



IPv6 distribution and policy update

ICANN Wellington

28 March 2006



Overview

- What is the NRO
 - IPv6 distribution status
 - IPv6 policy status
 - Questions

Number Resource Organization



What is the NRO

- Number Resource Organisation
 - Single point of contact, coordination, representation for the Regional Internet address Registries (RIRs)
 - Independent from ICANN
 - Incorporation in Uruguay
- Address Supporting Organisation (ASO)
 - A component of the ICANN framework
 - Established by agreement between the NRO and ICANN
 - Responsible for coordination of global IP addressing policies
 - Regional policies are handled by each RIR

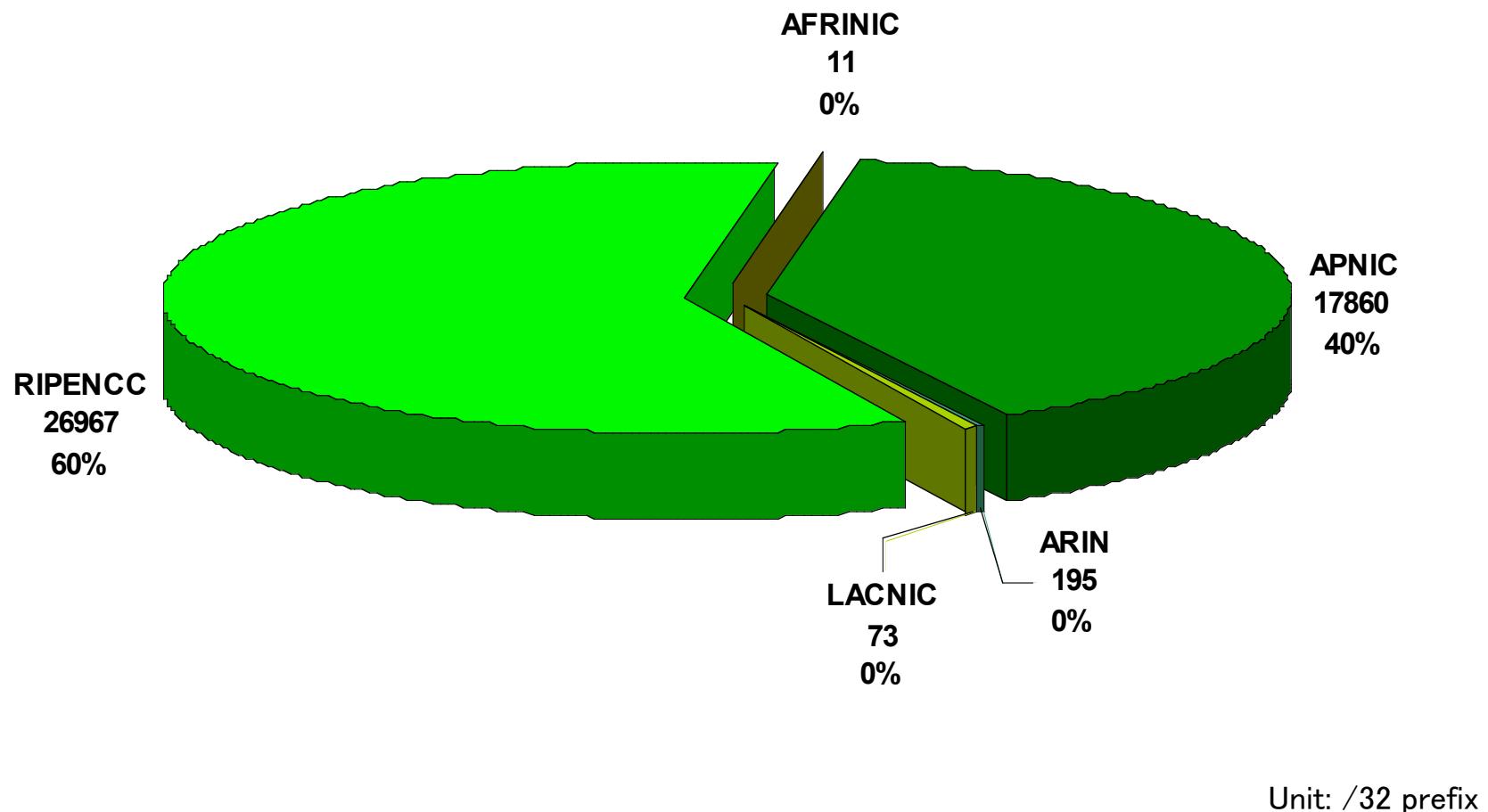


IPv6 distribution status

2001:610:240:0 193.0.0.202 62.109.128 195.048.02.03 178.12.02.02 2001:610:240 193.0.0.203
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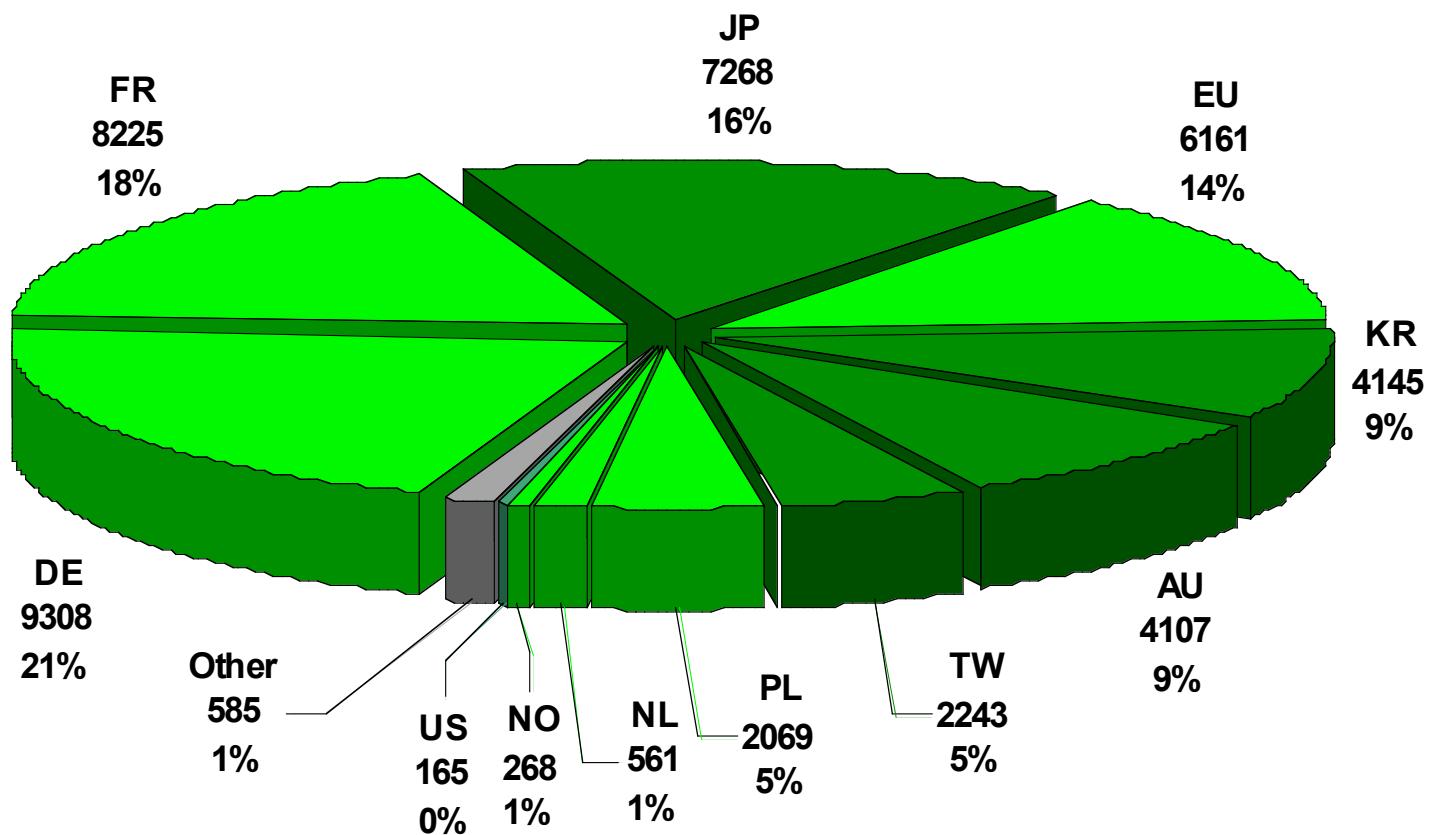
IPv6 distribution – Global



2001:610:240:0 193.0.0.202 62.109.128.195.048.02.03.178.12.02.02 2001:610:240 193.0.0.203 193.0.0.203
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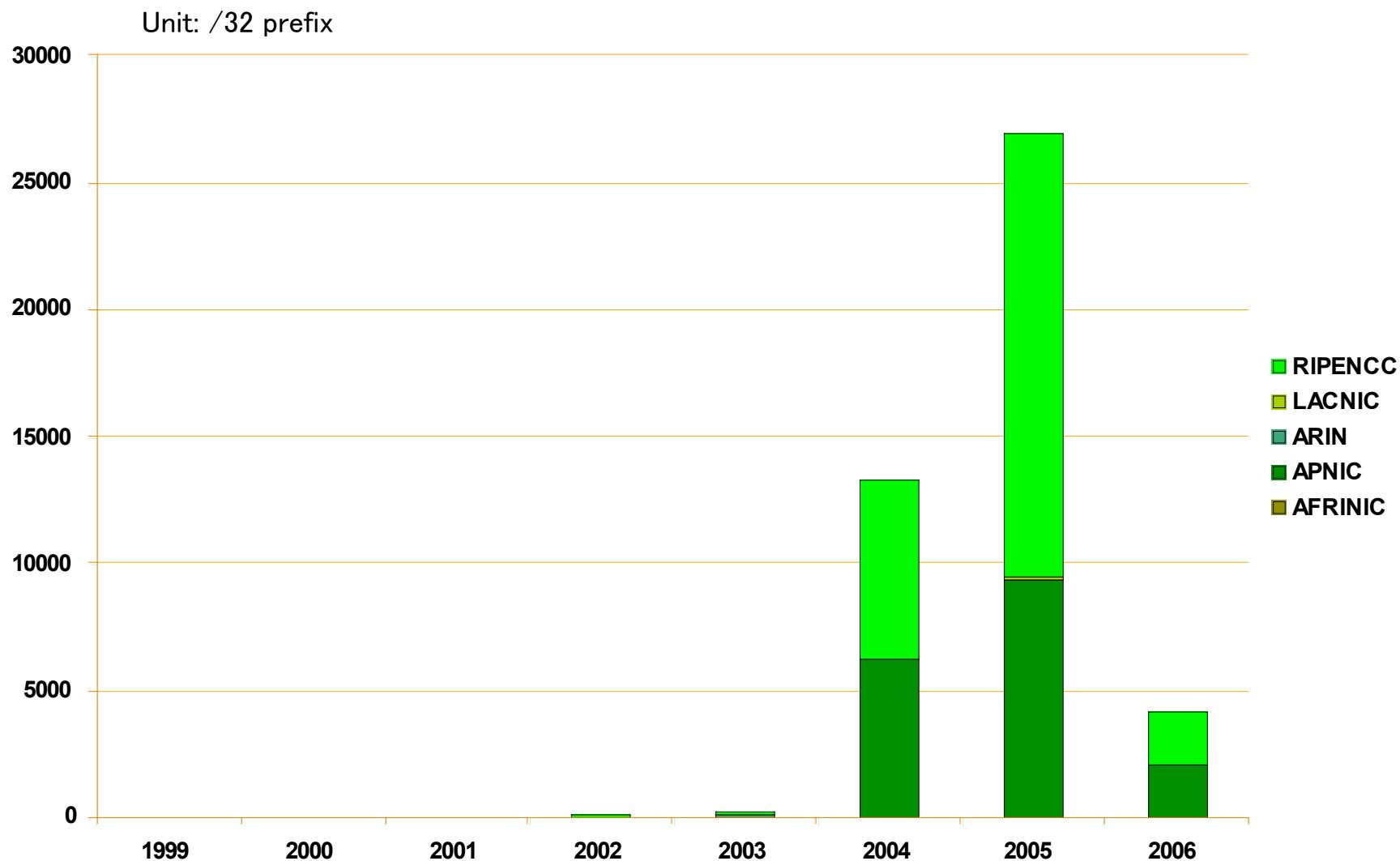


IPv6 distribution – top 10 CC





IPv6 distribution – annual totals



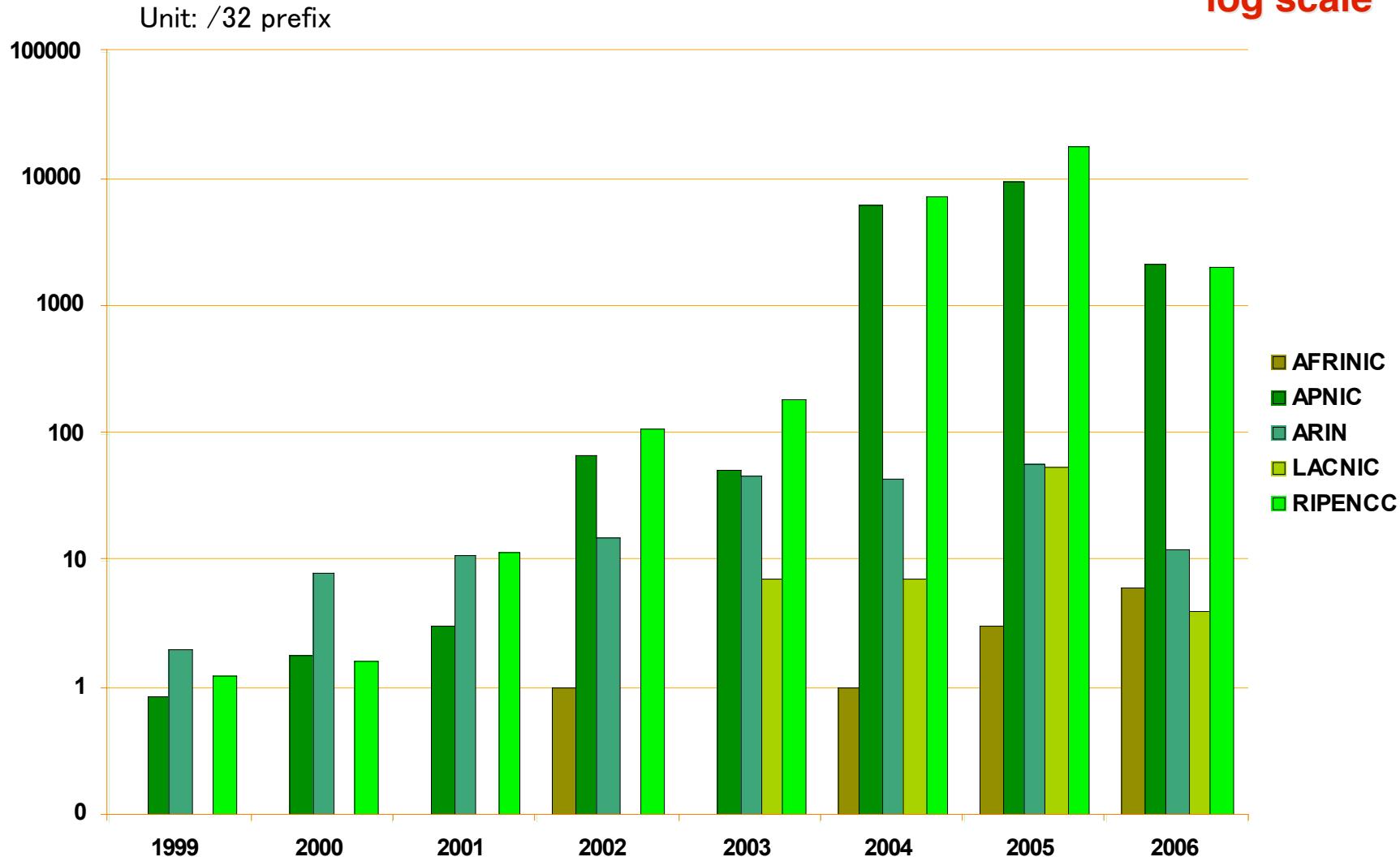
April 6, 06

IPv6 Update



IPv6 distribution – annual totals

* log scale





IPv6 statistics online

- RIR statistics
 - <http://www.nro.net/statistics>
 - IANA
 - <http://www.iana.org/assignments/ipv6-unicast-address-assignments>

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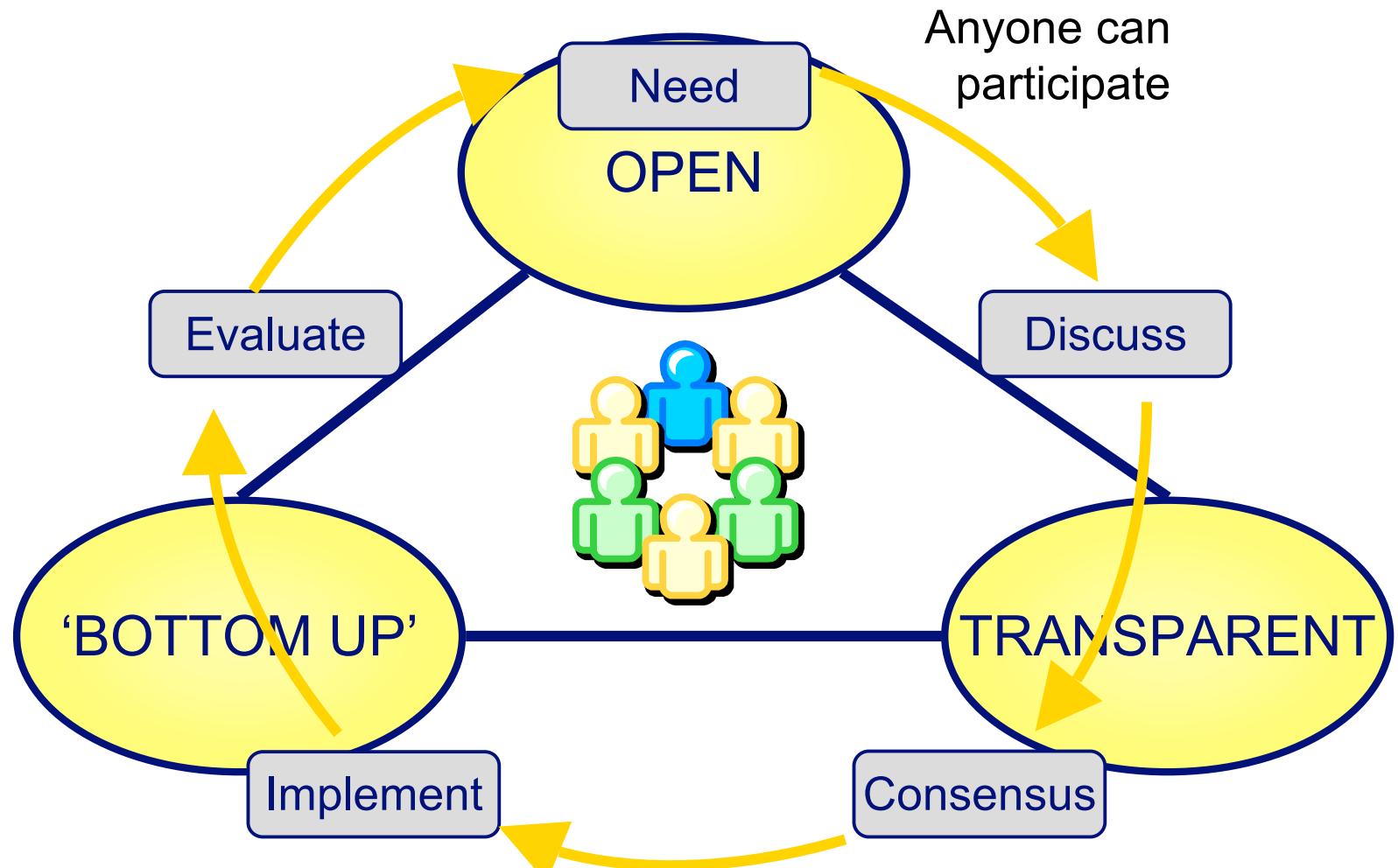


IPv6 policy status

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Number Resource Organization 10 195.048.02.03



RIR policy development process

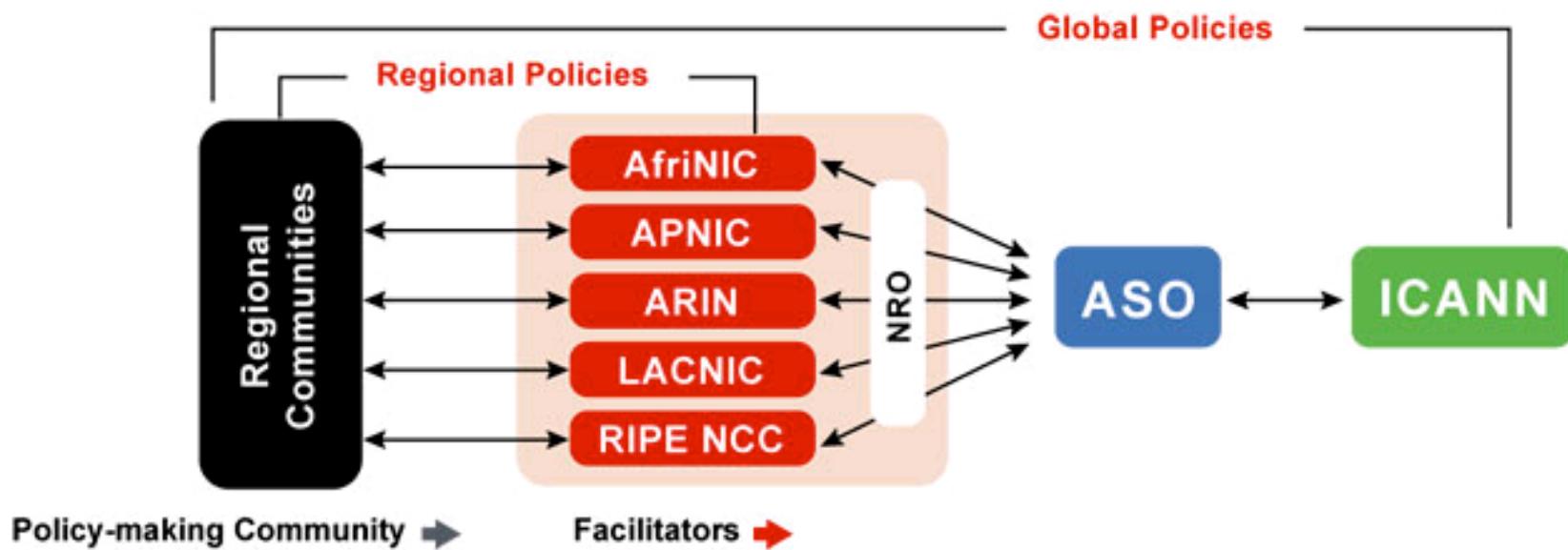


Internet community proposes and approves policy

All decisions & policies documented
& freely available to anyone



ASO global policy process





IPv6 policy status

Policy proposal	AfriNIC	APNIC	ARIN	LACNIC	RIPE-NCC
Policy for IPv6 allocation from IANA to RIRs (<i>global policy</i>)	...	α	α	α	...
Amend IPv6 utilisation requirement (HD ratio = 0.94)	-	α	α	-	...
Amend IPv6 assignment requirements	-	σ	...	-	...
IPv6 address space for anycast services	-	-	-	-	...
PI (portable) IPv6 assignments for end sites	-	-	...	-	-

α approved
... under discussion
- no discussion
σ no consensus

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RIR policy references

- NRO
 - <http://www.nro.org/policy>
- RIRs
 - AfriNIC <http://www.afrinic.net/policy.htm>
 - APNIC <http://www.apnic.net/docs/policy/proposals>
 - ARIN <http://www.arin.net/policy>
 - LACNIC <http://lacnic.net/en/politicas>
 - RIPE <http://www.ripe.net/ripe/policies>

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Questions?

<http://www.nro.net>