



NRO Status Report

AfriNIC-4

16 May 2006

Prepared by
Regional Internet Registries



Address Supporting Organization

Overview



- **Organisation**
- **Internet Number Resource Status**
- **Policy Discussions**

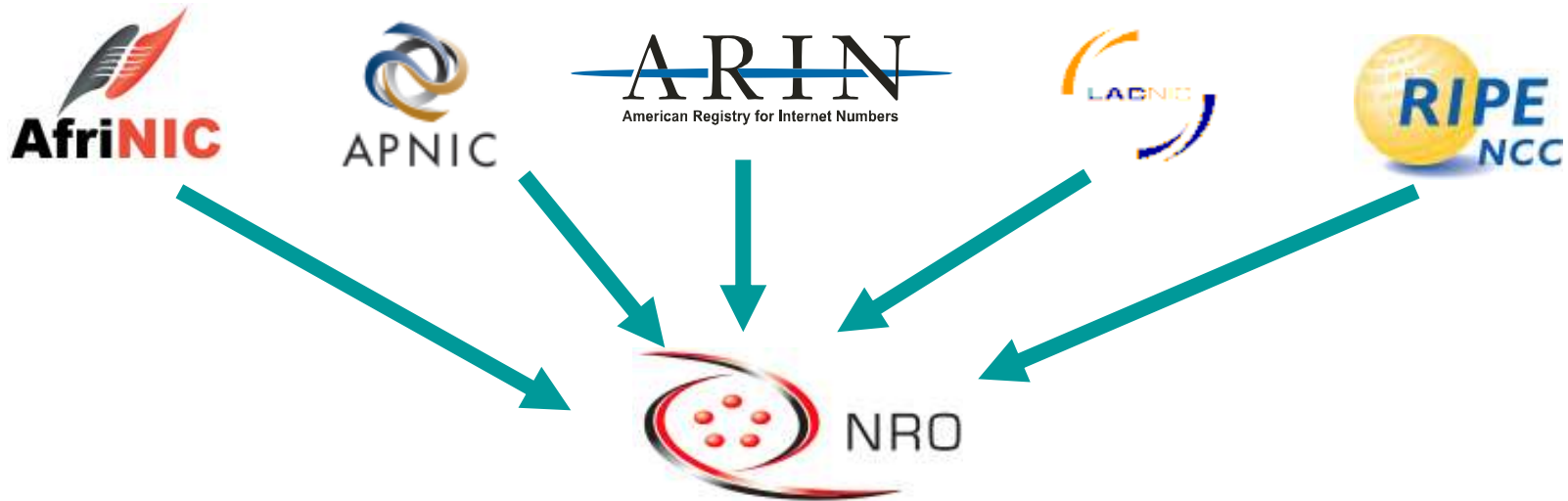


ORGANISATION

Address Supporting Organization

Number Resource Organisation

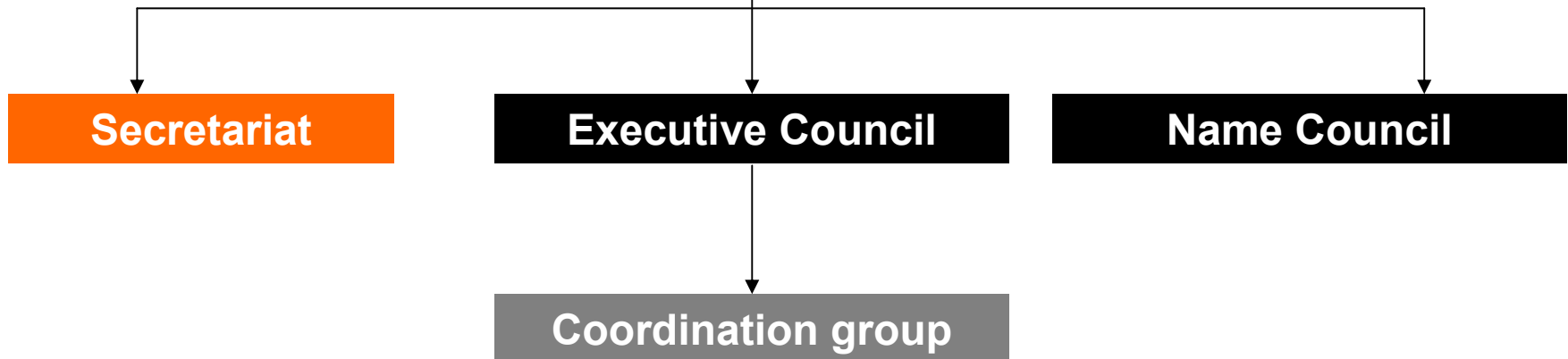
24 October 2004



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.

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Structure



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Executive council



LACNIC	Raul Echeberia	Chair
ARIN	Ray Plzak	Secretary
APNIC	Paul Wilson	Treasurer
AFRINIC	Adiel Akplogan	Member
RIPE NCC	Axel Pawlik	Member

The offices rotate every year

Meetings



- **The EC meets periodically by periodically by teleconference and/or face to face (10 meetings in 2005)**
- **Minutes are available www.nro.net**

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21 October 2004



5 RIRs

8269 NIR, LIR, ISP

The NRO Fulfils The:

- Role
- Responsibilities
- Functions

Of the ICANN ASO

Address Council



Who is it?	<ul style="list-style-type: none">• The NRO Number Council
What is it?	<ul style="list-style-type: none">• Number Resource Policy Advisory Body
How is it Organised?	<ul style="list-style-type: none">• 15 Members [3 From Each Region]<ul style="list-style-type: none">– 2 Elected at Large– 1 Appointed by RIR Board• RIR & ICANN Observers
Term of Office?	<ul style="list-style-type: none">• Three (3) years, staggered
What Does it Do?	<ul style="list-style-type: none">• Advise ICANN Board• Select ICANN Board Members (2)• Select ICANN NomCom member (1)

Address Council



REGION	Member
 <p>Afrinic</p>	<p>Sylvia Kezengwa Jean Robert Hountomey Alan Barrett*</p>
 <p>APNIC</p>	<p>Hyun-joon Kwon Kenny Huang Mao Wei*</p>
 <p>ARIN American Registry for Internet Numbers</p>	<p>Louis Lee Sanford George Martin Hannigan*</p>
 <p>LACNIC</p>	<p>Sebastian Bellagamba [Chair] Francisco Obispo Hartmut Glaser*</p>
 <p>RIPE NCC</p>	<p>Sabine Jaume Hans Petter Holen Wilfried Woeber*</p>

* Appointed by RIR Board

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Coordination groupes



- **Communication**
 - **Chair: Susan Hamlin**

- **Engineering**
 - **Chair: Ginny Listman**

- **Legal Team**
 - **Coordinator : Steve Ryan**

NRO Current main topics



- **Procedural Issue**
 - Procedures for ASO
 - Coordination Groups' Charters
- **Internet Governance**
 - WSIS Follow-up
 - IGF/IGF
 - ITU liaison
 - Relationship with the ICANN GAC
 - Certification Issues
- **Harmonization of IP allocation practices**
- **NRO Incorporation**
- **IANA Services Contract**

Links



<http://www.afrinic.net>



APNIC

<http://www.apnic.net>



<http://www.lacnic.net>



<http://www.arin.net>



<http://www.ripe.net>

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ICANN Board Members

Appointed by ASO AC



Name	Term
Raimundo Beca	MAY 2004 – MAY 2007
Mouhamet Diop	JUN 2003 – JUN 2006

Dave Wodelet has been recently elected by the NRO NC, in replacement of Mouhamet Diop which mandate is ending soon.



AC Activites

- **Apprise ICANN Staff of Global Policy Proposal status**
- **Internal processes**
- **Selection of ICANN Board Member**

AC Meetings



- **Telephonic – Monthly**
- **Physical**
 - **APR 2006 – Istanbul [RIPE 52]**
 - **DEC 2006 – São Paulo [ICANN]**

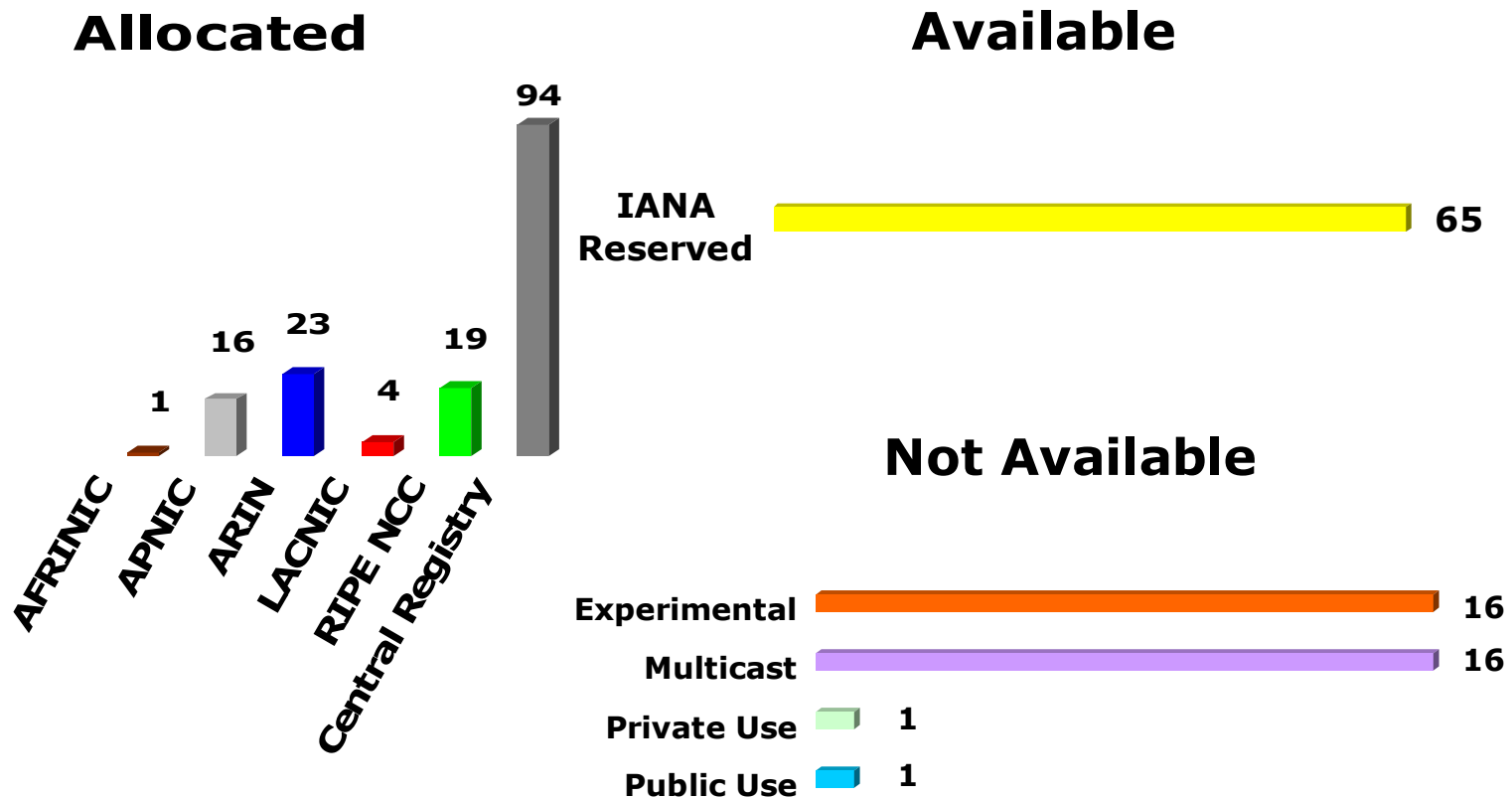


Internet Number Resource Status

As of 31 December 2005

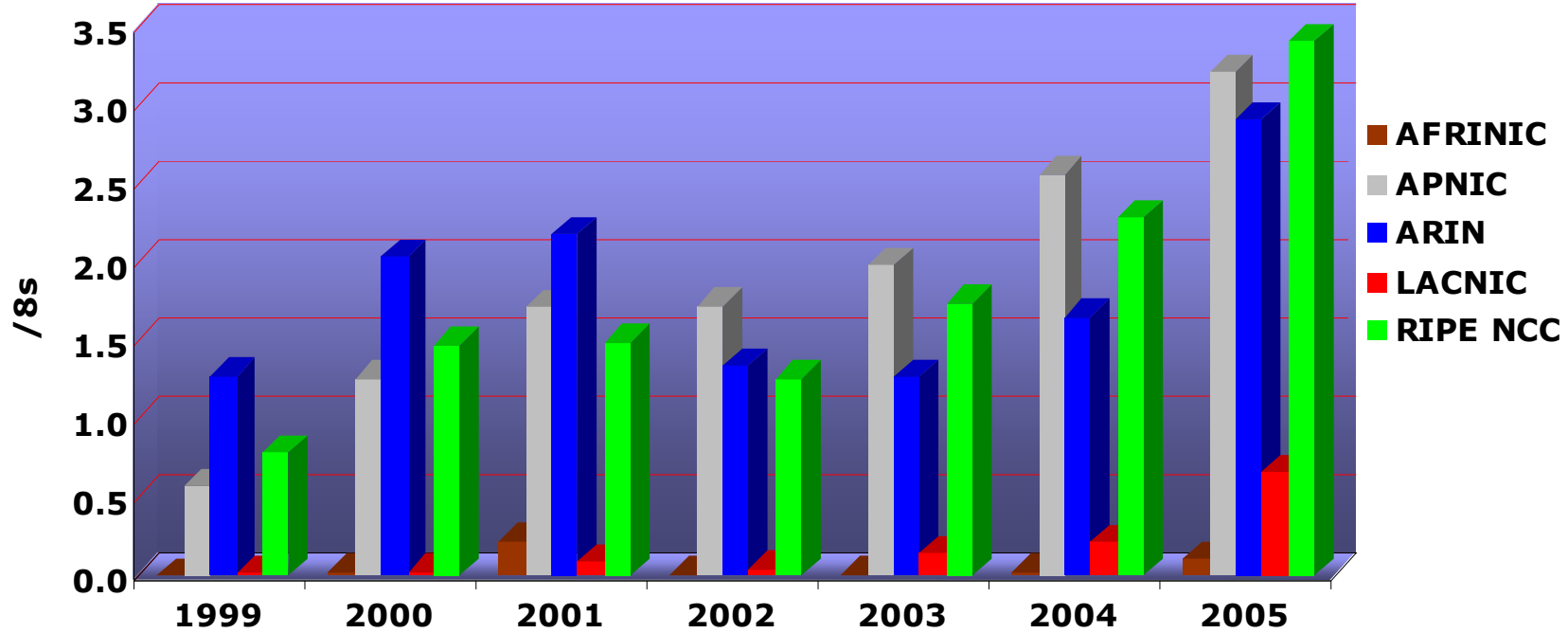
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IPv4 /8 Address Space Status



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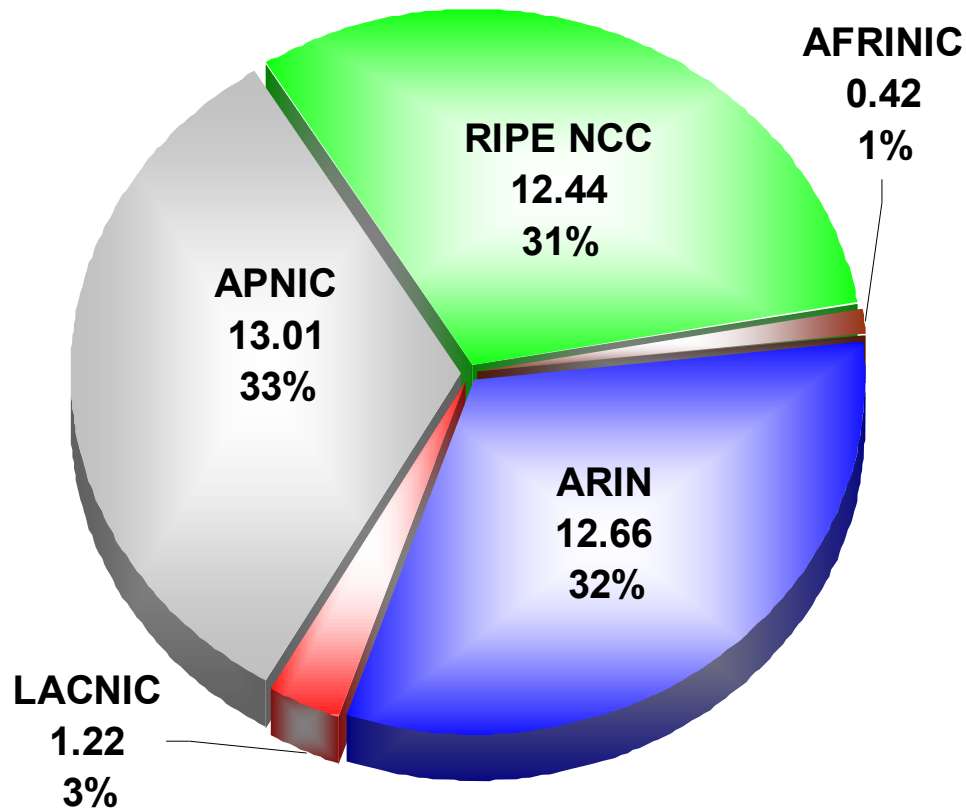
IPv4 Allocations from RIRs to LIRs/ISPs Yearly Comparison



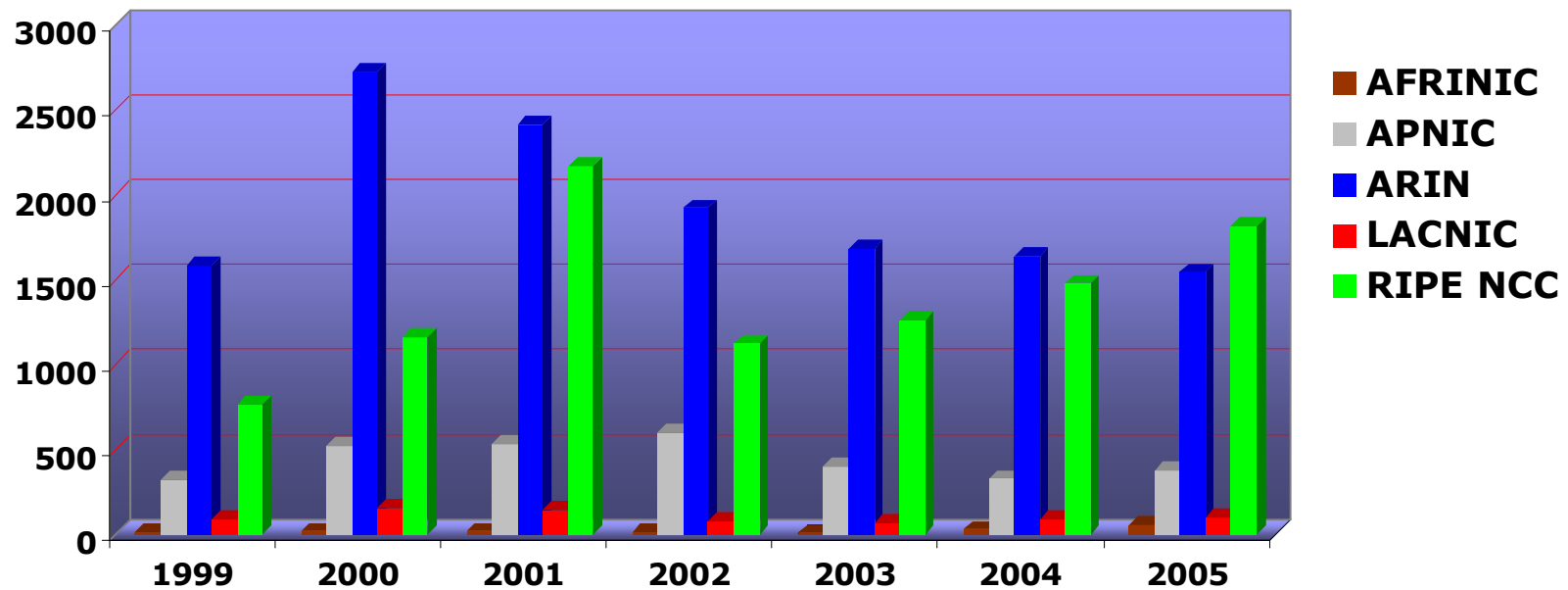
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IPv4 Allocations RIRs to LIRs/ISPs

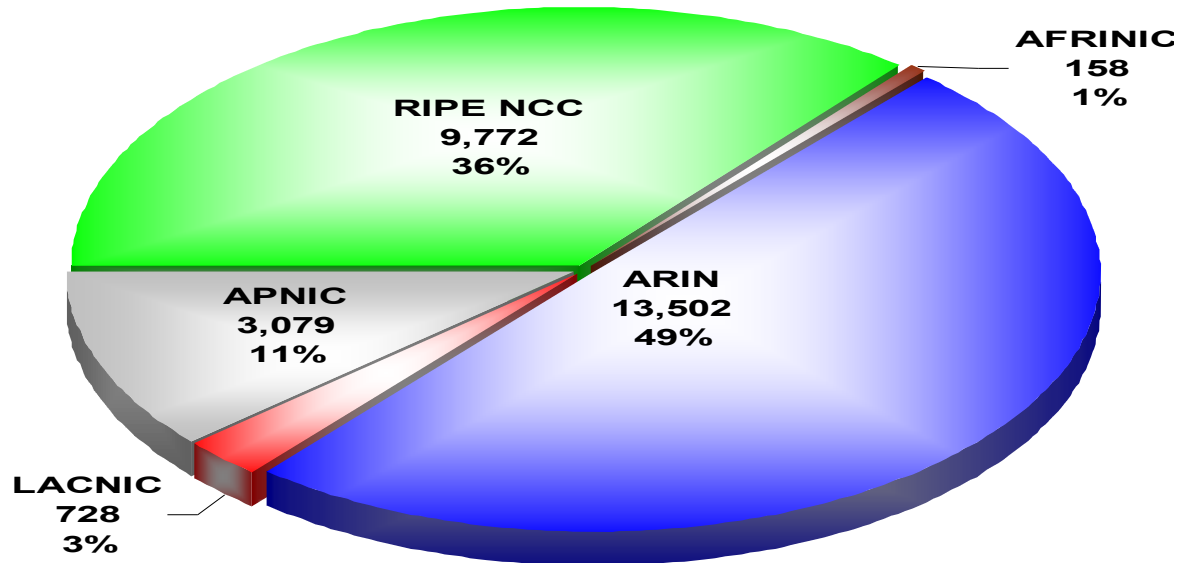
Cumulative Total (Jan 1999 – Dec 2005)



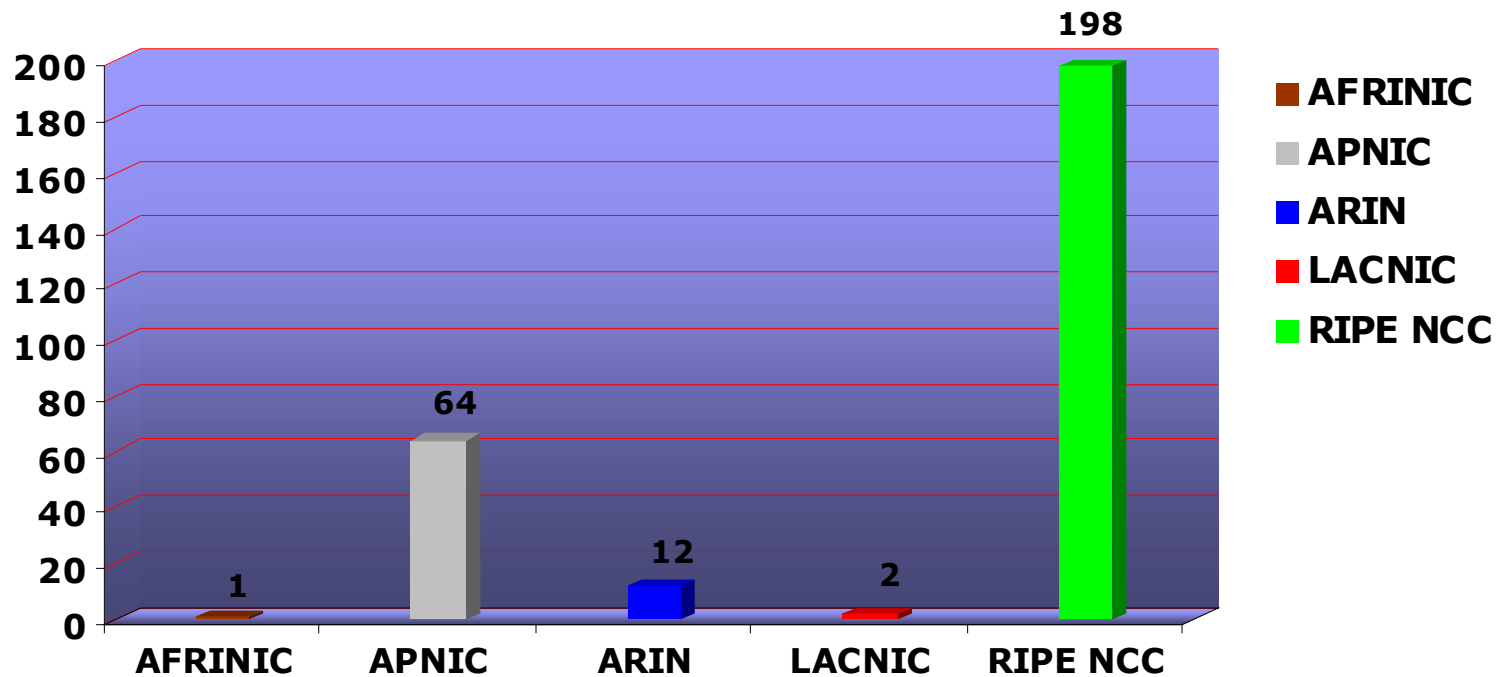
ASN Assignments RIRs to LIRs/ISPs Yearly Comparison



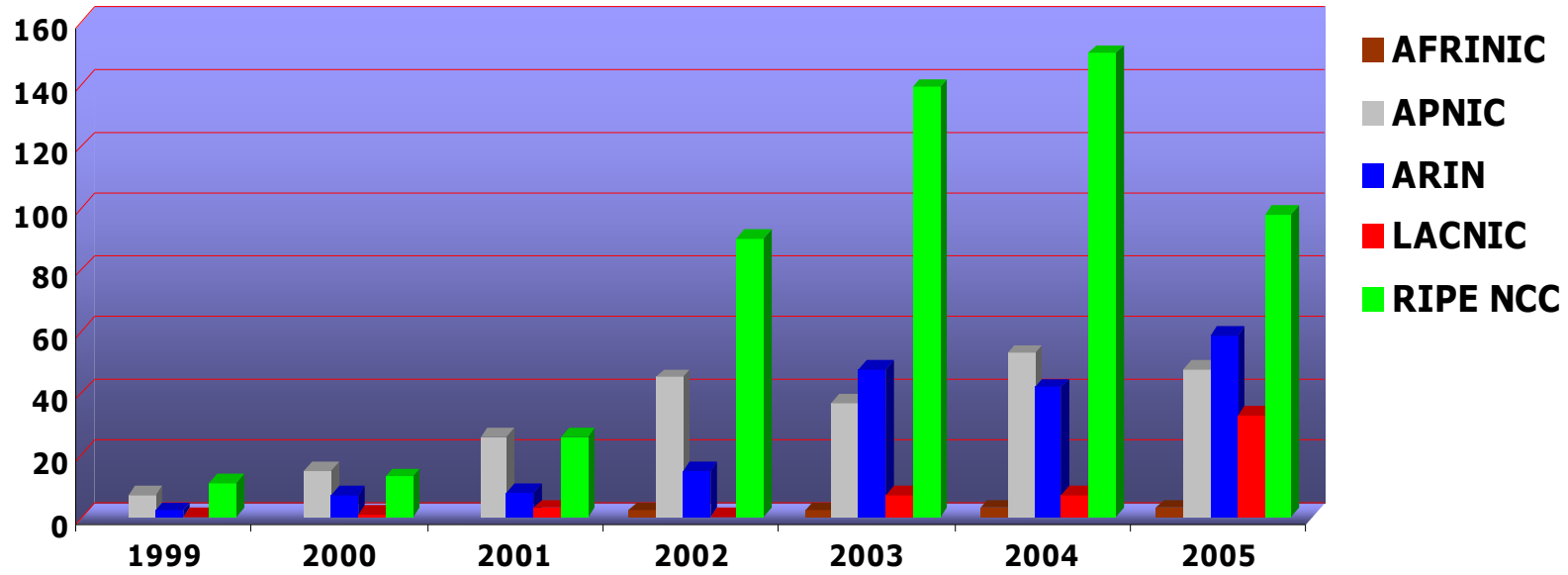
ASN Assignments RIRs to LIRs/ISPs Cumulative Total (Jan 1999 – Dec 2005)



IANA IPv6 Allocations to RIRs (no of /23s)

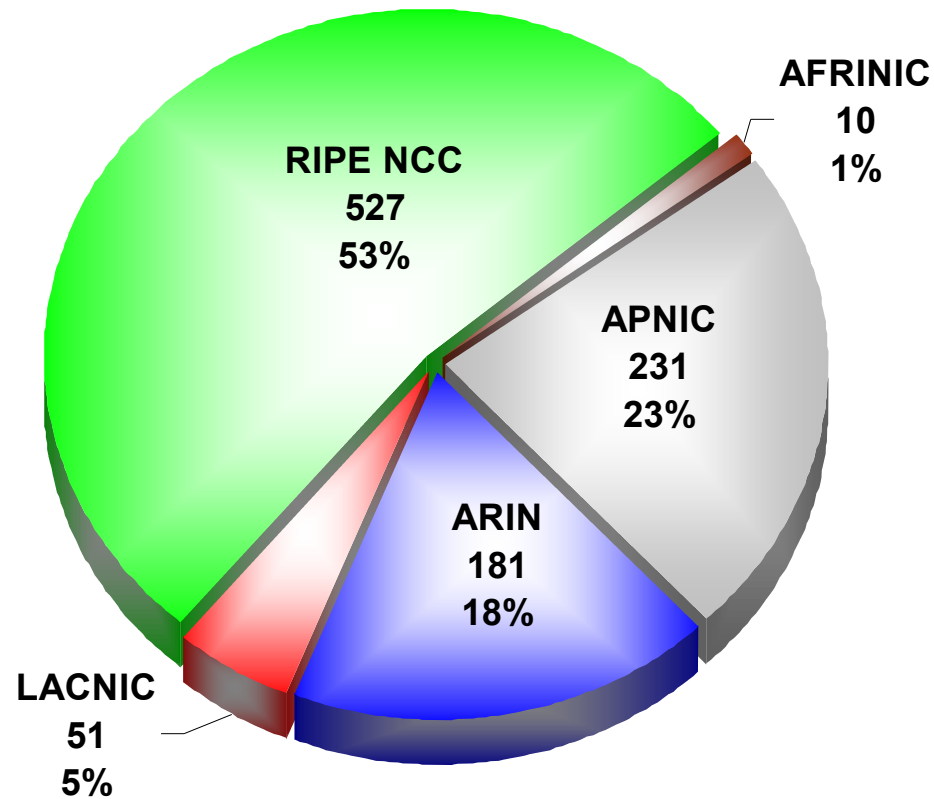


IPv6 Allocations RIRs to LIRs/ISPs Yearly Comparison



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IPv6 Allocations RIRs to LIRs/ISPs Cumulative Total (Jan 1999 – Dec 2005)



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Statistics Links



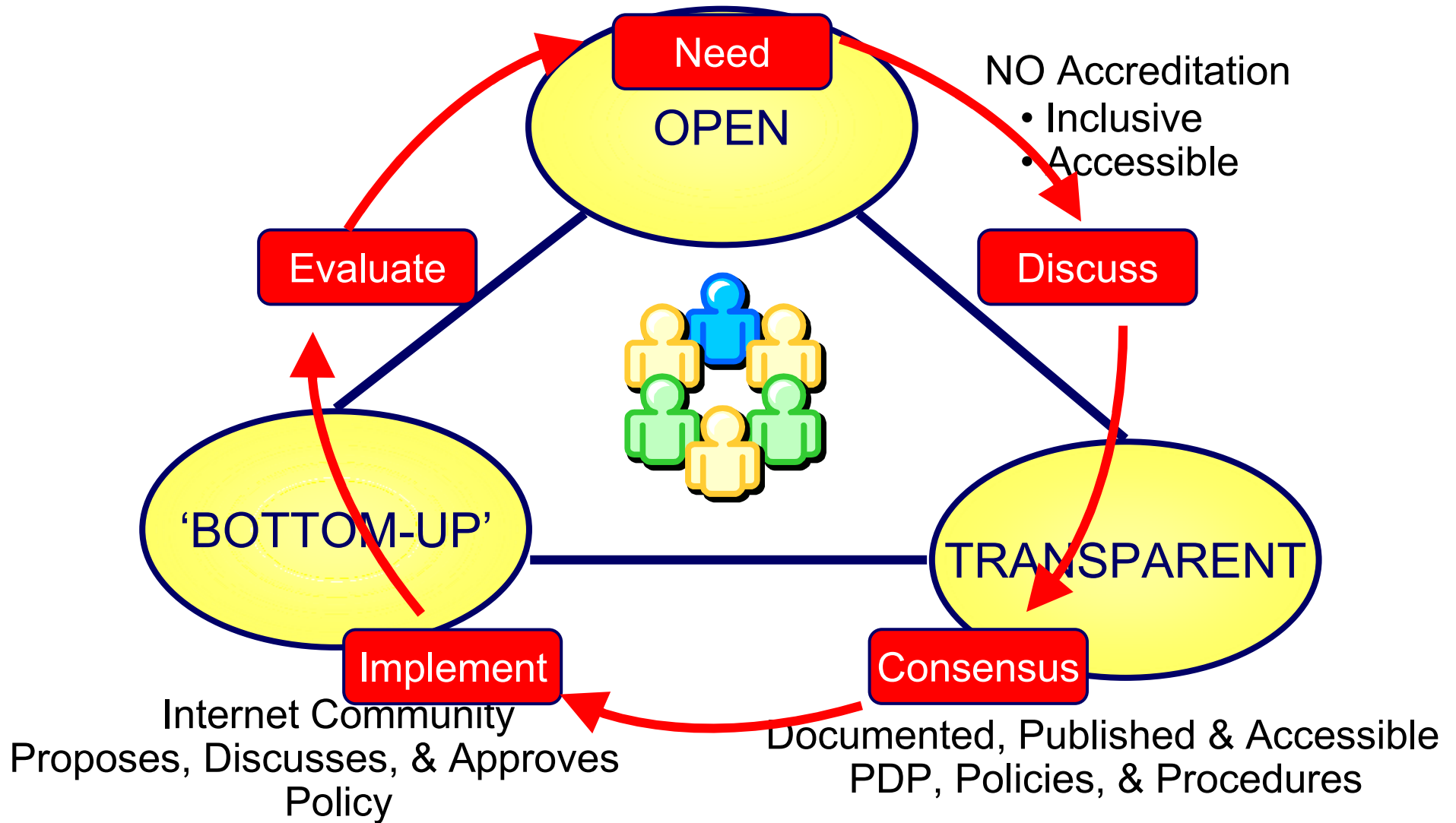
Raw & Historical Data	
RIRs	http://www.nro.net/statistics/
IANA	http://www.iana.org/ipaddress/ip-addresses.htm



Policy Discussions

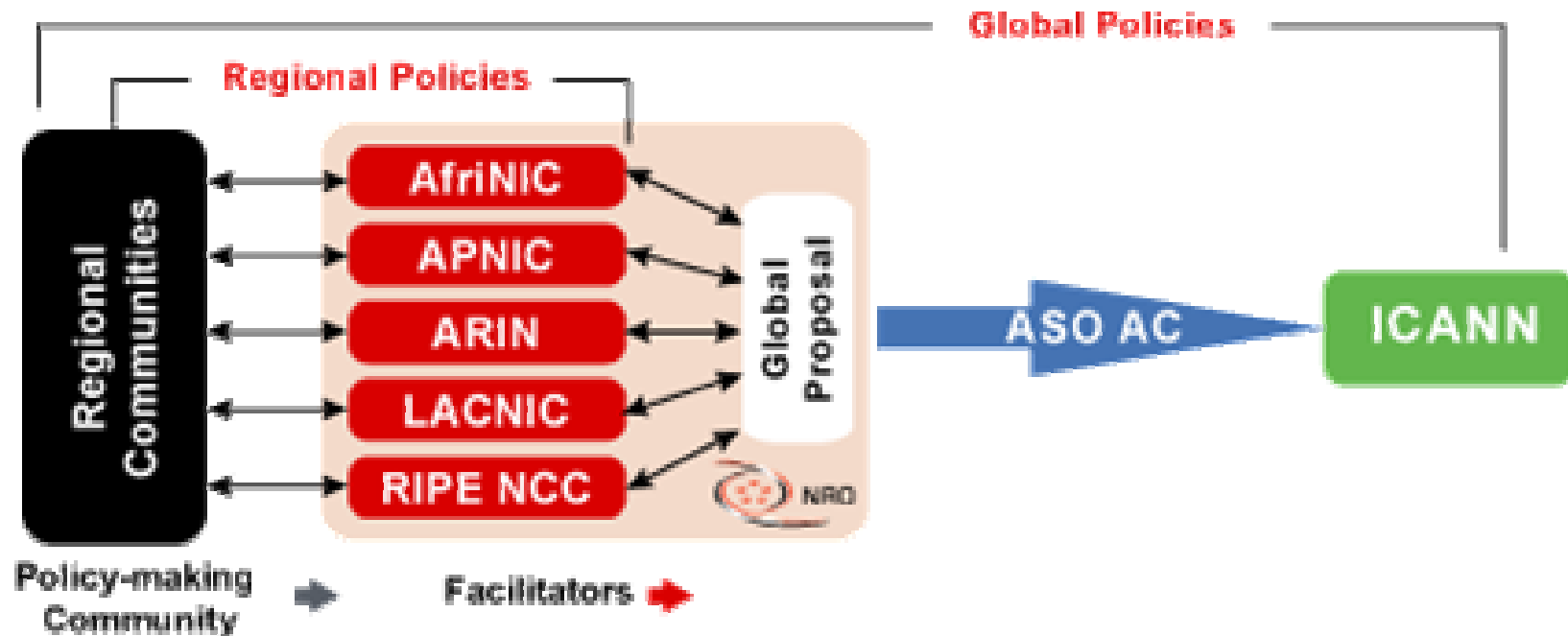
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RIR Policy Development Process (Predates ICANN PDP)



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The Global PDP (Defined in ASO MoU)



Integrates RIR PDP with ICANN PDP

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Public Policy Meetings








RIR	DATE	LOCATION
 Afrinic	16 – 17 May 2006	Nairobi
 APNIC	5 – 8 September 2006	Taiwan
 ARIN <small>American Registry for Internet Numbers</small>	9 – 12 April 2006	Montreal
 LACNIC	22 - 26 May 2006	Guatemala City
 RIPE NCC	24 – 28 April 2006	Istanbul

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Worldwide Look IPv4 Policy Discussions








RIR	TOPIC	STATUS
	<ul style="list-style-type: none"> • End User Assignment Criteria • Experimental Allocations 	<ul style="list-style-type: none"> • Discuss • Discuss
	<ul style="list-style-type: none"> • HD Ratio 	<ul style="list-style-type: none"> • Abandon
	<ul style="list-style-type: none"> • Micro Allocation for Anycast 	<ul style="list-style-type: none"> • Discuss
	<ul style="list-style-type: none"> • International ISPs • Allocation Period 	<ul style="list-style-type: none"> • Discuss • Discuss
	<ul style="list-style-type: none"> • Anycast Services • HD Ratio 	<ul style="list-style-type: none"> • Discuss • Last Call

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Worldwide Look IPv6 Policy Discussions








RIR	TOPIC	STATUS
		
	<ul style="list-style-type: none"> • End Site Definition • HD Ratio 	<ul style="list-style-type: none"> • Discuss • Consensus
	<ul style="list-style-type: none"> • End Site Definition • PI Allocation [2 Proposals] • Micro Allocation for Infrastructure 	<ul style="list-style-type: none"> • Discuss • Discuss • Discuss
	<ul style="list-style-type: none"> • HD Ratio • End Site Definition 	<ul style="list-style-type: none"> • Discuss • Discuss
	<ul style="list-style-type: none"> • End Site Definition • HD Ratio • Number of Required Customers 	<ul style="list-style-type: none"> • Discuss • Adopt • Discuss

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Worldwide Look Other Policy Discussions




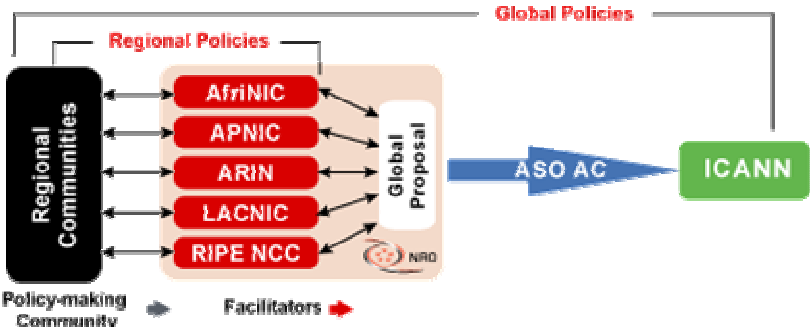





RIR	TOPIC	STATUS
	<ul style="list-style-type: none"> • ASN Assignment Criteria • 4 Byte ASN 	<ul style="list-style-type: none"> • Discuss • Discuss
	<ul style="list-style-type: none"> • 4 Byte ASN 	<ul style="list-style-type: none"> • Consensus
	<ul style="list-style-type: none"> • 4 Byte ASN • Capturing Route Origins • Residential Customer Privacy 	<ul style="list-style-type: none"> • Discuss • Discuss • Discuss
	<ul style="list-style-type: none"> • 4 Byte ASN • Unused Resource Recovery • WHOIS Privacy 	<ul style="list-style-type: none"> • Discuss • Discuss • Discuss
	<ul style="list-style-type: none"> • 4 Byte ASN 	<ul style="list-style-type: none"> • Discuss



Global Policy Proposal

IANA to RIR IPv6 Allocation

What is the Status?

RIR	IANA to RIR IPv6 Allocation	STATUS
	 <p>The diagram illustrates the process of IPv6 allocation from IANA to RIRs. It shows a flow from 'Regional Policies' (Afrinic, APNIC, ARIN, LACNIC, RIPE NCC) through a 'Global Proposal' stage, facilitated by 'ASO AC', to 'ICANN'. A 'Policy-making Community' and 'Facilitators' are also shown influencing the process. 'Global Policies' are also shown influencing the 'Global Proposal' stage.</p>	<ul style="list-style-type: none"> • Discuss
		<ul style="list-style-type: none"> • Adopt
		<ul style="list-style-type: none"> • Adopt
		<ul style="list-style-type: none"> • Adopt
		<ul style="list-style-type: none"> • Discuss
		<ul style="list-style-type: none"> • 3 QTR 2006

Policy Archives



RIR	LINK
 The Afrinic logo consists of a stylized graphic of three red and orange diagonal lines to the left of the text "Afrinic" in a bold, sans-serif font.	http://www.afrinic.net/policy.htm
 The APNIC logo features a stylized blue and yellow circular emblem above the text "APNIC" in a bold, sans-serif font.	http://www.apnic.net/docs/policy/proposals/archive.html
 The ARIN logo displays the letters "ARIN" in a large, serif font, with a blue horizontal line passing through the middle of the letters. Below it, the text "American Registry for Internet Numbers" is written in a smaller, sans-serif font.	http://www.arin.net/policy/proposals/proposal_archive.html
 The LACNIC logo features a stylized graphic of two curved lines, one orange and one blue, to the left of the text "LACNIC" in a bold, sans-serif font.	http://lacnic.net/en/politicas/desarrollo.html
 The RIPE NCC logo features a yellow globe with a blue grid pattern, to the left of the text "RIPE" in a large, bold, sans-serif font, with "NCC" in a smaller font below it.	http://www.ripe.net/ripe/policies/proposals/

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Links



<http://aso.icann.org>



<http://www.nro.net>



<http://www.afrinic.net>



<http://www.apnic.net>



<http://www.arin.net>



<http://www.lacnic.net>



<http://www.ripe.net>

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ASO

K I A O R A