ARIN 34

Baltimore, MD | 9-10 Oct 2014
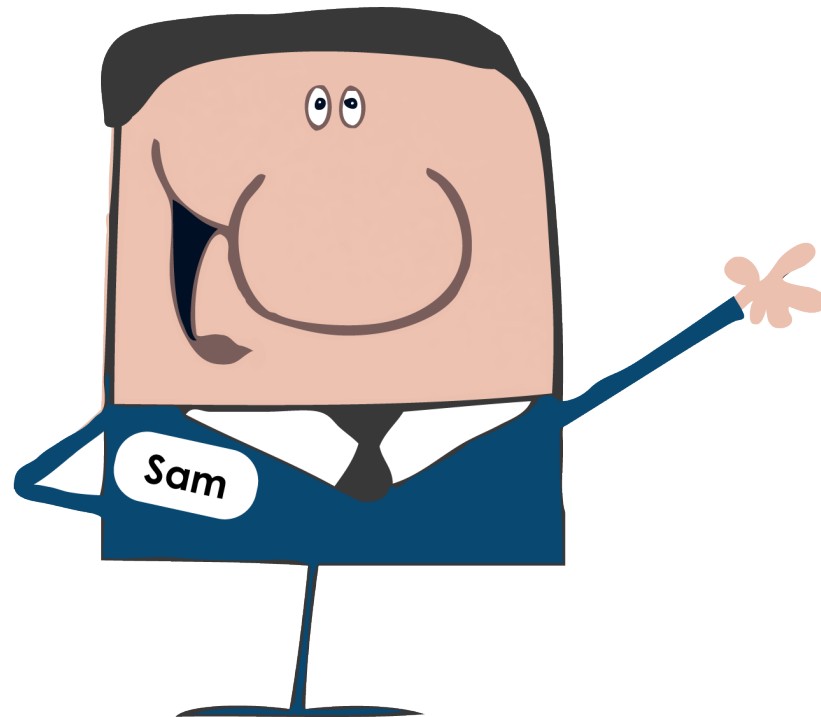
First Timers' Orientation

Richard Jimmerson
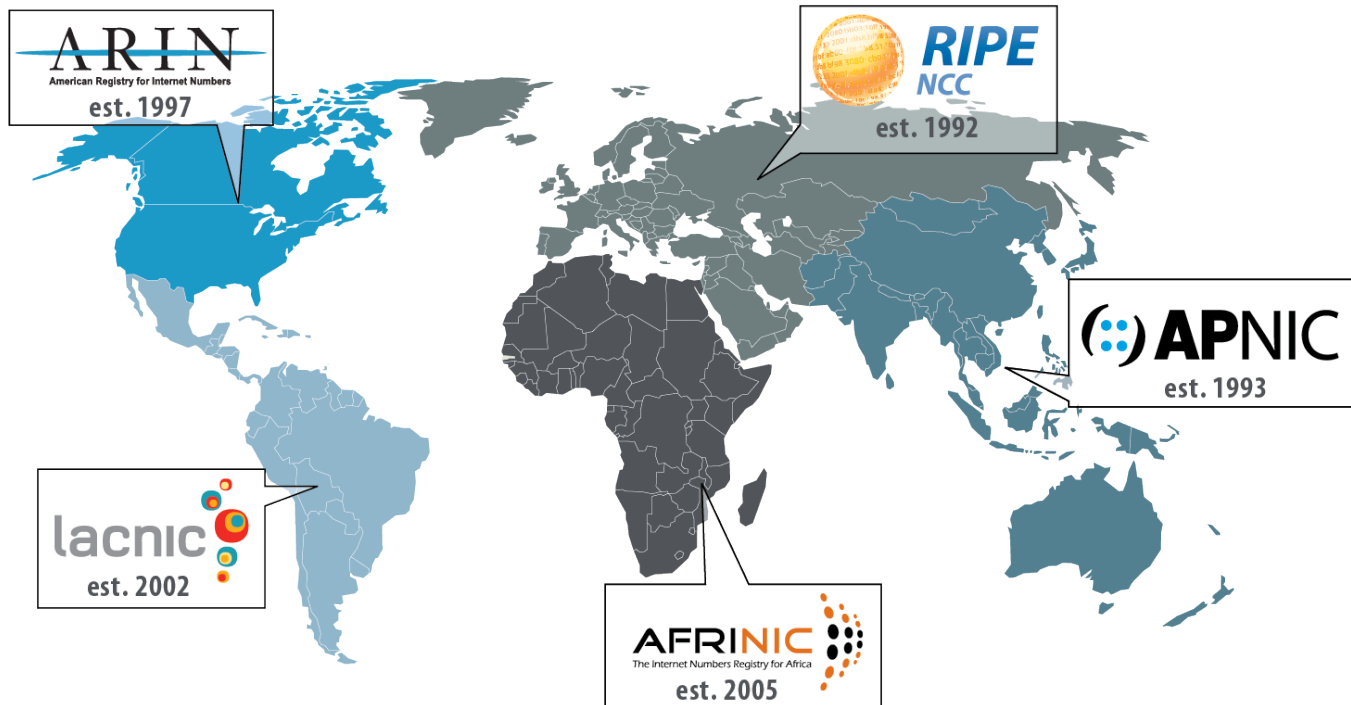
Chief Information Officer

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:

ARIN's Service Region

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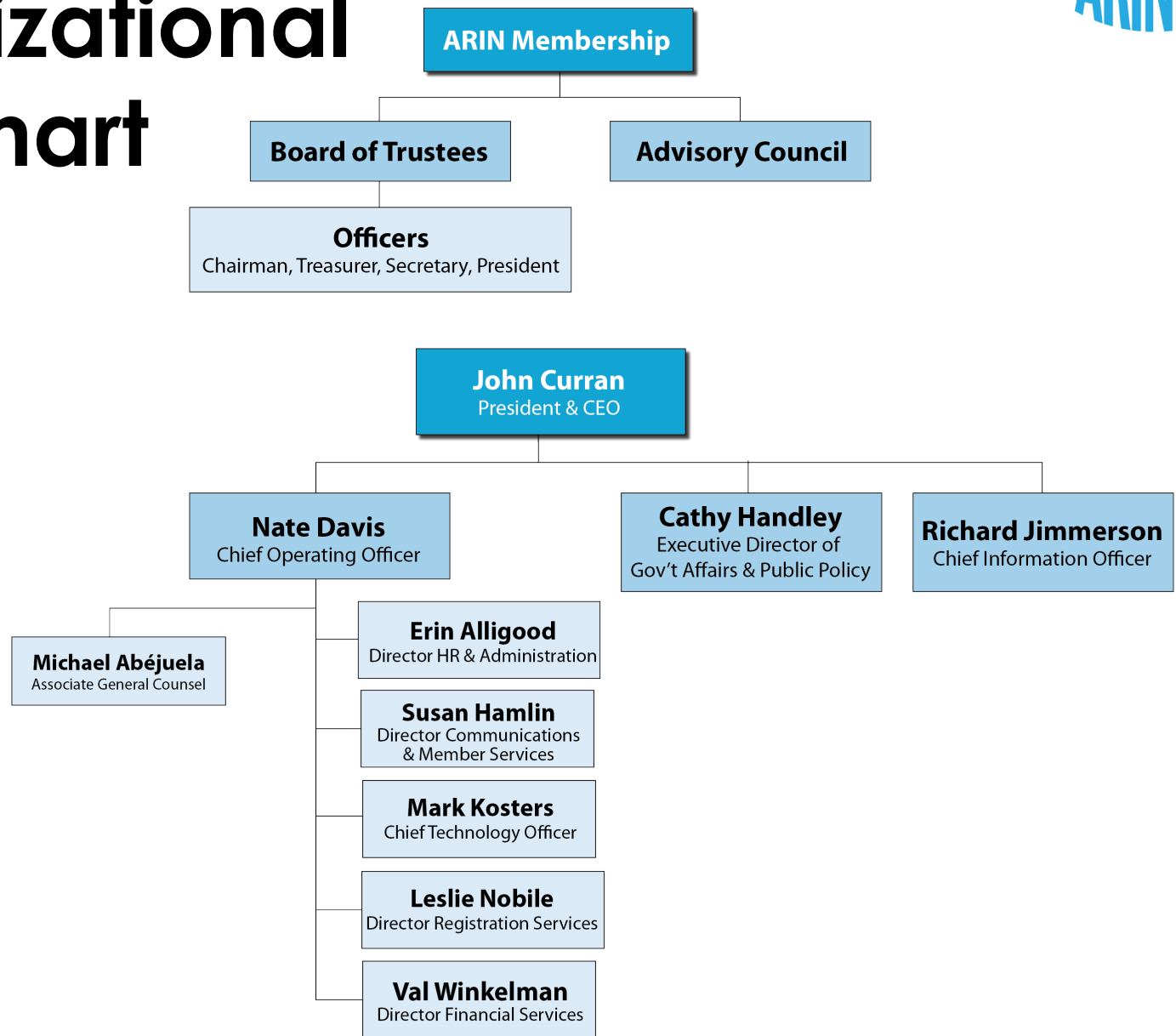
ARIN's Mission

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 34

```
                    ┌─────────────────────┐
                    │   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

8

ARIN Board of Trustees

- Paul Andersen, Vice Chair and Treasurer
- Vinton G. Cerf, Chair
- John Curran, President and CEO
- Timothy Denton, Secretary
- Aaron Hughes
- Bill Sandiford
- Bill Woodcock

ARIN Advisory Council

- Dan Alexander, Vice Chair
- Cathy Aronson
- Kevin Blumberg
- Bill Darte
- Owen DeLong
- Andrew Dul
- David Farmer
- Scott Leibrand
- Tina Morris
- Milton Mueller
- Heather Schiller
- Robert Seastrom
- John Springer
- John Sweeting, Chair

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)

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**

Technical Services

- ARIN Whois/Whois-RWS
- ARIN Online
- Internet Routing Registry
- Reverse DNS Services
- DNSSEC
- RPKI
- IT support for organization
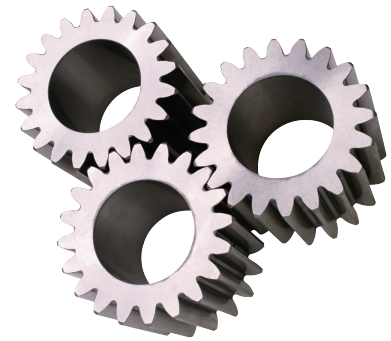
Organization Services

- 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. Advisory Council (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. Petition process available throughout at AC actions
9. Board review
10. Staff implements

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

- **Draft Policy ARIN-2014-1: Out of Region Use**
  - Organizations can explicitly request address space for use outside the ARIN region.

- **Draft Policy ARIN-2014-6: Remove 7.1 [Maintaining IN-ADDRs]**
  - There would be no reverse DNS policy.

- **Recommended Draft Policy ARIN-2014-9: Resolve Conflict Between RSA and 8.2 Utilization Requirements**
  - Removes "aggregate" and "reclaim" from M&A transfers ("return" and "transfer" remain).

- **Draft Policy ARIN-2014-14: Removing Needs Test from Small IPv4 Transfers**
  - Recipients of /16s and smaller networks would not have to demonstrate need.

- **Draft Policy ARIN-2014-15: Allow Inter-RIR ASN Transfers**
  - Would allow Inter-RIR specified transfers of ASNs.

Policy discussions at this meeting (cont.)

- **Draft Policy ARIN-2014-16: Section 4.10 Austerity Policy Update**
  - Reduces the /10 IPv4 to IPv6 transition pool to a /11 and allows more organizations to make use of it.
- **Draft Policy ARIN-2014-17: Change Utilization Requirements from last-allocation to total-aggregate**
  - From 80% of last allocation to 80% overall.
- **Draft Policy ARIN-2014-18: Simplifying Minimum Allocations and Assignments**
  - Automatic qualification for a minimum allocation or assignment.
- **Draft Policy ARIN-2014-19: New MDN Allocation Based on Past Utilization**
  - More IPv4 space for new MDNs.
- **Draft Policy ARIN-2014-20: Transfer Policy Slow Start and Simplified Needs Verification**
  - Significant changes to 8.3 and 8.4 transfers.

Proposals at Public Policy Meetings (AC workload)
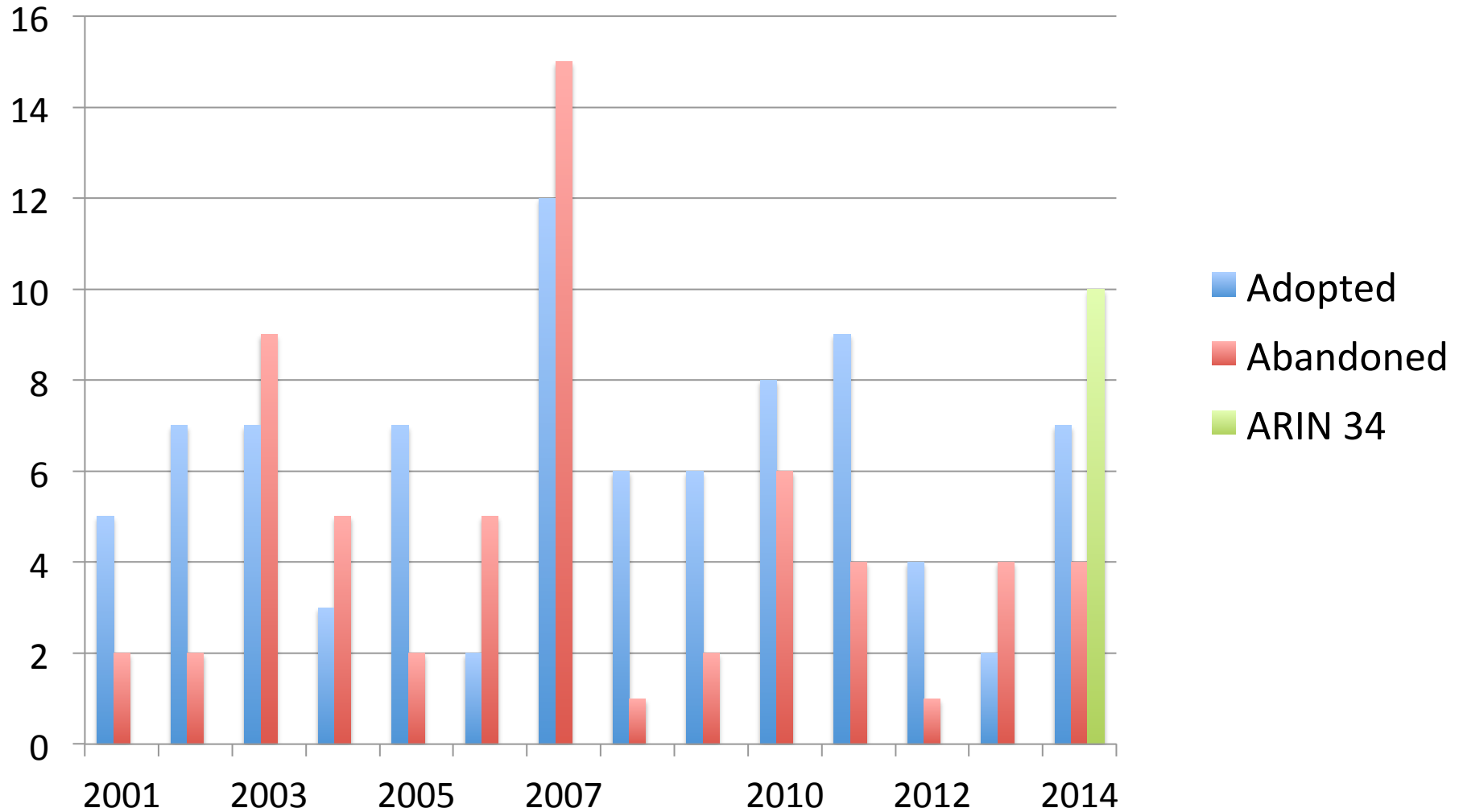
How to monitor and not be overwhelmed?

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: Constellation CDEF Second Floor

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

Tonight: **ARIN Social 7:00 PM – 11:00 PM**

Baltimore Museum of Industry
1415 Key Highway
Baltimore, MD

Busses depart the Hyatt in 15 minute increments (6:30, 6:45, 7:00).
Shuttles back to hotel start at 8:00 PM and run every 30 minutes

Friday: Constellation CDEF Second Floor

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 Guest Blog
- Members – Vote in annual elections
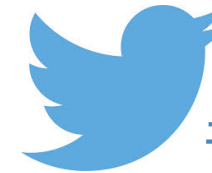
ARIN on Social Media

www.TeamARIN.net

www.facebook.com/TeamARIN

@TeamARIN

#ARIN34

www.gplus.to/TeamARIN

www.linkedin.com/company/ARIN

www.youtube.com/TeamARIN
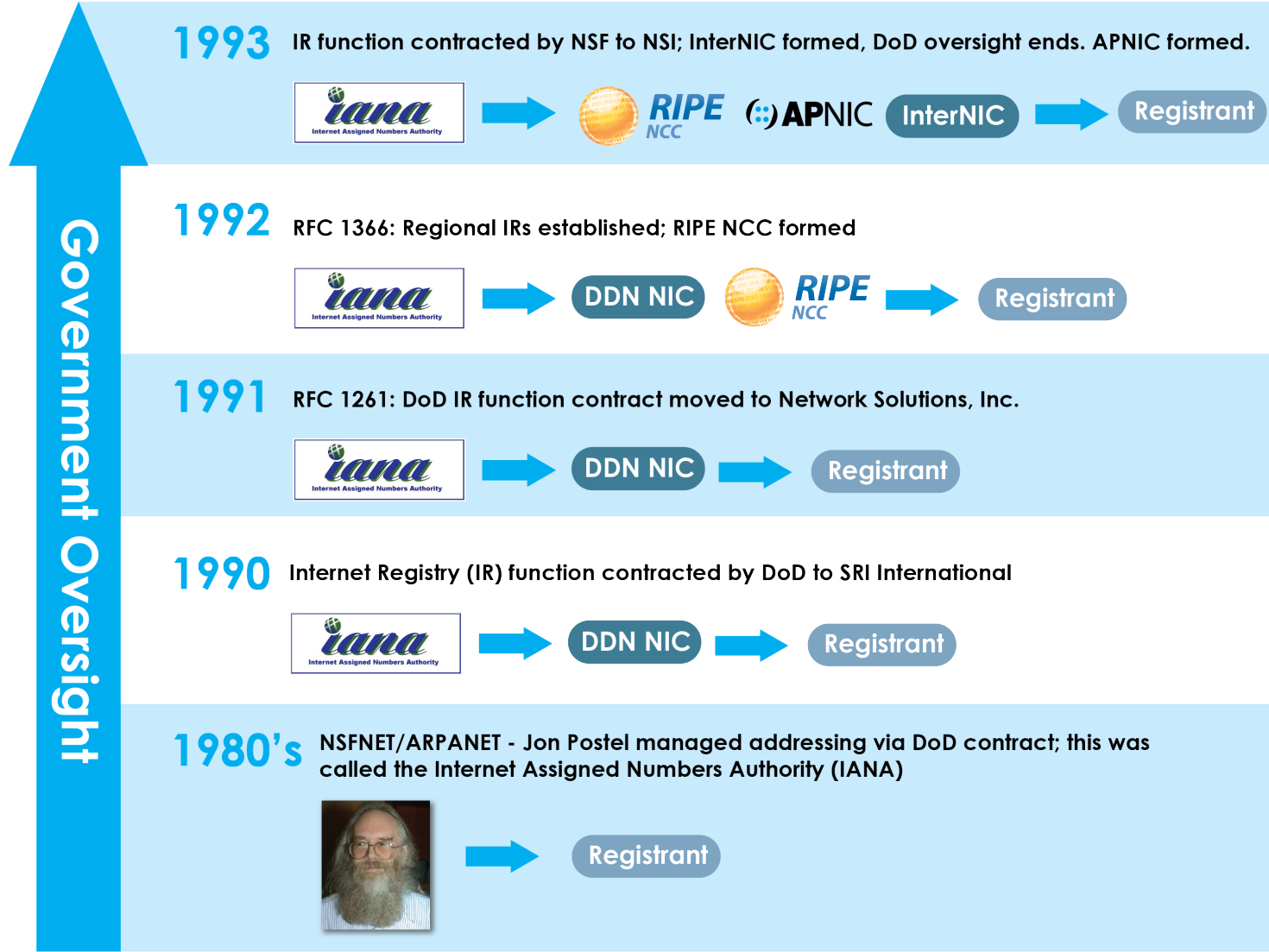
Don't Forget Your Survey

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

Be present in the meeting room this morning at the start for the drawing – you might win an External Battery Pack!

Questions?

Reference Material

Historical Timeline

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

IANA → RIPE NCC APNIC InterNIC → Registrant

1992   RFC 1366: Regional IRs established; RIPE NCC formed

IANA → DDN NIC RIPE NCC → Registrant

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

IANA → DDN NIC → Registrant

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

IANA → DDN NIC → Registrant

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

→ Registrant

Government Oversight

Historical Timeline