

IPv6 distribution and policy update

ICANN Wellington
28 March 2006

Overview

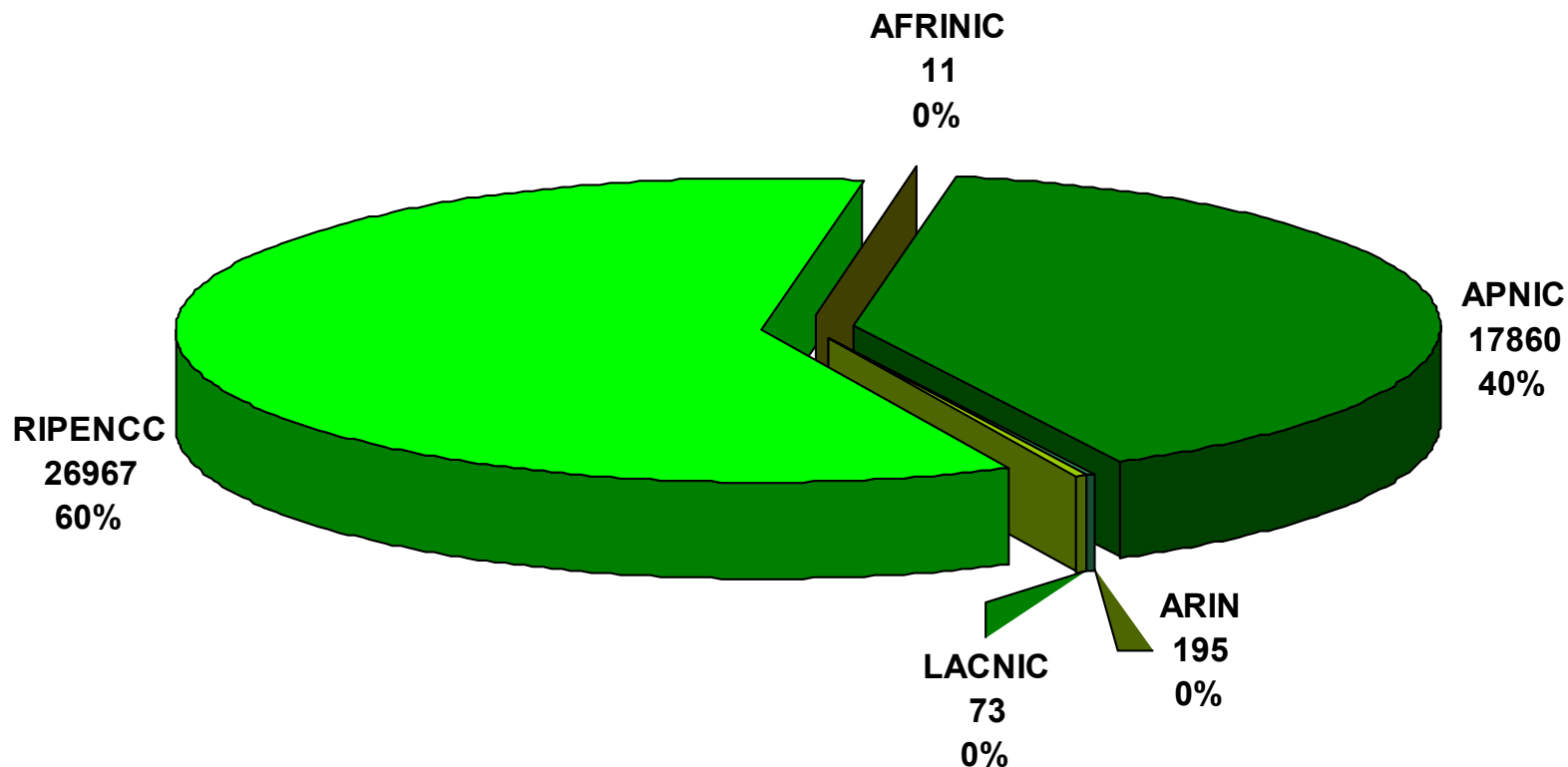
- What is the NRO
- IPv6 distribution status
- IPv6 policy status
- Questions

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

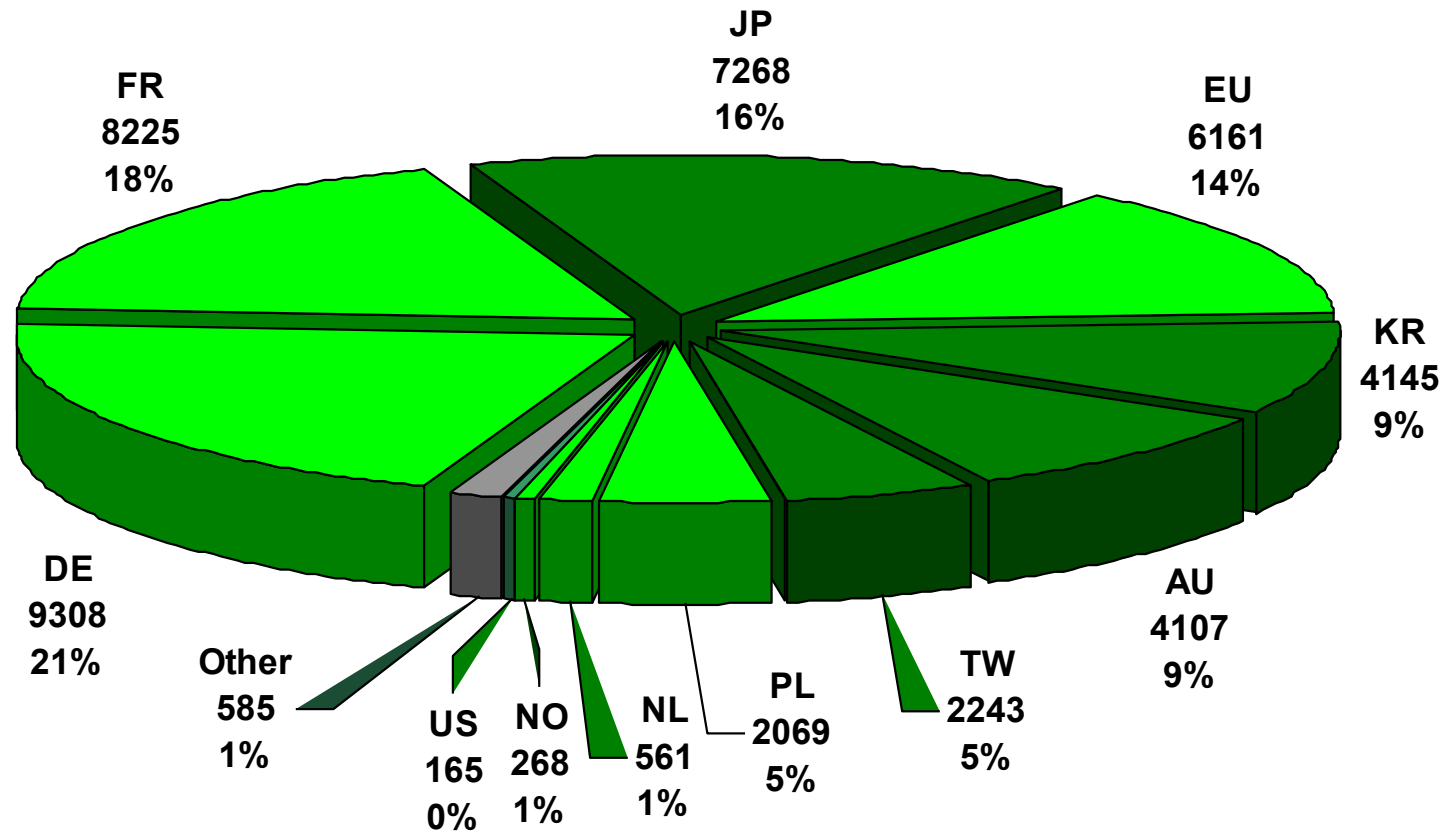
IPv6 distribution status

IPv6 distribution – Global



Unit: /32 prefix

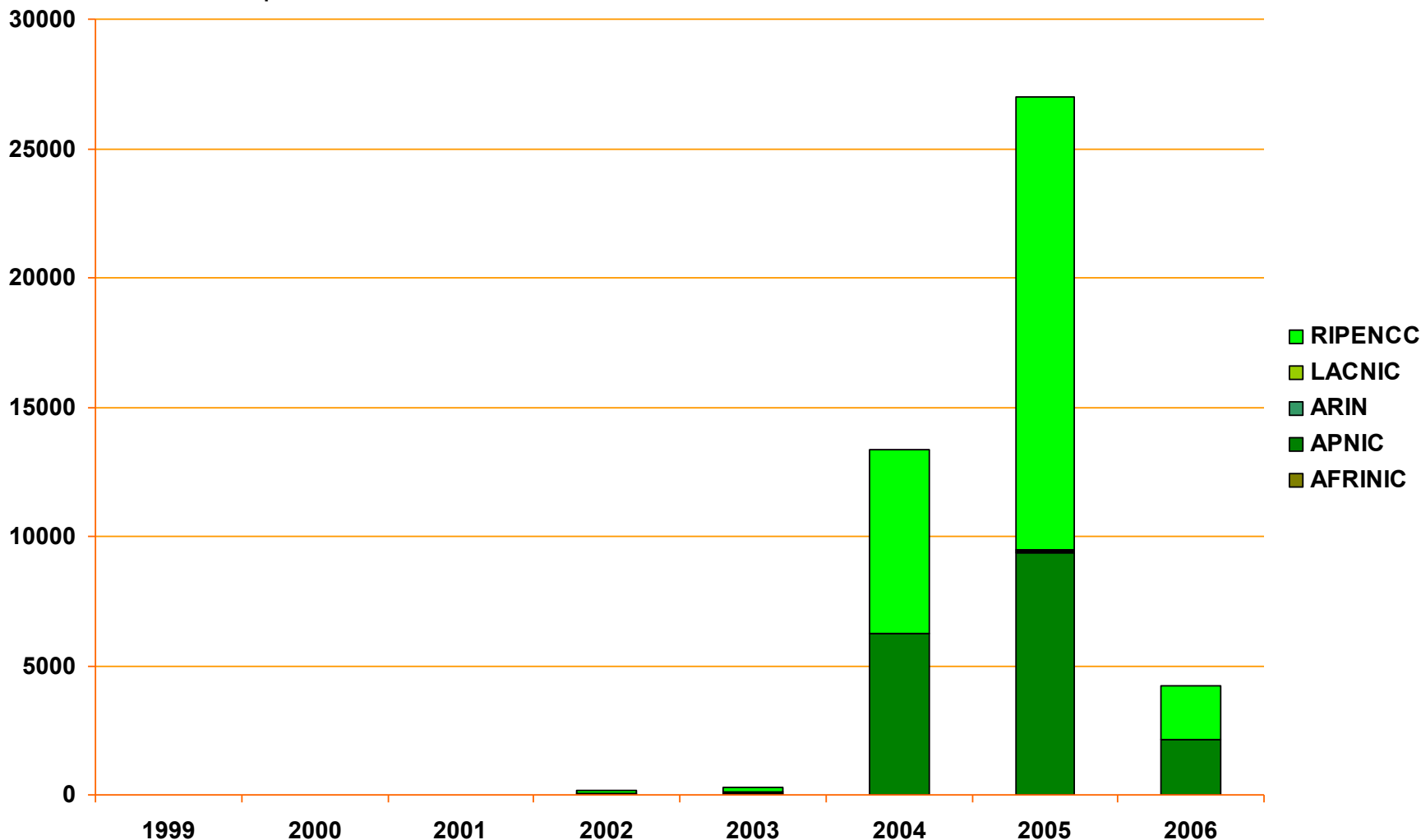
IPv6 distribution – top 10 CC



Number Resource Organization

IPv6 distribution – annual totals

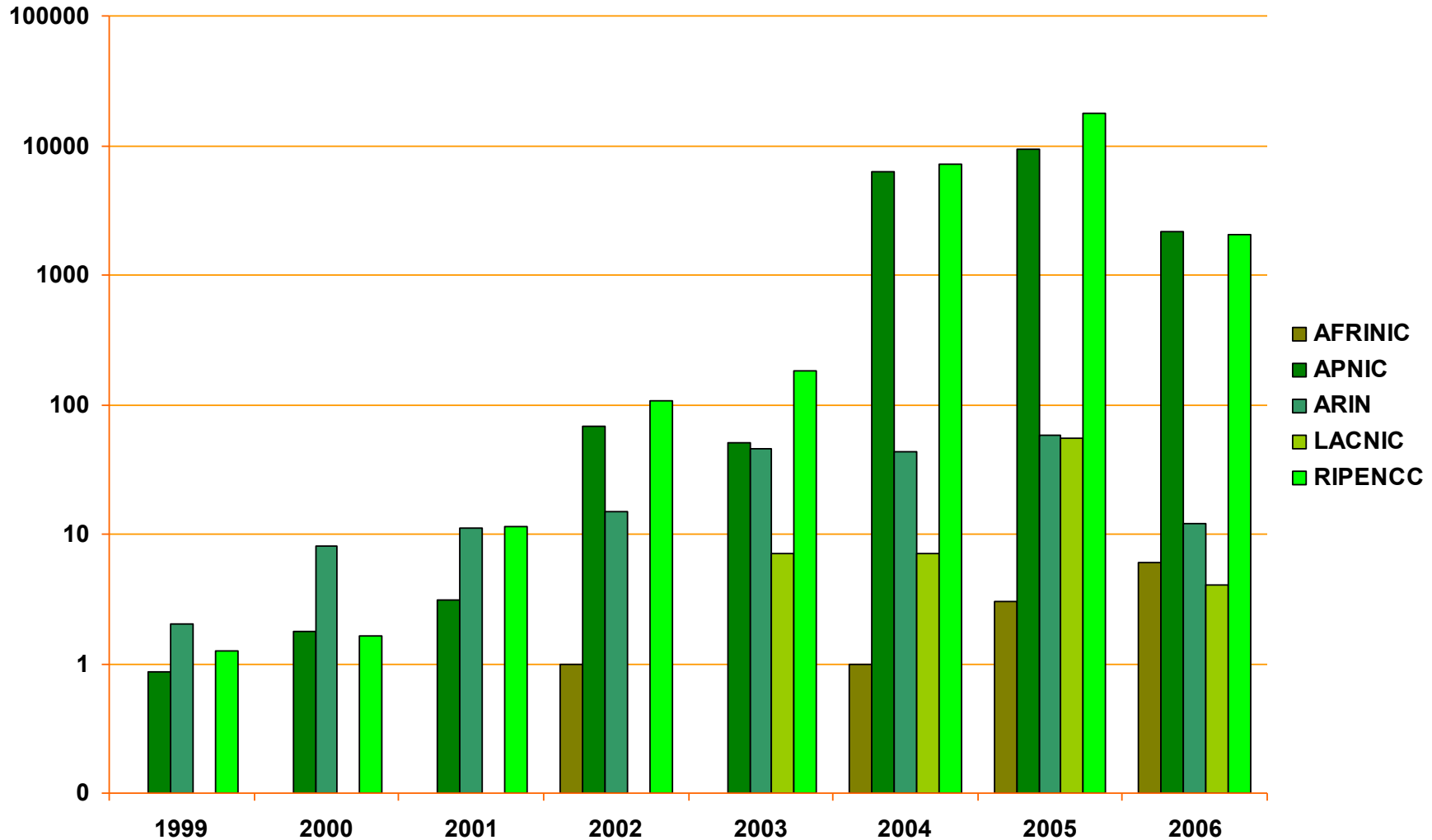
Unit: /32 prefix



IPv6 distribution – annual totals

* log scale

Unit: /32 prefix



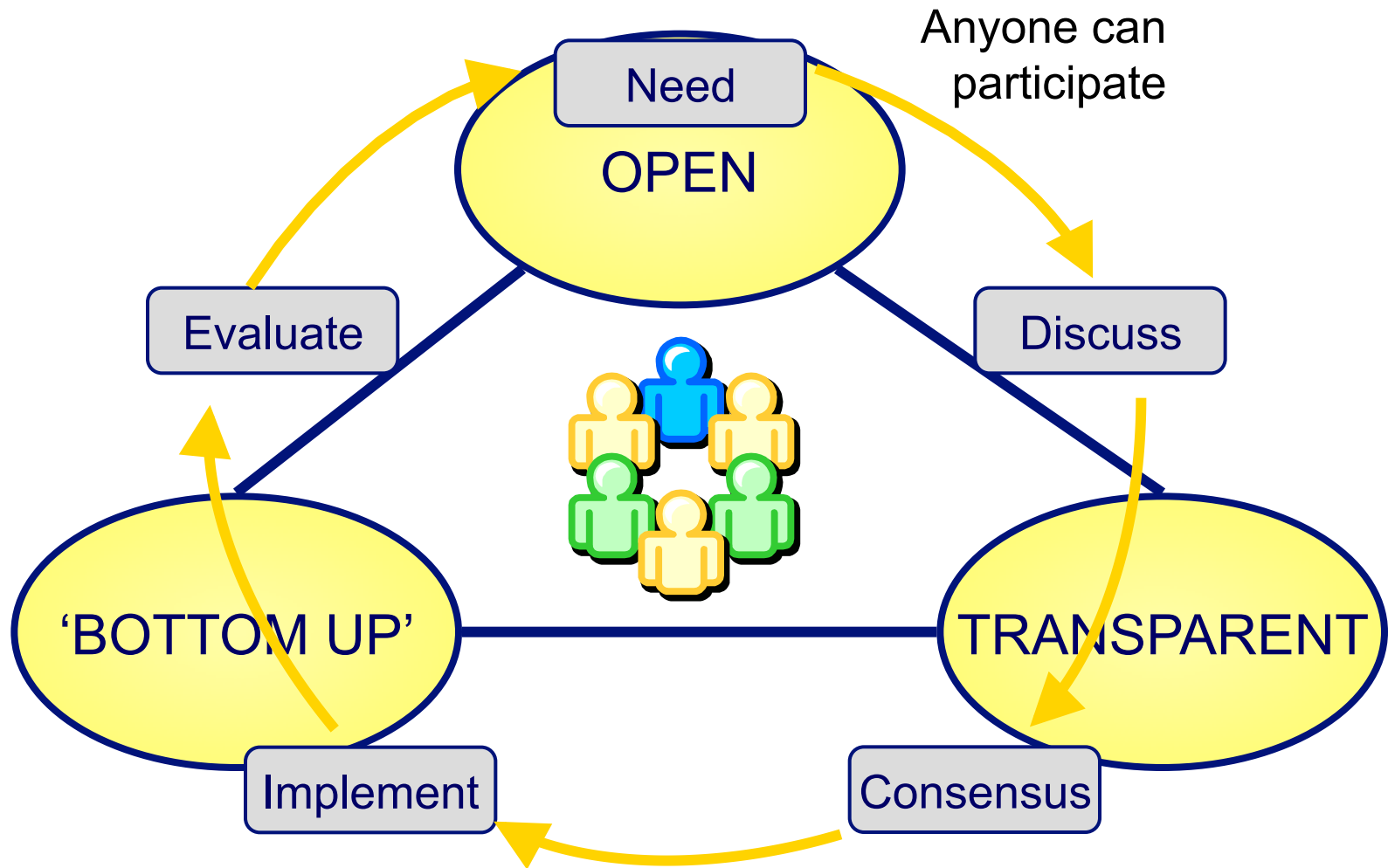
2001:610:240:0 193.0.0.202 62.109.128 195.048.02.03 178.12.02.02 2001:610:240 193.0.0.203 195.048.02.03
 62.109.128 195.048.02.03 2001:610:240 193.0.0.202 62.109.128 195.048.02.03 178.12.02.02 2001:610:240 193.0.0.203
 193.0.0.203 2001:610:240:0 193.0.0.202 62.109.128 195.048.02.03 178.12.02.02 2001:610:240 193.0.0.203
 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
 Number Resource Organization

IPv6 statistics online

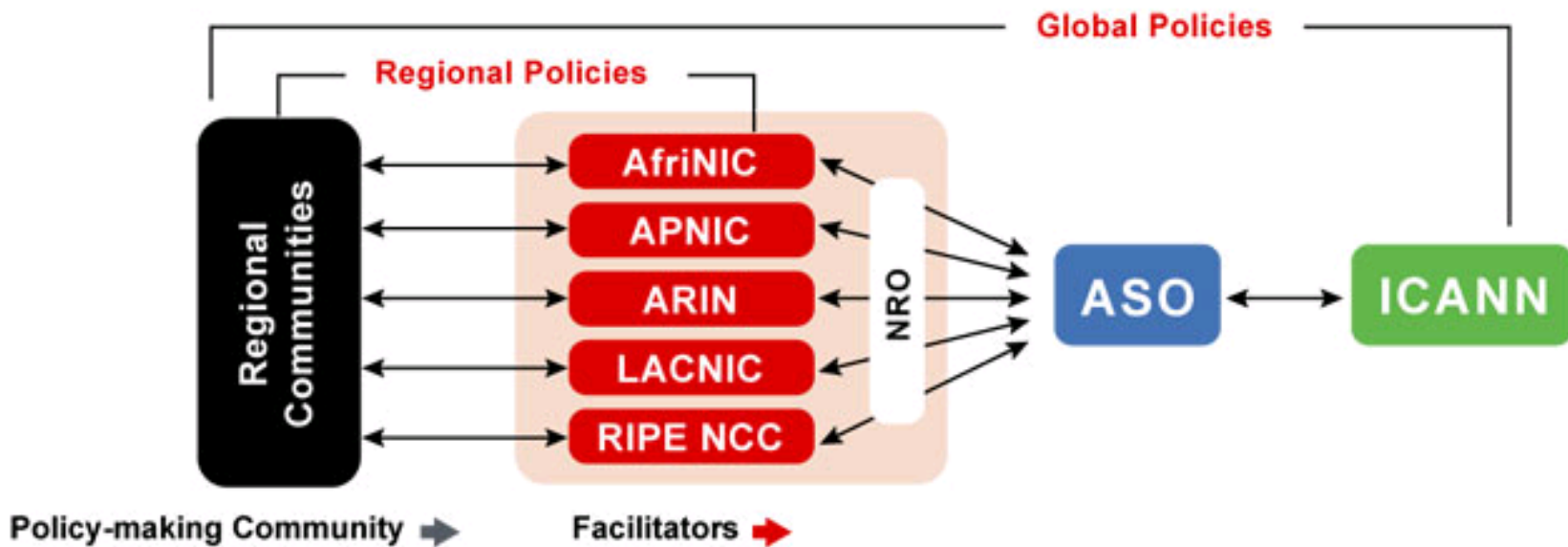
- RIR statistics
 - <http://www.nro.net/statistics>
- IANA
 - <http://www.iana.org/assignments/ipv6-unicast-address-assignments>

IPv6 policy status

RIR policy development process



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>)	...	✓	✓	✓	...
Amend IPv6 utilisation requirement (HD ratio = 0.94)	-	✓	✓	-	...
Amend IPv6 assignment requirements	-	?	...	-	...
IPv6 address space for anycast services	-	-	-	-	...
PI (portable) IPv6 assignments for end sites	-	-	...	-	-

✓ approved
 ... under discussion
 - no discussion
 ? no consensus

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>



Questions?

<http://www.nro.net>