

Michael Abéjuela
Associate General Counsel

Erin Alligood
Director HR & Administration

Susan Hamlin
Director Communications
& Member Services

Mark Kosters
Chief Technology Officer

Leslie Nobile
Director Registration Services

Val Winkelman
Director Financial Services

Registration Services

- Coordination & management of Internet number resources (IPv4, IPv6, AS Numbers)

- Internet number resource transfers

- Directory Services

- Registration transaction information (Whois)

- Record maintenance

- Routing information (Internet Routing Registry)

Technical Services

- ARIN Whois/Whois-RWS

- ARIN Online

- Internet Routing Registry

- Reverse DNS Services

- DNSSEC

- RPKI

- IT support for organization
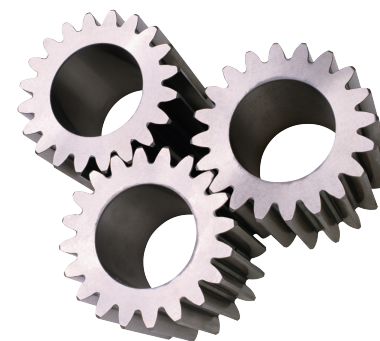
Organization Services

- Information publication and dissemination and public relations
- Education & Outreach events
- Elections (Board, AC, NRO NC)
- Policy development process – facilitation and documentation
- Public Policy and Member Meetings

Policy Development Principles

Open
- Developed in open forum
  - Public Policy Mailing List
  - Public Policy Meetings
- Anyone can participate

Transparent
- All aspects documented and available on website
  - Policy process, meetings, and policies

Bottom-up
- Policies developed by the community
- Staff implements, but does not make policy

Who Plays a Role in the Policy Process?

Community

- Submits proposals
- Participates in discussions and petitions

Advisory Council (elected volunteers)

- Facilitates the policy process
- Develops policy:
  - Enables fair and impartial resource administration
  - Technically sound
  - Supported by the Community
- Determines consensus based on community input

Roles…

ARIN Board of Trustees (elected volunteers)

- Provides corporate fiduciary oversight
- Ensures the policy process has been followed
- Ratifies policies

ARIN Staff

- Provides feedback to community
  - Staff and legal assessments for all proposals
  - Policy experience reports
- Implements ratified policies

Policy Development Process - Basic Steps

1. Community member submits a <u>Proposal</u>
2. AC works with submitter to ensure clear problem statement and suggested policy change
3. AC puts <u>Draft Policy</u> on PPML for community discussion/ feedback (possibly presented at PPC/PPM)
4. AC decides: continue work or abandon
5. AC recommends fully developed Draft Policy (fair, sound and supported by community) for adoption
6. <u>Recommended Draft Policy</u> presented at PPC/PPM
7. If AC still recommends adoption, then Last Call and review of last call
8. Board review
9. Staff implements

Petitions

- Petitions available for:
  - Delay by the AC
    - Proposal to Draft Policy (after 60 days)
    - Draft to Recommended Draft (after 90)
    - Last Call (after 60)
    - Board (after 60)
  - Abandonment
  - Rejection (proposals out of scope)
- Petitions begin with 5 day duration, needing support from 10 people from 10 different organizations (later stages require more people)
- Despite low bar, attempted petitions are rare

Number Resource Policy Manual
http://www.arin.net/policy/nrpm.html

Policies Covered:
IPv4 Address Space
IPv6 Address Space
Autonomous System Numbers (ASNs)
Directory Services (WHOIS)
Reverse DNS (in-addr)
Transfers
Experimental Assignments
Resource Review Policy

Policy discussions at this meeting

R ARIN-2013-7: NRPM 4 (IPv4) Policy Cleanup

Clean up of IPv4 policy text that will not really change anything

ARIN-2013-8: Subsequent Allocations for New Multiple Discrete Networks

Would remove the connectivity requirement text from the policy, and allow new discrete networks to get the minimum allocation

ARIN-2014-1: Out of Region Use

Will make it okay to use some address space outside of the region

ARIN-2014-2: Improving 8.4 Anti-Flip Language

Makes it easier for organizations to use the inter-RIR transfer policy to move space to themselves. - Full staff/legal requested

Policy discussions at this meeting

ARIN-2014-3: Remove 8.2 and 8.3 and 8.4 Minimum IPv4 Block Size Requirements

Removes the minimum prefix size (/24) for all types of transfers. [OD intends to abandon]

R ARIN-2014-4: Remove 4.2.5 Web Hosting Policy

Removes the policy about collecting information about web hosting

ARIN-2014-5: Remove 7.2 Lame Delegations

Removes the reverse DNS lame delegation policy

ARIN-2014-6: Remove 7.1 [Maintaining IN-ADDRs]

Removes the IPv4 reverse DNS policy

Policy discussions at this meeting

R ARIN-2014-7: Section 4.4 Micro Allocation Conservation Update
Exchange points would need to have three organizations connected for the exchange to be recognized as such (instead of just two)

ARIN-2014-8: Alignment of 8.3 Needs Requirements to Reality of Business
Would make it easier to get a real two-year supply of address space during an in-region transfer. - Full staff/legal requested

ARIN-2014-9: Resolve Conflict Between RSA and 8.2 Utilization Requirements
This is still a work in progress. - Full staff /legal requested

R ARIN-2014-10: Remove Sections 4.6 and 4.7
Removes the amnesty and aggregation policies.

Policy discussions at this meeting

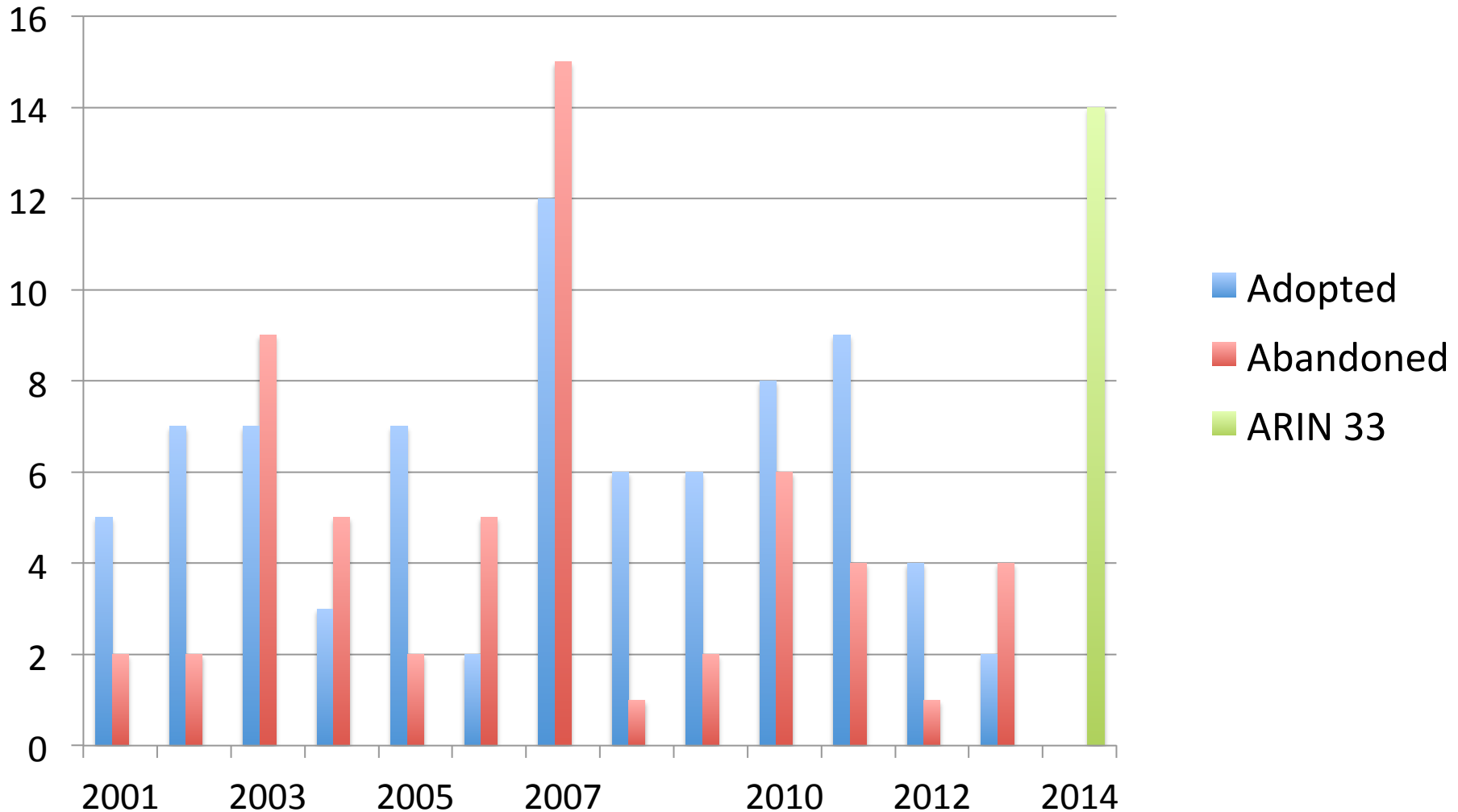***ARIN-2014-11: Improved Registry Accuracy Proposal***

Ensures services to legacy resource holders

ARIN-2014-12 Anti-hijack Policy

Prohibits the allocation of the same address space to more than one customer at a time

Proposals at Public Policy Meetings (AC workload)

How to monitor and not be overwhelmed?

Once a month:

- Front page of the website leads to proposals and draft policies under discussion
  - New proposals need feedback for the AC's initial decision
  - Web site can help you focus on what's important to you and your company

Twice per year:

- Check the ARIN Public Policy Meeting site in the weeks leading up to the meeting
  - Proposals/Draft Policies on Agenda
  - Discussion Guide (summaries, text, staff assessments)
  - Attend in Person/Remote
- AC meeting last day: Watch list for AC's decisions, Last Calls – State your opinion, are you For or Against?

What's Ahead this week

Today: 5:30 – 7:00 PM Happy Hour – Club International

Monday: Grand Ballroom

ARIN Public Policy Meeting 9:00 AM – 5:00 PM

ARIN social – Field Museum (Buses depart starting at 6:30 PM)

Tuesday: Grand Ballroom

ARIN Public Policy Meeting 9:00 AM – 5:00 PM

NEW - Dine Around –DIY - Sign up at the Registration Desk

Wednesday: Grand Ballroom

ARIN Members Meeting (open to all), 9:00 AM – Noon

Ways to participate this week: Membership is not required ☺

- Meet your fellow attendees at meals and during breaks

- Join a lunch table topic discussion led by an Advisory Council member

- ARIN Board, Advisory Council, NRO Number Council and Staff all have ribbons on our name tags – seek us out and ask questions

- Go the floor microphones in the meeting room, be sure to state name and organization upfront

- Raise your hand to voice your opinion when votes are taken during policy discussions

Participate in ARIN

Contribute your Opinions and Ideas:

- Public Policy Mailing List
- IPv6 Wiki
- Attend Public Policy and Members Meetings, Public Policy Consultations, outreach events
- Submit a suggestion
- Participate in community consultations
- Write a **g**uest **b**log
- Members – Vote in annual elections

Don't Forget Your Survey

Please complete the survey form and drop it in the bowl.

Be present in the meeting room tomorrow morning at the start for the drawing – you might win a $100 Think Geek gift certificate.

Questions?

Reference Material

Historical Timeline

Government Oversight

1993 IR function contracted by NSF to NSI; InterNIC formed, DoD oversight ends. APNIC formed.

iana — Internet Assigned Numbers Authority → RIPE NCC · APNIC · InterNIC → Registrant

1992 RFC 1366: Regional IRs established; RIPE NCC formed

iana — Internet Assigned Numbers Authority → DDN NIC · RIPE NCC → Registrant

1991 RFC 1261: DoD IR function contract moved to Network Solutions, Inc.

iana — Internet Assigned Numbers Authority → DDN NIC → Registrant

1990 Internet Registry (IR) function contracted by DoD to SRI International

iana — Internet Assigned Numbers Authority → DDN NIC → Registrant

1980's NSFNET/ARPANET - Jon Postel managed addressing via DoD contract; this was called the Internet Assigned Numbers Authority (IANA)

→ Registrant
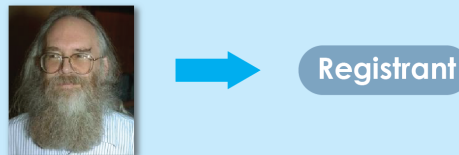
Historical Timeline

Community Oversight

2005 Regionalization complete; AfriNIC formed

IANA → RIPE NCC ⦿APNIC ARIN LACNIC AfriNIC → Registrant

2002 Regionalization continues; LACNIC formed

IANA → RIPE NCC ⦿APNIC ARIN LACNIC → Registrant

1998 ICANN formed by US Gov't (top level technical coordination)

IANA → RIPE NCC ⦿APNIC ARIN → Registrant

1997 IR regionalization continues; ARIN formed. USG oversight of IR function ends.

IANA → RIPE NCC ⦿APNIC ARIN → Registrant