



Getting to Know ARIN

Ray Plzak
President & CEO

- **The RIR System**
 - Where did the RIRs come from?
 - Where do they fit in the global Internet community?
 - What does an RIR look like?
 - How does an RIR manage IP address space?
- **About ARIN**
 - Organization & Structure
 - Policy Development Process
 - Interacting with ARIN
- **About the Public Policy & Members Meetings**



The RIR System



Where did the RIRs
Come From?

Where Do They Fit
In The
Global Internet
Community?

In The Beginning



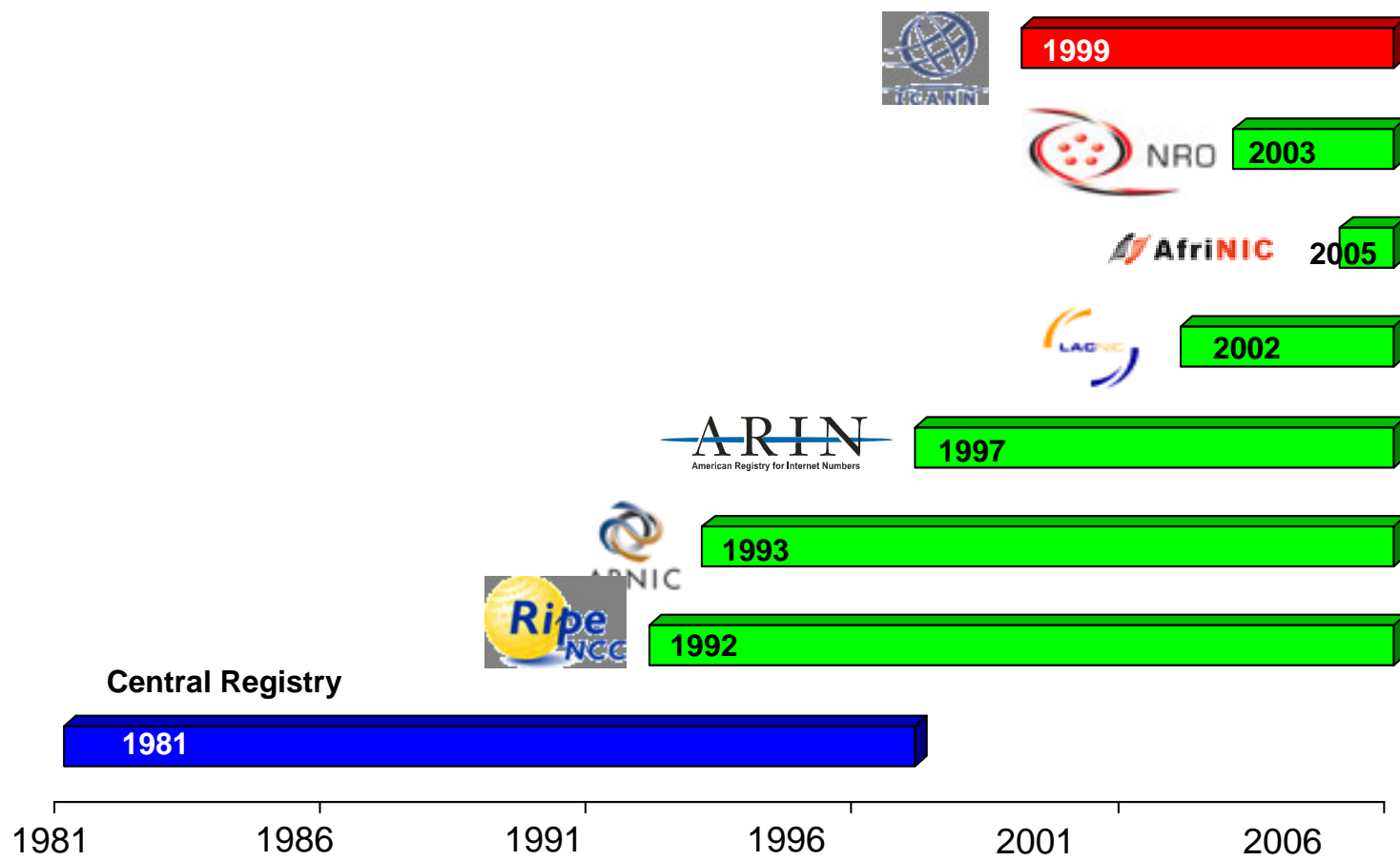
**RFC 790
1981**



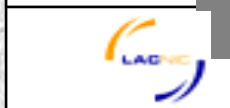
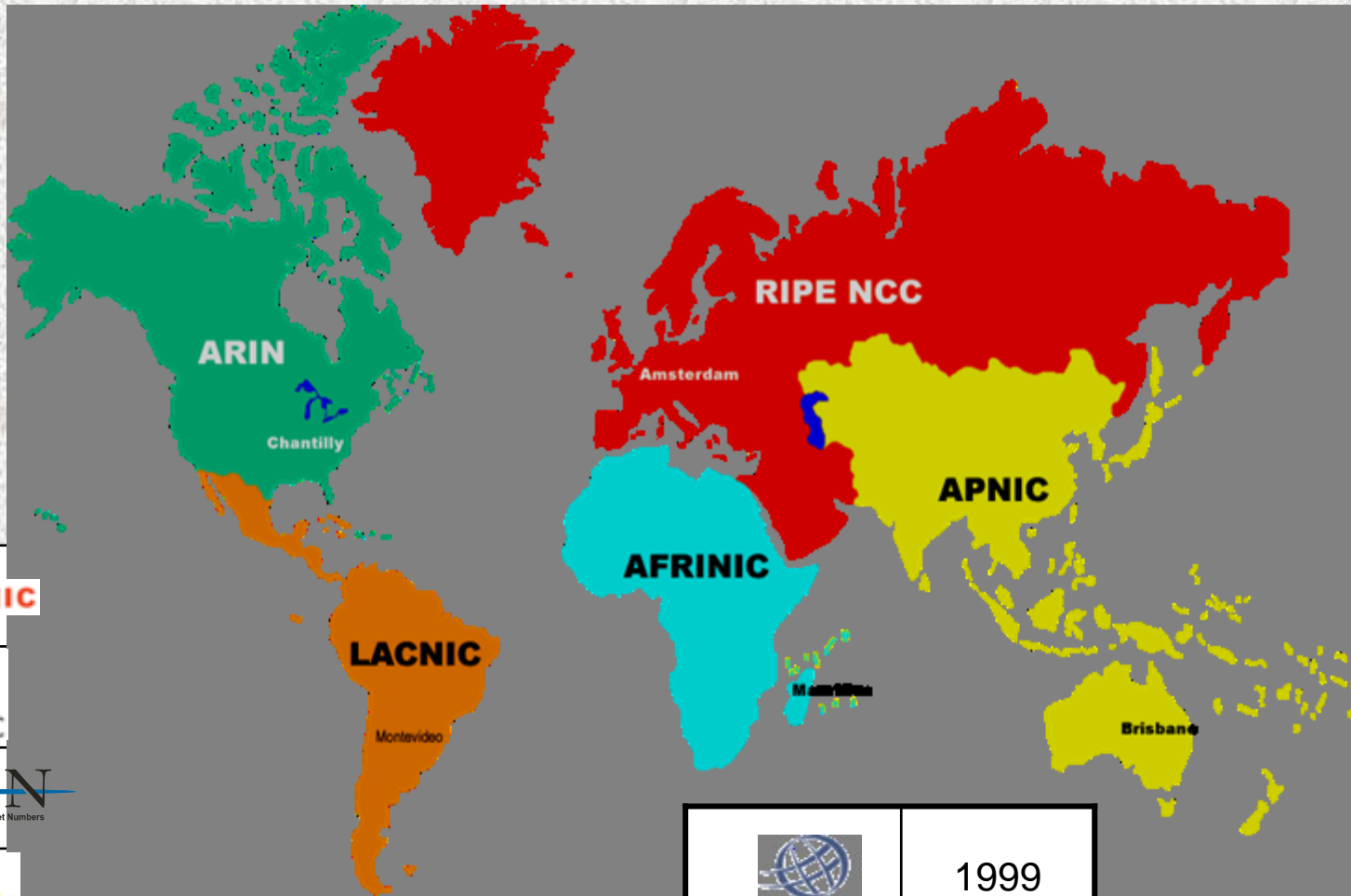
“The assignment of numbers is also handled by Jon.

If you are developing a protocol or application that will require the use of a link, socket, port, protocol, or network number ***please contact Jon to receive a number assignment.***”

RIR System Evolution



RIR Service Regions



2002

1992



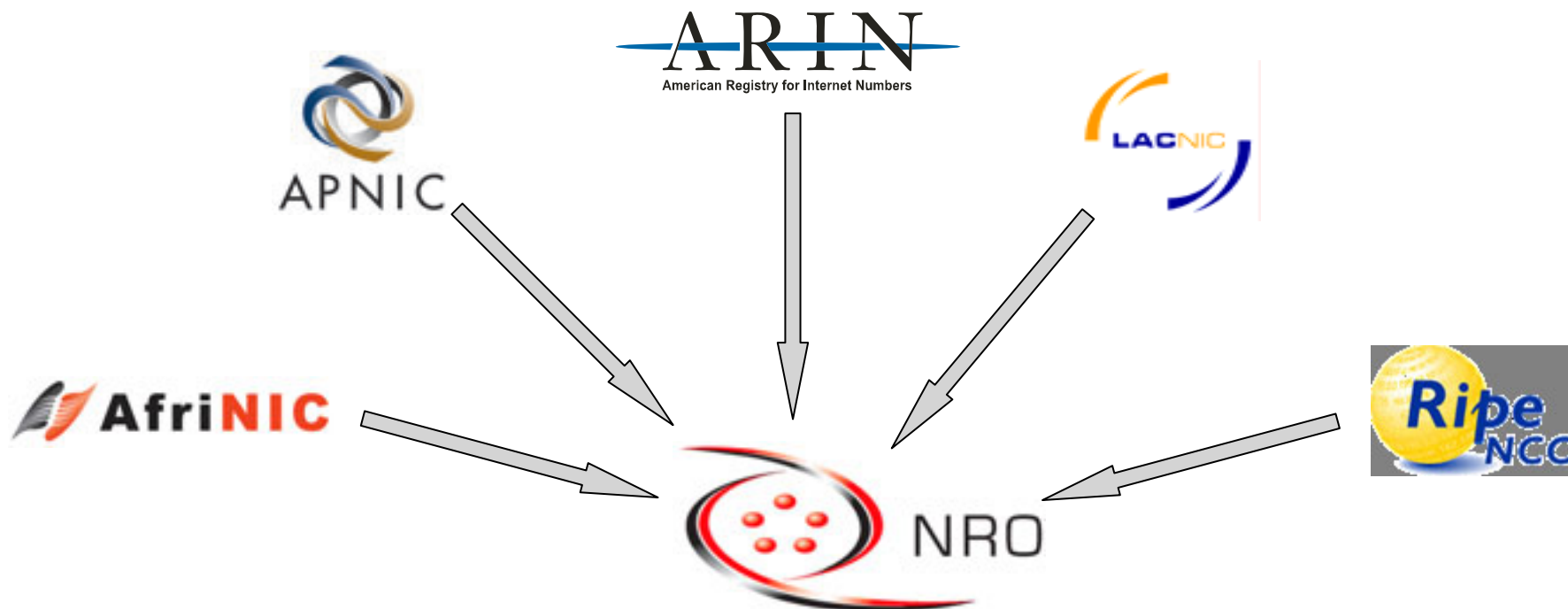
1999



2003

ARIN Number Resource Organization

24 October 2003

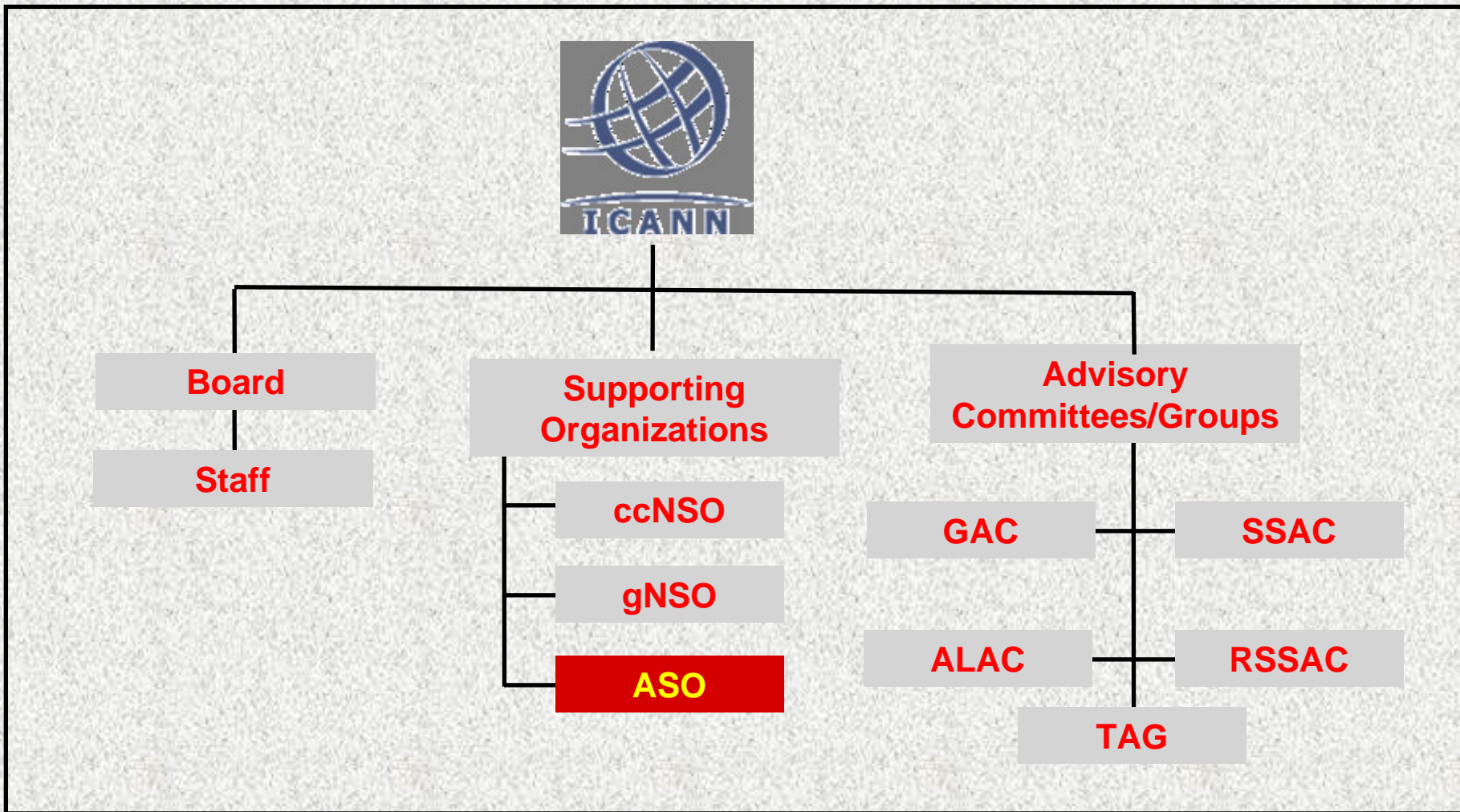


Formed by the Regional Internet Registries to formalize their cooperative efforts, the NRO exists to protect the unallocated Number Resource pool, to promote and protect the bottom up policy development process, and to act as a focal point for Internet community input into the RIR system.

NRO Activities

	<ul style="list-style-type: none">• Communications CG• Engineering CG
	<ul style="list-style-type: none">• GAC Workshops• ASO funding• ASO Secretariat• ICANN budget
	<ul style="list-style-type: none">• PREPCOM 3• Tunis Summit• Tunis Summit Pavilion

Internet Corporation for Assigned Names and Numbers





Internet Corporation for Assigned Names and Numbers

Mission	Structure	Organization
<ul style="list-style-type: none">• Coordinate Internet system of Unique Identifiers	<ul style="list-style-type: none">• Non Profit• Self-Regulatory	<ul style="list-style-type: none">• Supporting Orgs<ul style="list-style-type: none">– ccNSO– gNSO– ASO• Advisory Cmtes

ASO AC

Address Supporting Organization
Address Council

Who is it?	<ul style="list-style-type: none">• The NRO Numbers Council
What is it?	<ul style="list-style-type: none">• Addressing Policy Advisory Body
How is it Organized?	<ul style="list-style-type: none">• 15 Members• RIR & ICANN Observers
What Does it Do?	<ul style="list-style-type: none">• Advise ICANN Board• Select ICANN Board Members (2)• Select ICANN NomCom member (1)

NRO Number Council

- Term – Three (3) years, staggered
- Responsibilities
 - Advise the NRO Executive Council on ratification of proposed global IP number resource allocation policies
 - Sit as members on the ICANN ASO Address Council and fulfill those duties

NRO Number Council

- Representatives from the ARIN Region
 - Two elected
 - **Louis Lee**
 - **Sanford George**
 - One appointed by the ARIN Board
 - **Lee Howard**



Links



<http://www.afrinic.net>



<http://www.apnic.net>



<http://www.arin.net>



<http://www.lacnic.net>



<http://www.ripe.net>



<http://www.nro.net>



<http://www.icann.org>



What does an RIR
Look Like?

RIR Structure

<p>Not For Profit</p>	<p>Membership Organization</p>	<p>Community Regulated</p>
<ul style="list-style-type: none"> • Fee for Services NOT Number Resources • 100% membership funded 	<ul style="list-style-type: none"> • Open • Broad-based <ul style="list-style-type: none"> – Private Sector – Public Sector – Civil Society 	<ul style="list-style-type: none"> • Community Developed Polices • Member Elected Executive Board • Open and transparent processes

RIR Services

<h2>Number Resources</h2>	<h2>Organization</h2>	<h2>Policy Development Process</h2>
<ul style="list-style-type: none"> • IP Address Allocation Assignment • ASN Assignment • Directory Services <ul style="list-style-type: none"> – WHOIS – IRR • DNS (reverse) 	<ul style="list-style-type: none"> • Elections • Meetings • Information Dissemination <ul style="list-style-type: none"> – Web Site – Newsletters – Round Tables • Training 	<ul style="list-style-type: none"> • Maintain e-mail discussion lists • Conduct public policy meetings • Publish policy documents



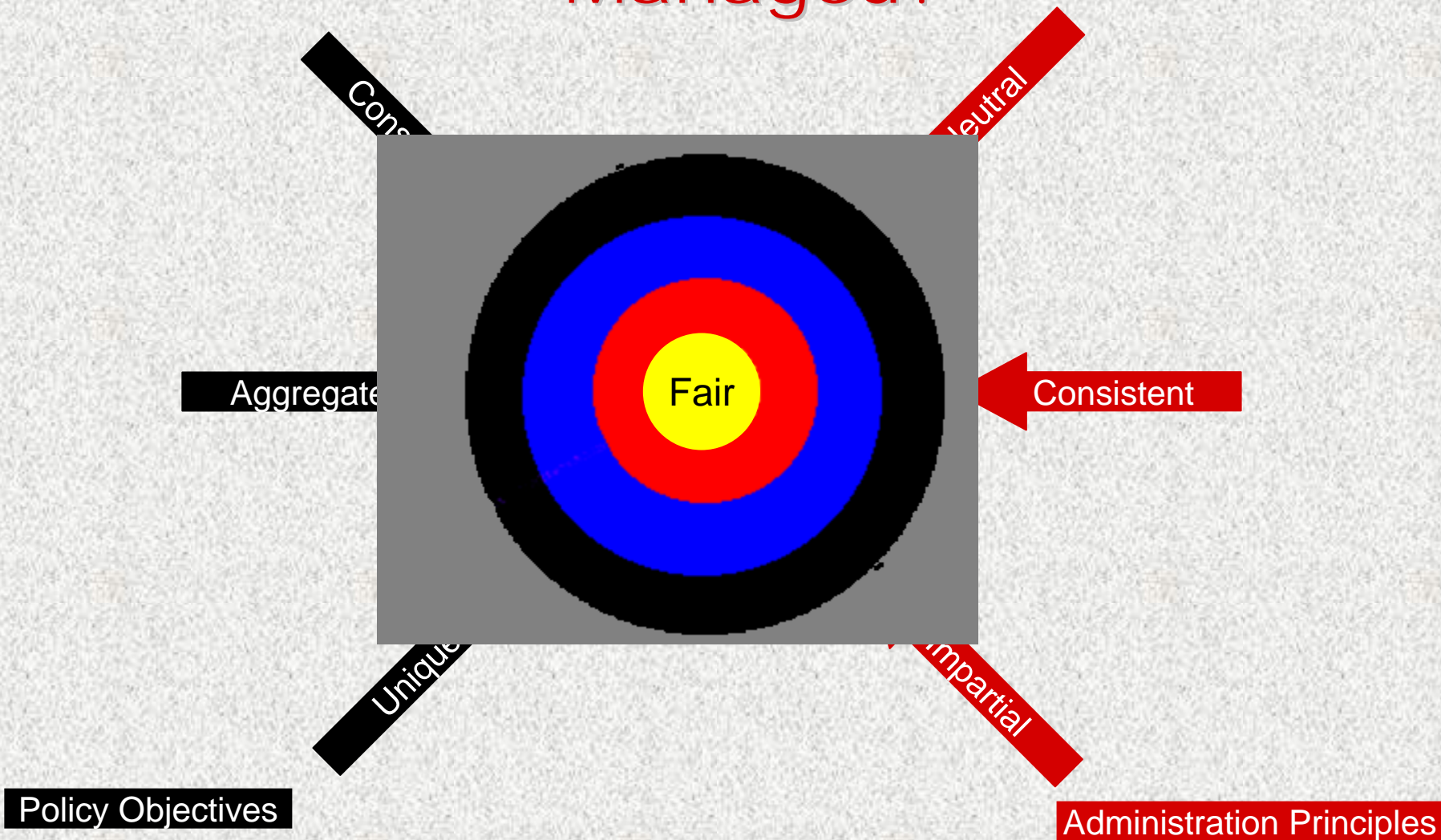
How does an RIR
Manage
IP Address Space?

Why Manage IP Address Space?

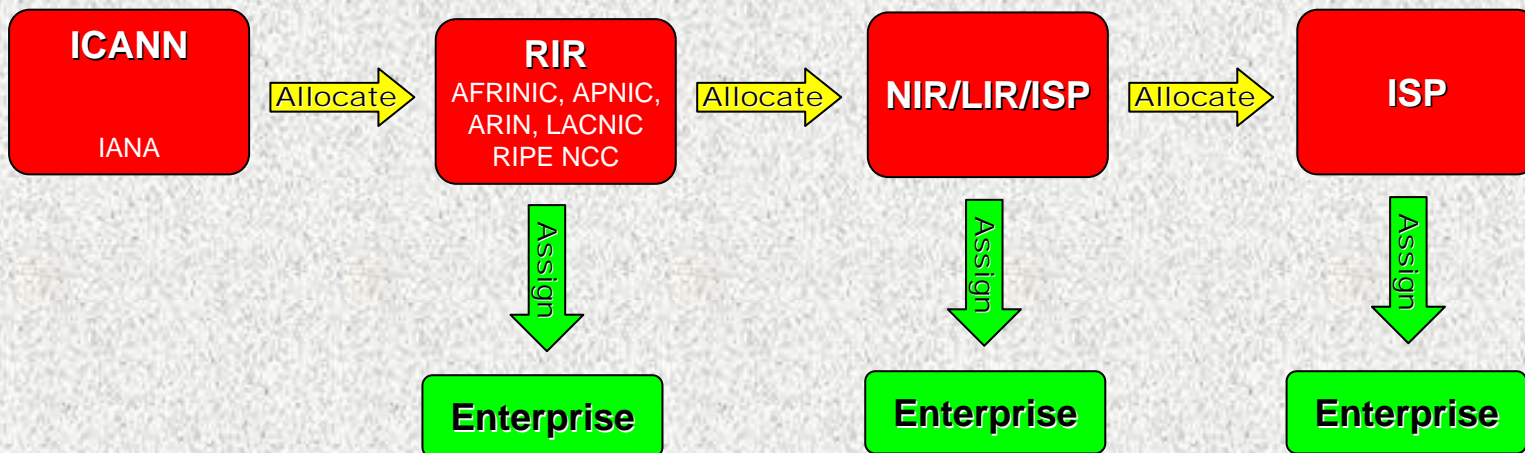
Address Space Constraints Require Good Stewardship

- Technical Requirements
 - Defined Characteristics Create a Finite Common Resource
 - Network Topology Realities
- Prevent Capricious Consumption
- Ensure Fair Distribution to All

How Are IP Addresses Managed?

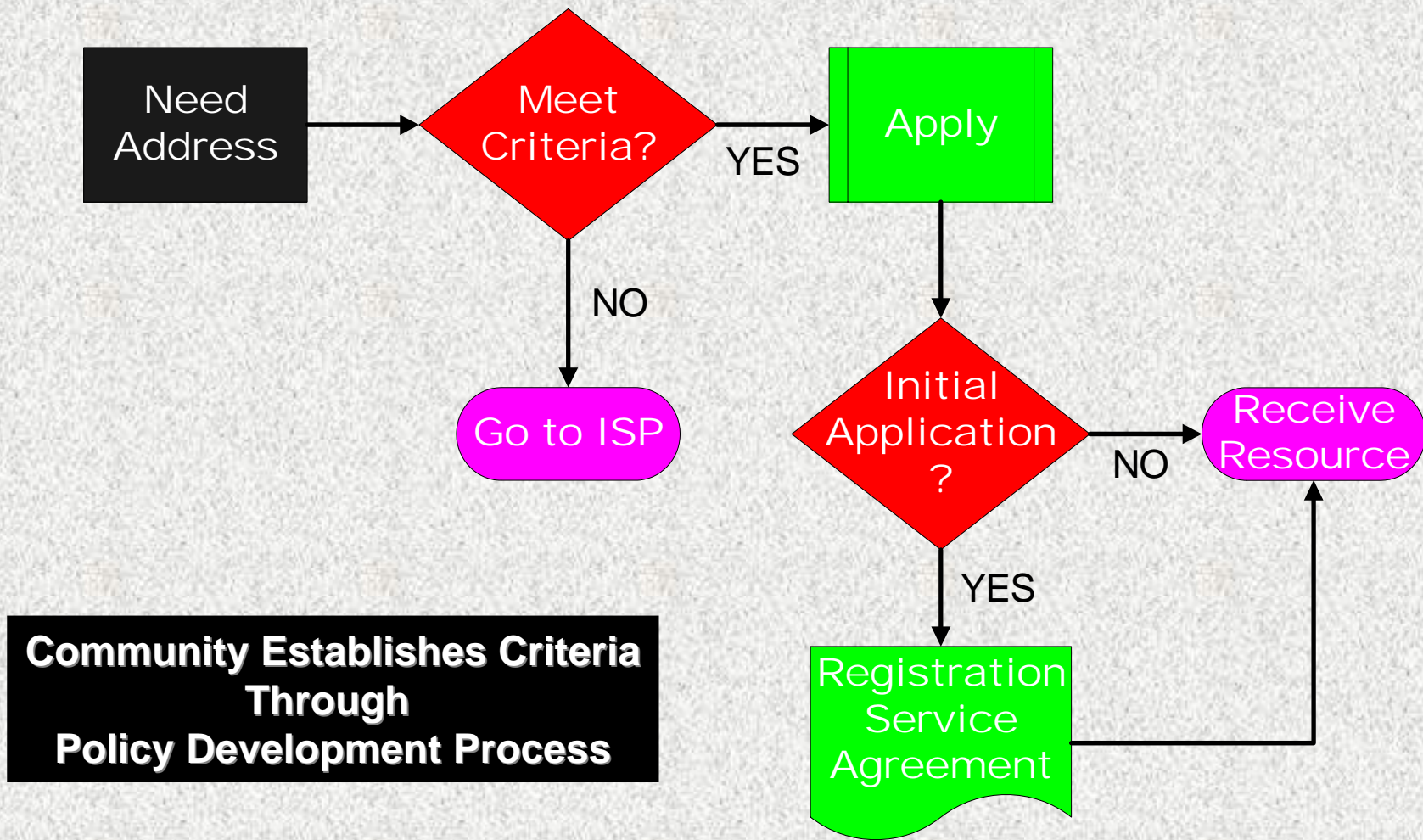


Who Are The Provisioning Organizations?



Provision	Allocate or Assign Number Resource
Allocate	Provide Number Resource to Registry or Service Provider
Assign	Provide Number Resource to Enterprise

How Are IP Addresses Provisioned?





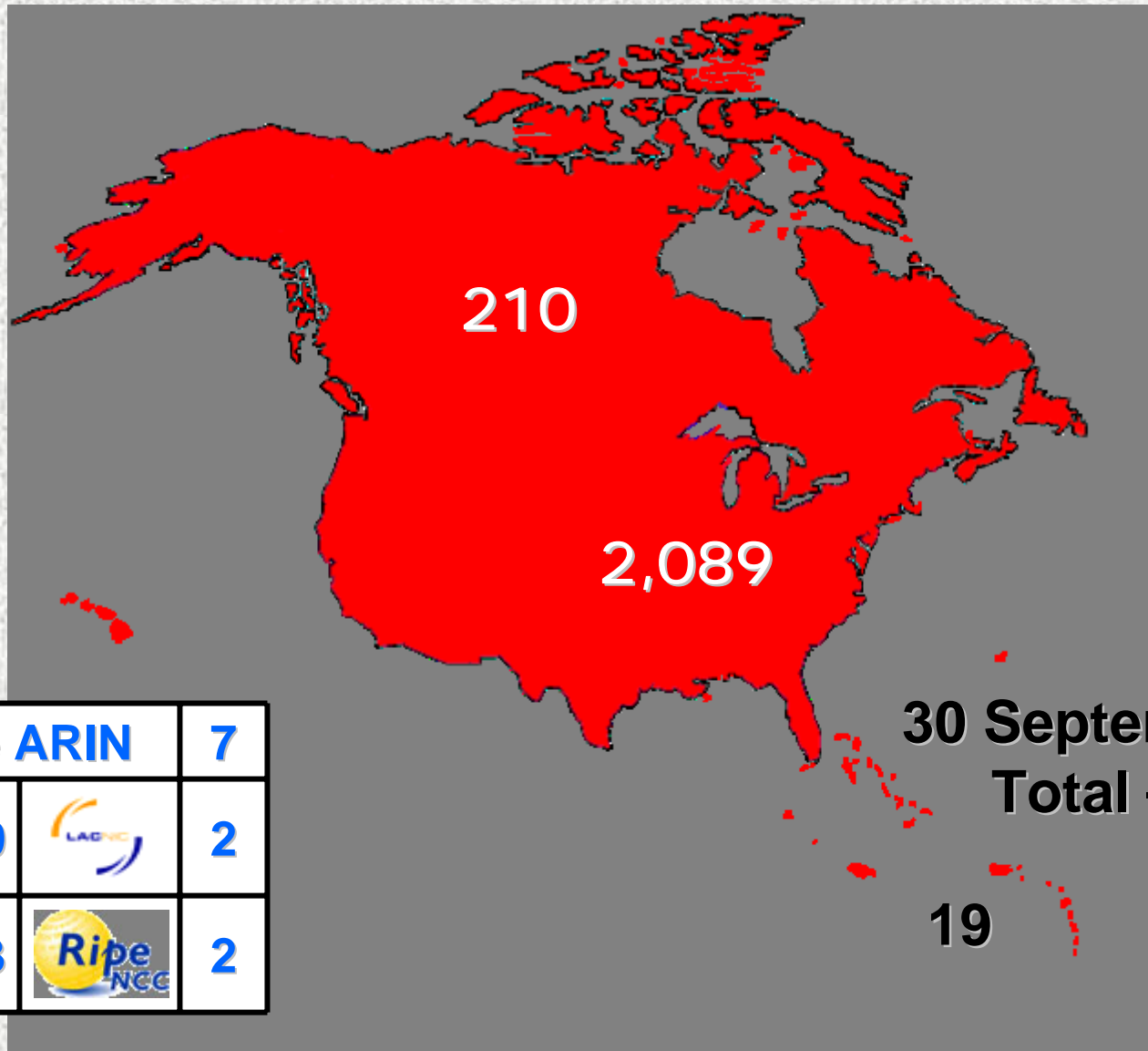
About ARIN

The logo for ARIN (American Registry for Internet Numbers) features the letters 'A', 'R', 'I', and 'N' in a large, black, serif font. A thick, blue horizontal line with pointed ends passes through the middle of the letters, creating a stylized 'ARIN'.

American Registry for Internet Numbers

"Applying the principles of stewardship, ARIN, a nonprofit corporation, allocates Internet Protocol resources; develops consensus-based policies; and facilitates the advancement of the Internet through information and educational outreach."

Membership



Outside ARIN		7
 AfrinIC	0	 2
 APNIC	3	 2

30 September 2005
Total - 2,325

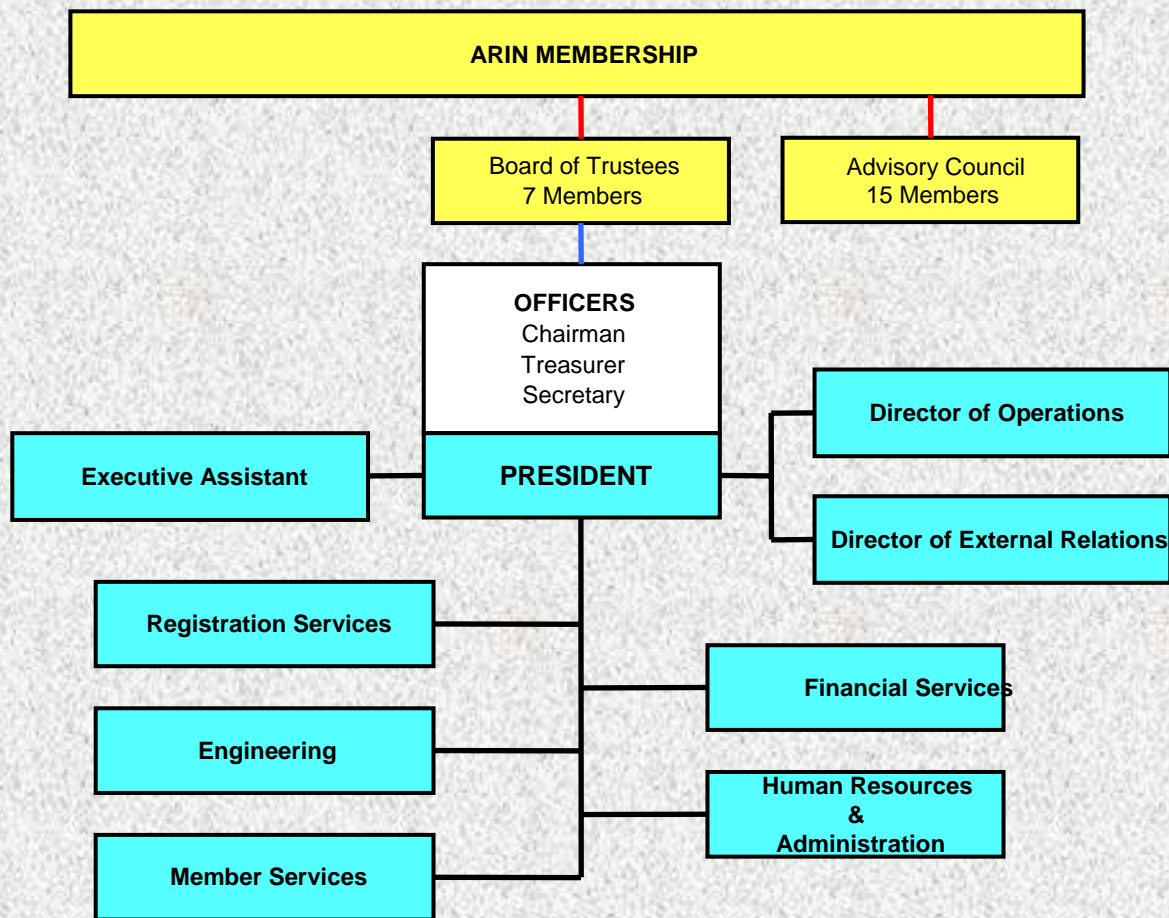
19

OPEN MEMBERSHIP

Two methods:

- **Complete a Membership Application Form**
Pay Annual Membership Fee
- **Receive IP Address Allocation Directly**
from ARIN
Pay Annual Service Fee

Organization & Staff



ARIN Board of Trustees

- **Elected by Members**
- **Term**
 - Three years
 - Staggered – 2 Trustees elected each year
- **Responsibilities**
 - Fiduciary
 - Policy ratification
 - Liability

MEMBERS
Scott Bradner – Secretary
David Conrad – Treasurer [Resigned]
John Curran - Chairman
Bill Manning
Ray Plzak – President & CEO
Paul Vixie
Bill Woodcock

ARIN Advisory Council

- **Elected by Members**
- **Term**
 - Three years
 - Staggered – 5 members elected each year
- **Responsibilities**
 - Advises ARIN Board
 - Forwards consensus-based policy proposals to the Board for ratification

Advisory Council








Ron da Silva, Chairman



Alec Peterson, Vice-Chairman

- Paul Andersen
- Marla Azinger
- Leo Bicknell
- Bill Darte
- Andrew Dul
- Mark Kosters
- Lea Roberts
- Alex Rubenstein
- Robert Seastrom
- John Sweeting
- Stacy Taylor
- Cathy Wittbrodt
- Suzanne Woolf

Department Activity

 <p>RSD</p>	<ul style="list-style-type: none"> • Reclamation [451 ASN] • Robust Verification • Lame Delegation • New Templates
 <p>MSD</p>	<ul style="list-style-type: none"> • ARIN XVI • Election System • Contact Database • Outreach Support System
 <p>FSD</p>	<ul style="list-style-type: none"> • Procurement System • Disbursement System • Over Due Accounts
 <p>ENGR</p>	<ul style="list-style-type: none"> • Ticket System • Credit Card System • Voting System • RS/MS/FS DB Integration • Secure Routing
 <p>HR</p>	<ul style="list-style-type: none"> • Position Inventory • Salary Survey • MINDEX Training



Interacting With ARIN

ARIN Services

Registration Services	Member Services	Financial Services
<ul style="list-style-type: none">• Registration Help Desk• IP Address Allocation Assignment• ASN Assignment• Directory Services<ul style="list-style-type: none">– WHOIS– IRR• DNS (reverse)	<ul style="list-style-type: none">• Elections• Meetings• Information Dissemination<ul style="list-style-type: none">– Web Site– Newsletters– Annual Report• Training• Maintain e-mail discussion lists• Publish policy documents	<ul style="list-style-type: none">• Billing Help Desk• Accounting• Financial Reports

- Registration Services
- Policy
 - Current policies
 - Policy proposals
- Meetings
 - Past minutes
 - Future meetings



- WHOIS
- Training
 - WHOIS CBT
 - FAQs
 - Process Flowcharts
- Membership
- Statistics

Contact Information

- Registration Services Help Desk
 - (703) 227-0660
 - Monday – Friday, 7AM – 7PM US Eastern time
- Hostmaster E-mail
 - hostmaster@arin.net
 - Ticketing system for request/inquiry tracking
- Billing Help Desk
 - (703) 227-9886
 - billing@arin.net
 - Monday - Friday, 9AM-5PM US Eastern Time

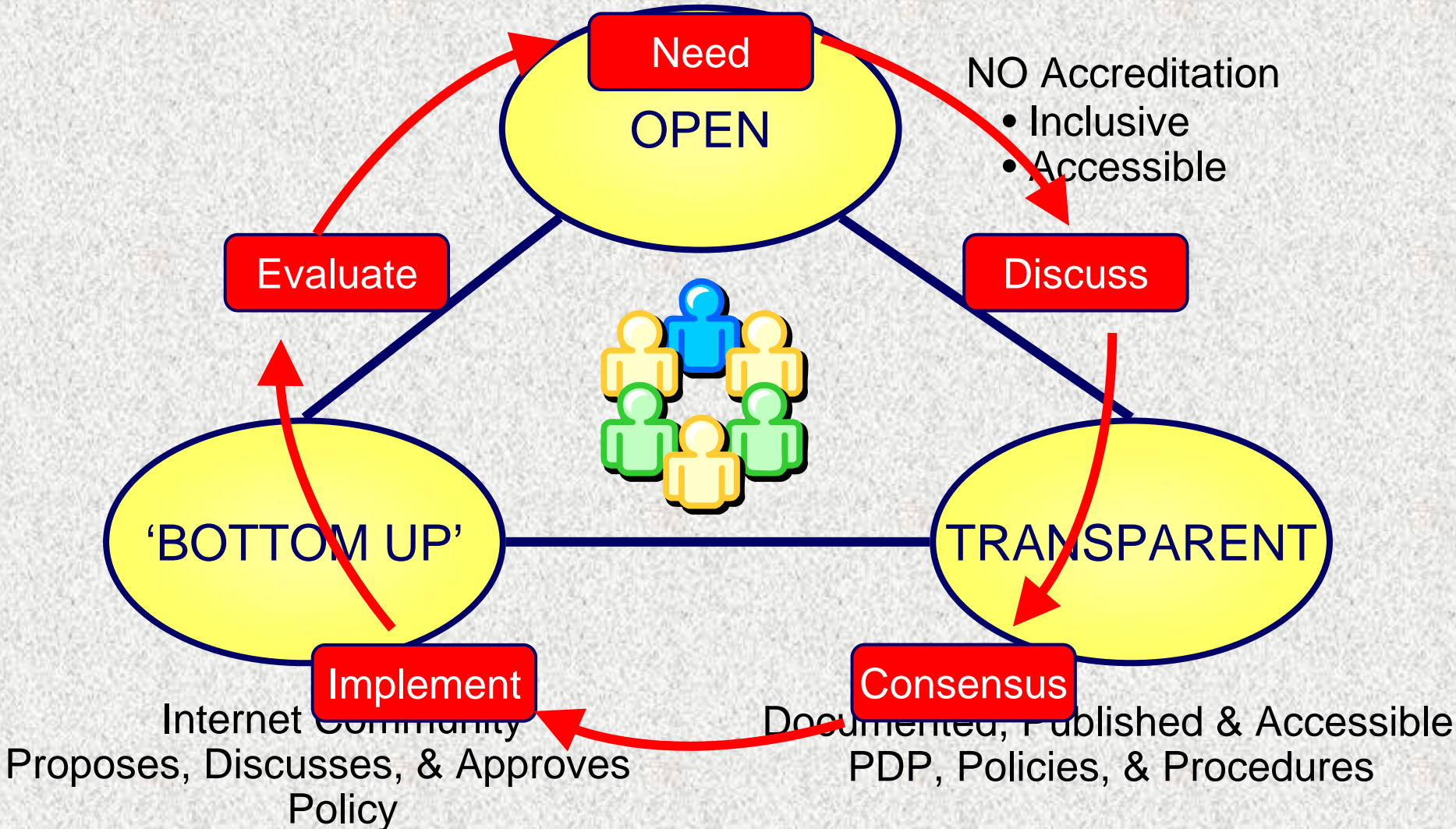


About Public Policy & Members Meetings

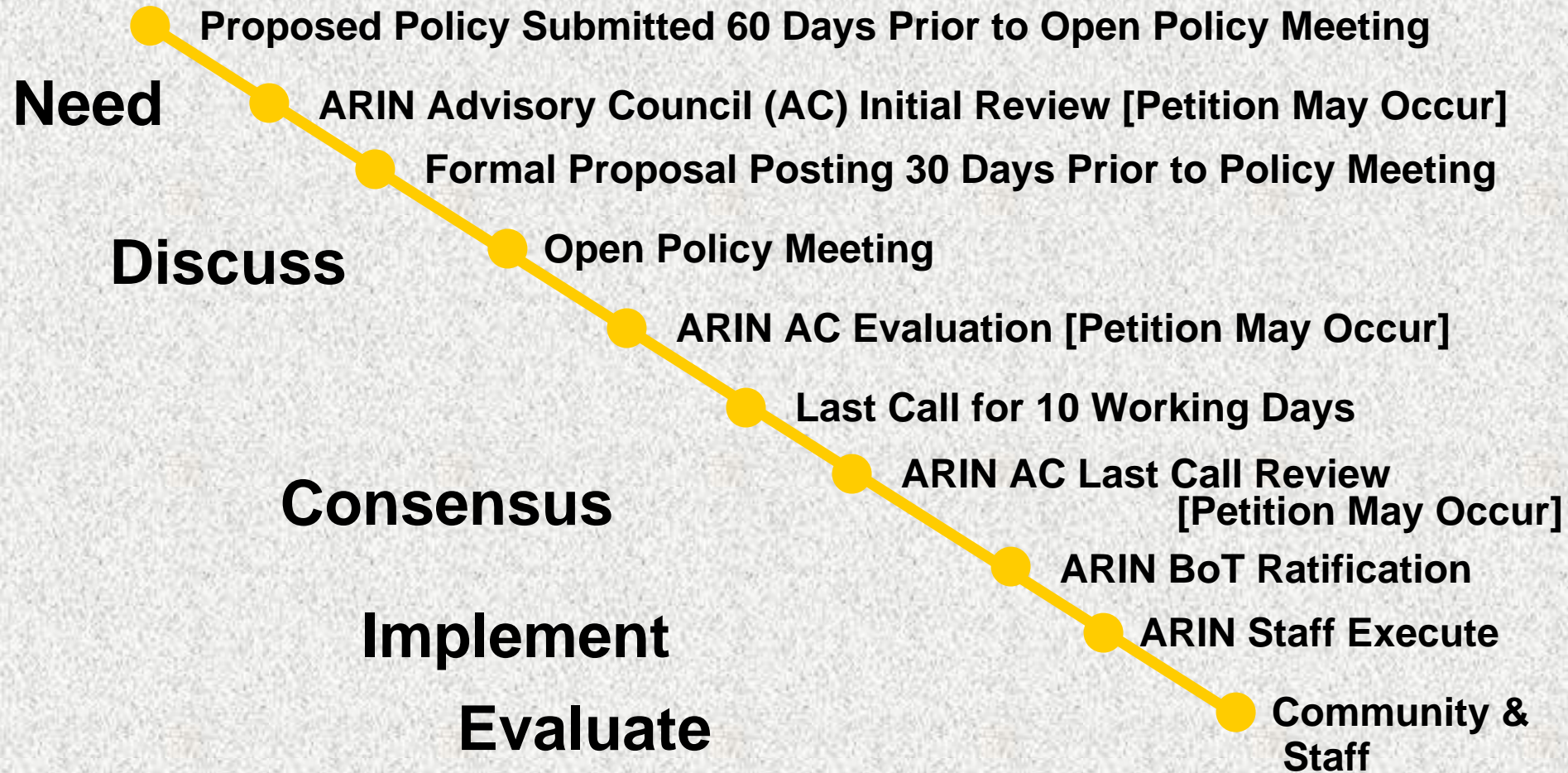


Policy Development Process

RIR Policy Development Process



ARIN Internet Resource Policy Evaluation Process



- **ARIN Number Resource Policy Manual:**
<http://www.arin.net/policy/index.html>
- **Internet Resource Policy Evaluation Process**
<http://www.arin.net/policy/ipep.html>

ARIN XVI Policy Issues



Issue 1	Allocation of IPv4 Address Space
Issue 2	Allocation of IPv6 Address Space
Issue 3	Directory Services
Issue 4	NRPM Edits

ARIN XVI

Policy Issue 1

Allocation of IPv4 Address Space

2005-6	IPv4 Micro-allocations for Anycast Services
2005-7	Rationalize Multi-Homing Definition and Requirement

ARIN XVI

Policy Issue 2

Allocation of IPv6 Address Space	
2005-1	Provider-independent IPv6 Assignments for End Sites
2005-5	IPv6 HD ratio
2005-8	Proposal to amend ARIN IPv6 assignment and utilisation requirement

ARIN XVI Policy Issue 3

Directory Services

2005-2

Directory Services Overhaul

ARIN XVI Policy Issue 4

Number Resource Policy Manual (NRPM) Edits

2005-4

AfriNIC Recognition Policy

ARIN XVI

Policy Discussions

2005-1	Provider-independent IPv6 Assignments for End Sites
2005-2	Directory Services Overhaul
2005-4	AfriNIC Recognition Policy
2005-5	IPv6 HD ratio
2005-6	IPv4 Micro-allocations for Anycast Services
2005-7	Rationalize Multi-Homing Definition and Requirement
2005-8	Proposal to amend ARIN IPv6 assignment and utilisation requirement

Get The Most From This Meeting

By:

- **Participating**
- **Meeting your peers and ARIN staff**
- **Visiting the RSD help desk**
- **Visiting the Billing Help Desk**
- **Completing the meeting survey**



Thank You