



IPv6 Registration at the RIPE NCC

Global IPv6 summit, Madrid

presented by
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Outline

- Introduction to RIPE NCC
- IPv6 Allocation Policy
- Allocation Statistics
- Policy Development & How to participate



What is the RIPE NCC?

- Co-ordination and support service for (mainly) ISPs & RIPE community
- One of 3 Regional Internet Registries (RIR)
- Organisational Structure
 - Contract with members (LIRs)
 - Annual General Meeting (AGM)
 - Executive Board
 - Annual Activity Plan & Budget
 - Annual fee



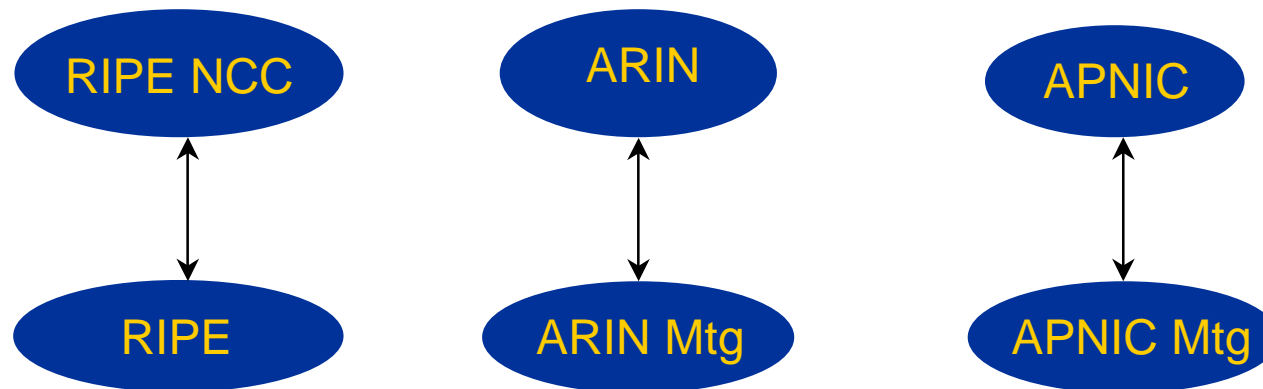
RIPE NCC in Global Context

Ultimate global numbers authority

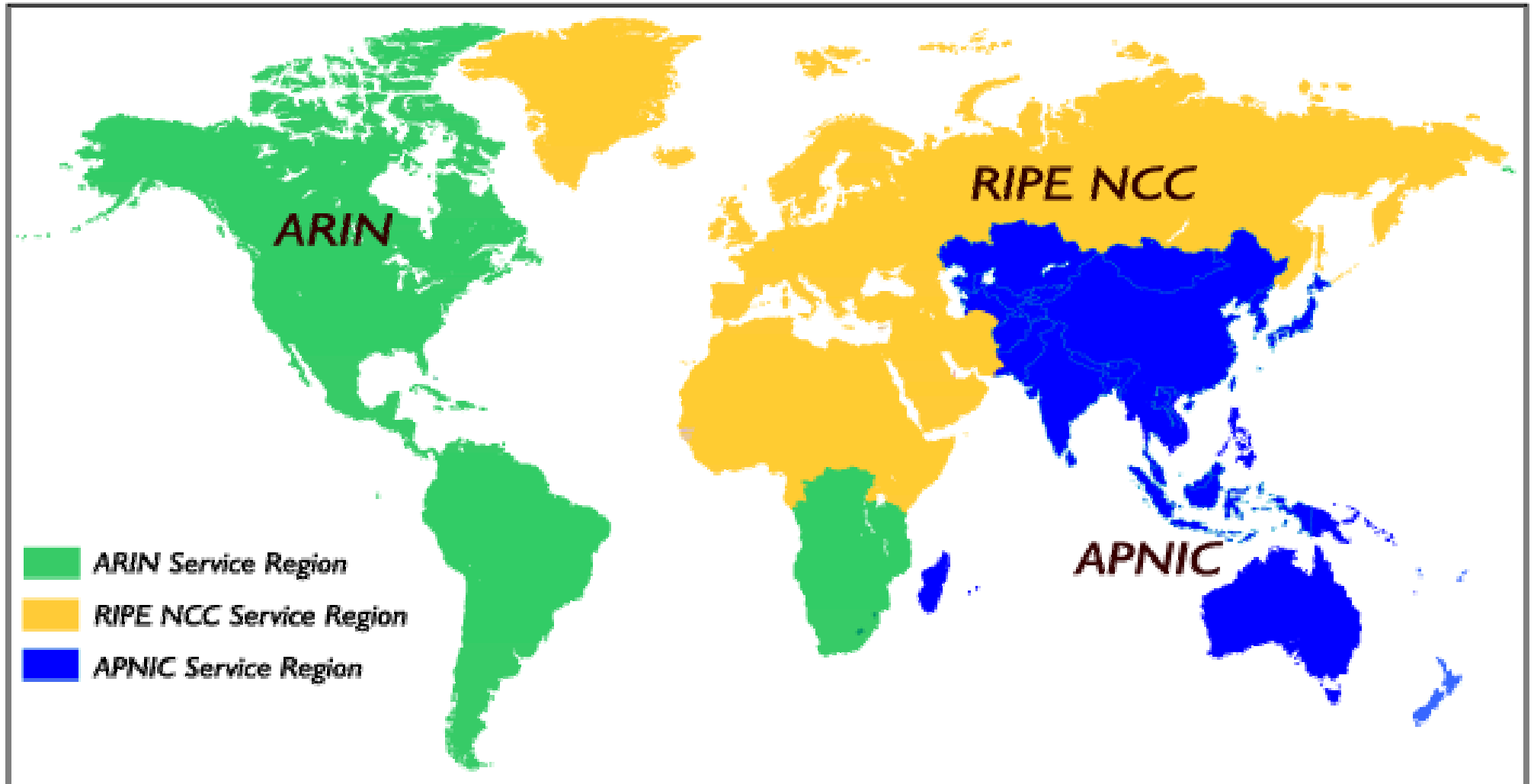
IANA/ICANN

Sets policy and criteria for Regional Registries

Regional Registries: Policies and criteria aligned but differences in local implementation



Service Regions





RIPE NCC Activities

- Registration Services
 - IPv4 & IPv6 address & AS number allocation
 - Reverse delegation (no forward domains!)
- Co-ordination & Liaison
 - RIPE database maintenance
 - Technical Projects
- Information Dissemination & Training



IPv6 Allocation Policies

1. Peering with ≥ 3 subTLAs

AND either

2. Plan to provide IPv6 services within 12 months

OR

2. ≥ 40 SLA customers



IPv6 Allocation Policies

- Bootstrap Phase

Peering with ≥ 3 ASes

AND

Plan to provide IPv6 services within 12 months

AND either

≥ 40 IPv4 customers

OR

Have 6bone experience



IPv6 Allocations

- Initial Allocation: /35 subTLA
- Entire /29 reserved (aggregatable)
- APNIC: 24 sub-TLAs allocated
- ARIN: 11 subTLAs allocated
- RIPE NCC: 25 subTLAs allocated
- List of RIR IPv6 allocations:

<http://www.dfn.de/service/ipv6/ipv6aggis.html>



IANA Allocations

- APNIC: 2001:0200::/23
- ARIN: 2001:0400::/23
- RIPE NCC: 2001:0600::/23



IPv6 Allocations - APNIC

CONNECT-AU	WIDE-JP	NUS-SG
KIX-KR	ETRI-KRNIC-KR	NTT-JP
HINET-TW	IMNET-JPNIC-JP	JENS-JP
IJJ-JPNIC-JP	CERNET-CN	INFOWEB-JPNIC-JP
TANET-IPV6-TW	6DION-JPNIC-JP	DACOM-BORANET
ODN-JPNIC-JP	KOLNET-KRNIC-KR	BIGLOBE-JPNIC-JP
HANANET-KRNIC-KR		



IPv6 Allocations - ARIN

ESNET-V6

VBNS-IPV6

SPRINT-V6

CANET3-IPV6

VRIO-IPV6-0

CISCO-IPV6-1

QWEST-IPV6-1

DEFENSENET

UNAM-IPV6

ABOVENET-IPV6



IPv6 Allocations - RIPE NCC

UK-BT

UK-JANET

RU-FREENET

DE-TRMD

DE-IPF

DE-ECRC

SE-SWIPNET

BE-BELNET

CH-SWITCH

DE-DFN

GR-GRNET

FR-RENATER

DE-NACAMAR

FR-TELECOM

PL-ICM

AT-ACONET

NL-SURFNET

EU-UUNET

EU-EUNET

DE-XLINK

PT-RCCN

DE-SPACE



IPv6 Allocations - Distribution

- Up to November 2000:
 - 7 DE
 - 2 EU, 2 FR, 2 UK
 - 1 AT, CH, GR, NL, PT, RU, SE, PL, BE
- 5 Academic networks
- 17 Commercial networks
- Several requests currently under review



Policy Document

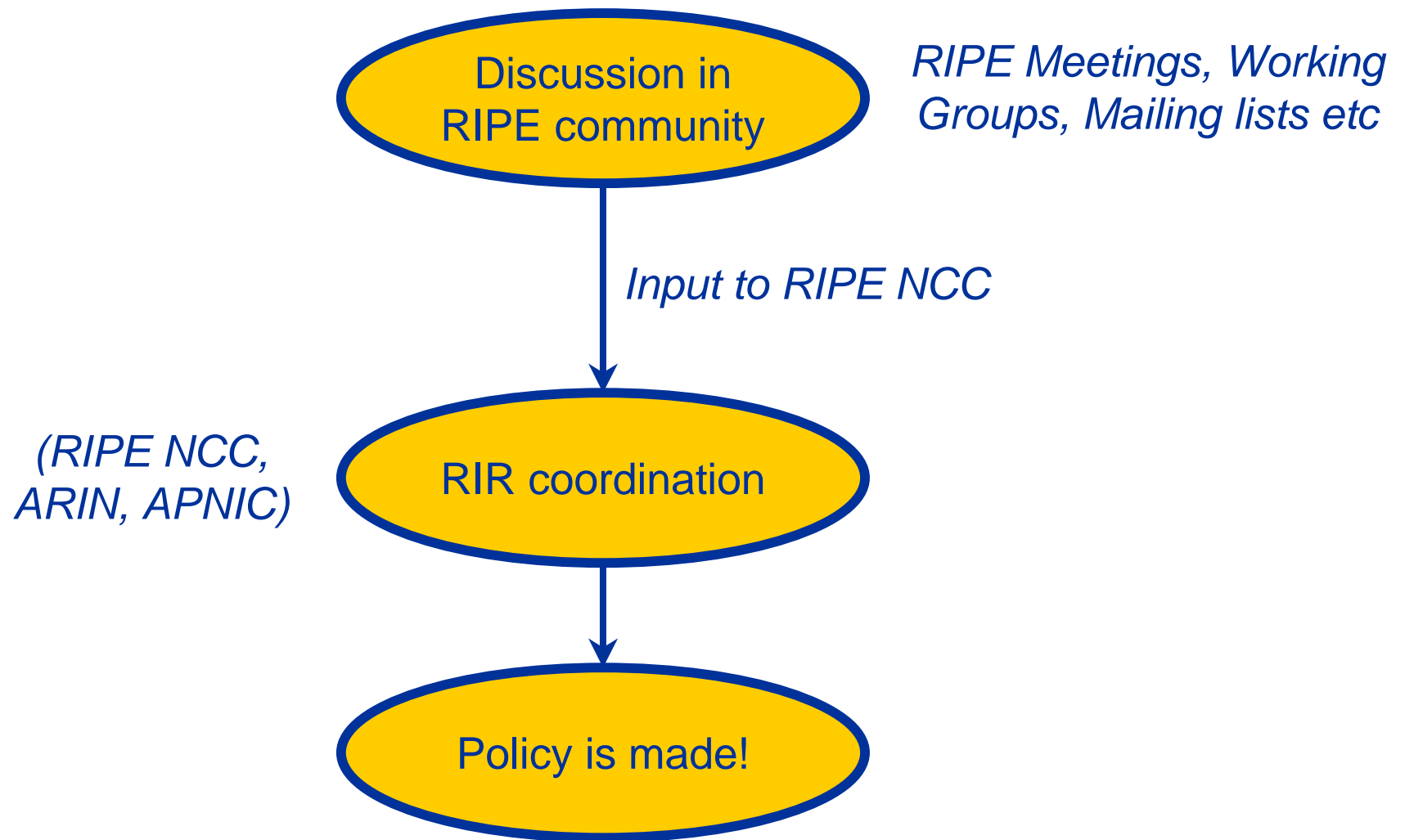
- Under discussion*
- Discussion about size of SLA field and conservation
- IETF/IAB input to all RIRs:
- /48 to all endusers
- Exception: no interest in multiple subnets - /64
- Close co-ordination between RIRs



Policy Development Process

- Policy (changes) can be suggested by
 - Members/Local IRs
 - RIPE NCC
 - Public at large
- Policy must be
 - fair to all
 - ‘good’ for the Internet
 - consistent with global policies

Policy Development





How Can You Participate

- RIPE Working Groups
 - LIR-WG (<lir-wg@ripe.net>)
 - IPv6-WG (<ipv6-wg@ripe.net>)
- Open Mailing Lists
 - <majordomo@ripe.net>
- Public Meetings
 - Meeting in Amsterdam - 23-26th Jan 2001, next in Bologna beginning of May.
 - RIPE NCC membership
 - Annual General Meeting



Pointers & References

- IPv6 Allocation Policies

<http://www.ripe.net/lir/registries/ipv6.html>

<http://www.ripe.net/ripe/docs/ripe-196.html>

- RIPE Meetings

<http://www.ripe.net/meetings/ripe/index.html>

- Presentation

<http://www.ripe.net/ripenncc/about/presentations/index.html>

Questions and Answers



<http://www.ripe.net/ripencc/about/presentations/index.html>