

RIPE



RIPE vs RIPE NCC

- from the beginning to after the NTIA transition

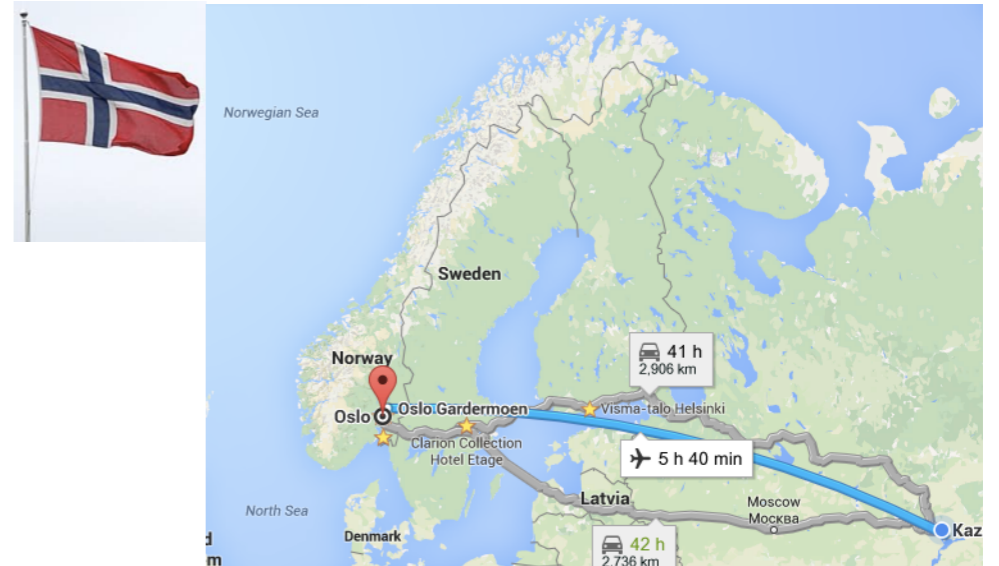
Hans Petter Holen
RIPE Chair

ENOG 9 - 9. June 2015
Kazan, Russia



Who am I?

- RIPE Chair
- ICANN NomCom 2014 & 2015 member
- Strategic Advisor, Visma
 - Visma Hosting: Active 24, Loopia
 - Corporate IT projects



Part I:

A Brief History Lesson

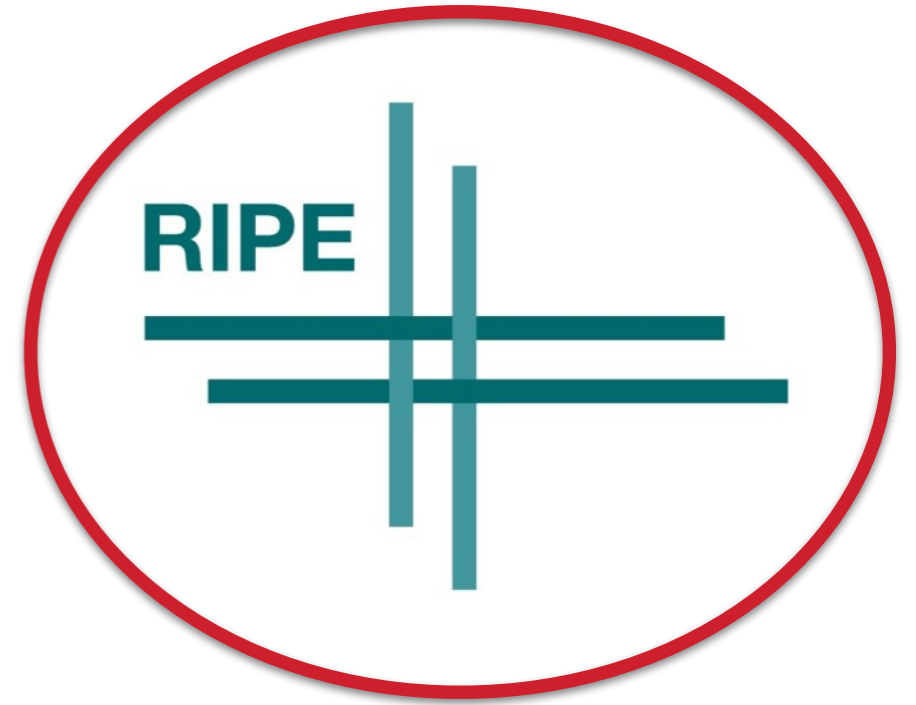


Formed in 1989

Open for everyone

**Creates policies
on consensus**

RIPE Working Groups





Formed in 1992

Incorporated organisation based in Amsterdam (and Dubai and with staff in Russia)

Secretariat for the RIPE community



RIR for Europe, the Middle East and Parts of Central Asia

11,000+ members and growing

Not-for-profit



RIPE
NCC

Not “just” an RIR

Formed by the RIPE community to act as secretariat and carry out activities on its behalf

To enable the community to gather online and in person

Got the “blessing” from the community to become an RIR shortly afterwards



RIPE
NCC

RIPE NCC services also include:

Operating k-root

Provide technical training for members

RIPE Atlas - atlas.ripe.net

RIPEstat - stat.ripe.net

Regional meetings



Formed in 1989

Community - open for all

Creates policies

**Does not allocate Internet
number resources**

Has Working Groups



Formed in 1992

Members

**Administers those policies in
its work**

**Allocates Internet number
resources**

**Has an Executive Board elected
by its members**

RIPE NCC Governance & Accountability

- Managing Director accountable to the Board
- Board accountable to the RIPE NCC members through the General Meeting
- Arbitration
- RIPE -Bottom-UP, Open & Inclusive
- <https://www.nro.net/about-the-nro/rir-accountability>





RIPE Working Groups

Address Policy

Anti-Abuse

Connect

Cooperation

Database

DNS

IPv6

Open Source

RIPE NCC Services

Routing

Measurement, Analysis and Tools (MAT)

RIPE Working Group Chairs

Address Policy



Gert



Sander

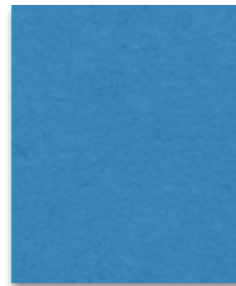


Brian



Tobias

Anti-Abuse



Cooperation



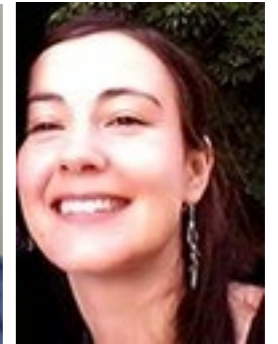
Meredith



Alain



Remco



Florence

Connect

Database



Nigel



Piotr



Job

DNS



Jim



Jaap



Peter

IPv6



Jen



Benedikt



Dave

MAT



Christian



Nina

Open Source



Martin



Ondrej

RIPE NCC Services



Kurtis



Bijal

Routing




Rob



João



Participate!









RIPE NCC RIPE NETWORK COORDINATION CENTRE

[Login](#)

[RIPE Database \(Whois\)](#) [Website](#)

Your IP address is: 78.138.133.60

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IPv4, IPv6 and ASNs LIR Portal RIPE Database Resource Transfers and Mergers	RIPE NCC Statistics RIPEstat RIPE Atlas Raw Datasets	Participate RIPE NCC Membership RIPE Community Policy Development Process Internet Governance	Contact Us Training and Education Documentation Spam, Hacking and Phishing	RIPE Documents RIPE Labs IPv6 Info Centre RIPE NCC Activity Plan	What We Do Staff Executive Board Corporate Governance

News and Announcements

[Report on the WSIS Forum 2015](#)
Publication date: 02 Jun 2015

[RIPE NCC IPv4 Address Space Chart - Now Updated](#)
Publication date: 02 Jun 2015

[RIPE NCC Regional Meeting in Tbilisi](#)
Publication date: 26 May 2015

[>](#)

[Meetings](#) [Recent](#)

[ENOG 9 / RIPE NCC Regional Meeting](#)
09 Jun 2015 - 10 Jun 2015 Kazan, Russia

[RIPE NCC Regional Meeting Yerevan](#)
15 Sep 2015 - 16 Sep 2015 Yerevan, Armenia

[ENOG 10 / RIPE NCC Regional Meeting](#)
12 Oct 2015 - 14 Oct 2015 Odessa, Ukraine

[RIPE 71 Bucharest](#)
16 Nov 2015 - 20 Nov 2015 Bucharest,

New on RIPE Labs

[IPv6 Deployment in Estonia](#)
Publication date: 04 Jun 2015

[The DNS Root Zone Key-Signing Key is Changing](#)
Publication date: 27 May 2015

[DNSSEC Meets End-of-life DLV: Turning off is Hard](#)
Publication date: 25 May 2015

Service Announcements

[>](#)

[IANA Stewardship Transition](#)

[>](#)

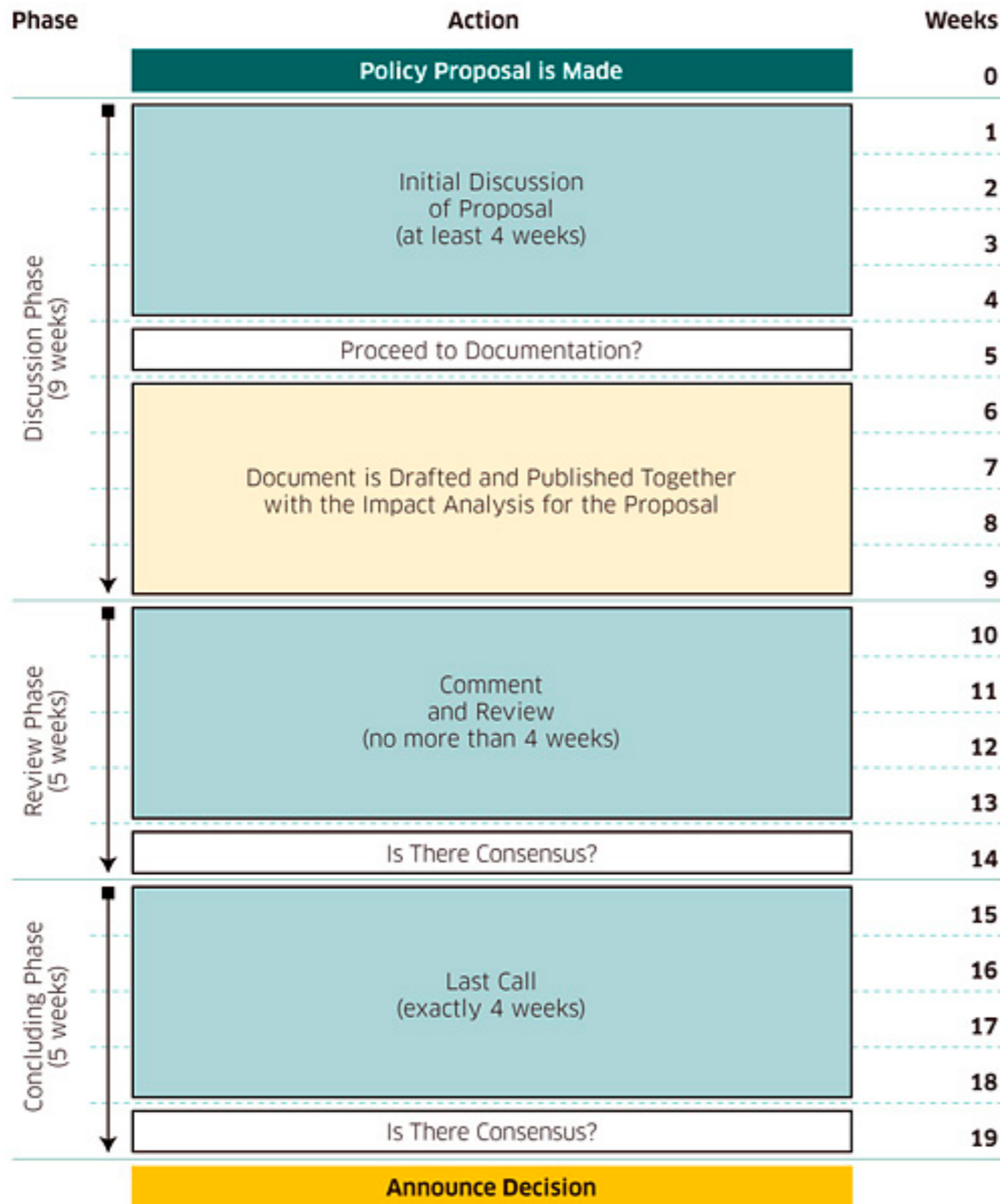
[NRO News](#)
[ASO AC Selects Ron da Silva to Serve on Seat](#)



Bottom-up, Open & Inclusive

- Address Policy is decided by the Address Policy Working-group through the PDP
- RIPE NCC activity Plan is discussed in the Services Working-group
- Governments welcome - in all workgroups
- Cooperation Working-group

RIPE Policy Development process



- **Anybody** can propose
- **Consensus** decided by WG Chairs
- RIPE NCC Board does **NOT** approve policies



RIPE Region summary

- RIPE - the open community
- RIPE NCC - membership association
- RIPE Working groups
- RIPE NCC accountability
- RIPE Policy Development process

What is Happening?

- March 2014: NTIA announced intention to transition away from oversight of the IANA functions
 - Including management of global IP address and AS Number pools
- A global, multi-stakeholder process is underway to develop a proposal for future IANA arrangements
- Work occurring in all of the affected communities
 - Protocol parameters (IETF)
 - Numbers (RIRs)
 - Names (TLD communities, country code and generic)



What is IANA?

- The Internet Assigned Numbers Authority (IANA)
 - Handles a small registry, including the global pools of Internet number resources
 - Executed by ICANN
 - Operated according to the global policies developed by the RIR communities
 - Other functions includes maintenance of the DNS root zone and management of protocol parameters for the IETF
- ICANN acts as IANA operator under a contract to a US government agency (NTIA)
 - Historical arrangement



Internet Assigned Numbers Authority

The Internet Assigned Numbers Authority (IANA) is responsible for the global coordination of the DNS Root, IP addressing, and other Internet protocol resources. [Learn more.](#)

Domain Names

IANA manages the DNS Root Zone (assignments of ccTLDs and gTLDs) along with other functions such as the .int and .arpa zones.

- [Root Zone Management](#)
- [Database of Top Level Domains](#)
- [.int Registry](#)
- [.arpa Registry](#)
- [IDN Practices Repository](#)

Number Resources

IANA coordinates allocations from the global IP and AS number spaces, such as those made to Regional Internet Registries.

- [IP Addresses & AS Numbers](#)
- [Network abuse information](#)

Protocol Assignments

IANA is the central repository for protocol name and number registries used in many Internet protocols.

- [Protocol Registries](#)
- [Apply for an assignment](#)
- [Time Zone Database](#)

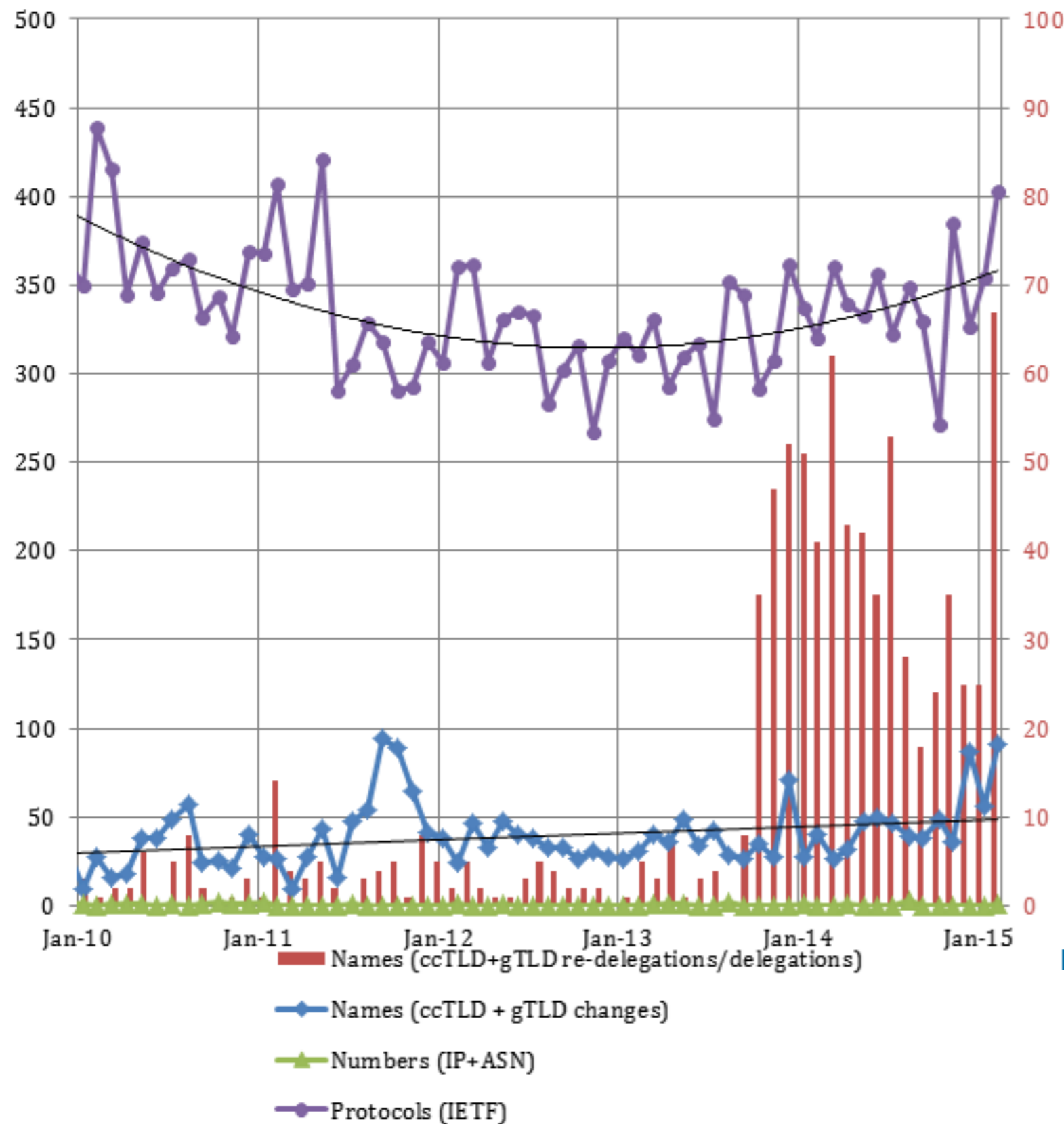
[IANA Customer Survey](#) — In September 2014 ICANN invited customers of the IANA services to participate in its third annual customer satisfaction survey. We have now analyzed the results and are happy to report that the feedback was very positive. This report summarizes the survey methodology and the responses received and compares them to last year's results.



Basic requests

IANA Functions Monthly Usage

TLD (Re-)Delegations



Scheduled Allocation	IPv4	2015-03-02
APNIC	ASN	2014-08-27
LACNIC	ASN	2014-09-04
Scheduled Allocation	IPv4	2014-09-02
Scheduled Allocation	IPv4	2014-05-20
RIPE NCC	ASN	2014-02-27
RIPE NCC	ASN	2013-09-06
APNIC	ASN	2013-09-10

<http://www.iana.org/performance/metrics>

<https://www.icann.org/news/blog/iana-functions-usage-analysis>



NTIA Timeline

- December 24, 1998 (DARPA-to-USC-to-ICANN transition) February 9, 2000 (NTIA-ICANN transition)
- April 1, 2001 (March 21, 2001 NTIA-ICANN contract)
- April 1, 2002
- April 1, 2003 (March 13, 2003 NTIA-ICANN contract) October 1, 2003
- October 1, 2004
- October 1, 2005
- October 1, 2006 (August 11, 2006 NTIA-ICANN contract) October 1, 2007
- October 1, 2008
- October 1, 2009
- October 1, 2010
- June 14, 2011 (Extension to March 31, 2012)
- March 5, 2012 (Extension to September 30, 2012)
- March 10, 2012 (NTIA finds no proposals met the requirements of Dec 19, 2011 RFP) March 10, 2012 (Extension to September 30, 2012)
- October 1, 2012 (July 2, 2012 NTIA-ICANN contract)
- October 1, 2015
- October 1, 2017



IANA executes Global addressing policy

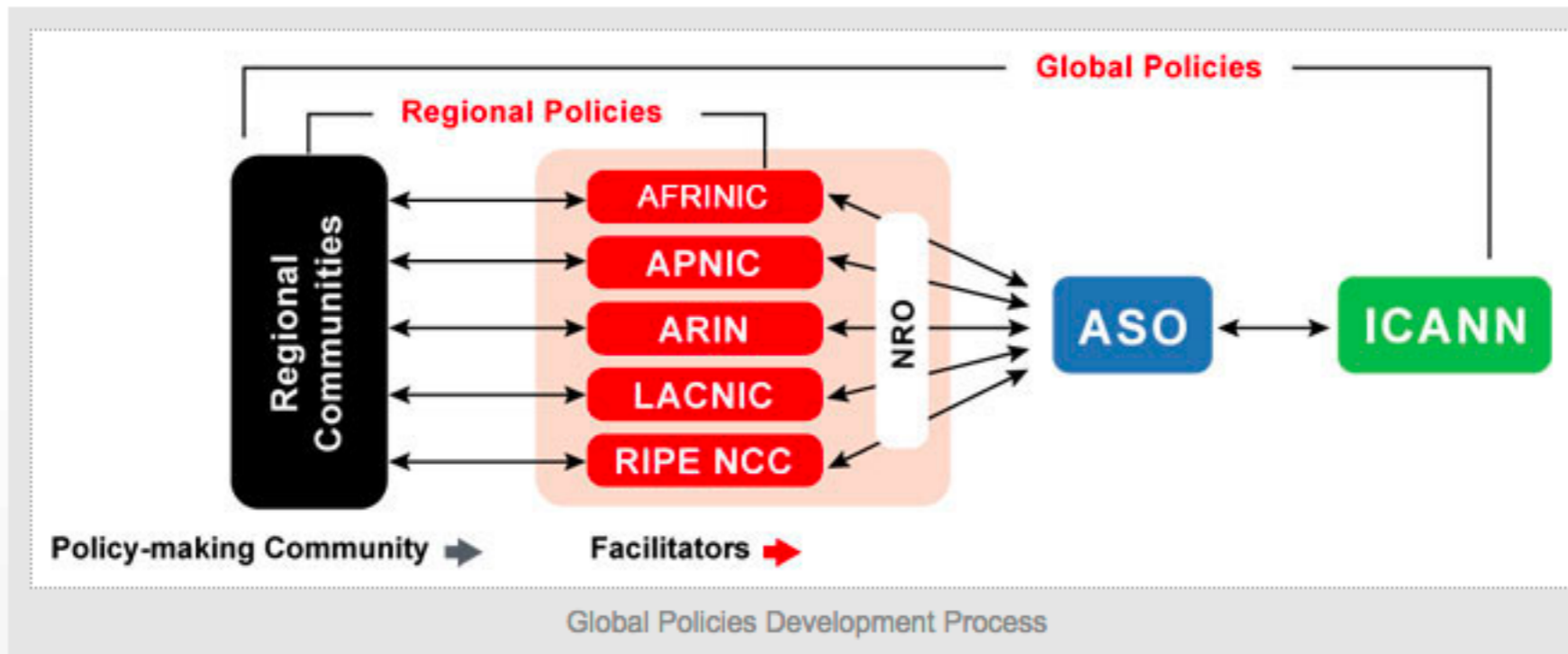
- Allocation of **IPv6** Blocks to Regional Internet Registries | (Ratified 7 September 2006)
- Allocation of **ASN** Blocks to Regional Internet Registries | (Ratified by Executive Committee, on behalf of the ICANN Board in September 2010)
- Post Exhaustion **IPv4** Allocation Mechanisms by the IANA | (Ratified 6 May 2012)
- ICP-2: Criteria for Establishment of New Regional Internet Registries



Global Policy Process

Global Policies Development

Any individual may submit a global proposal. Each RIR community must ratify an identical version of the proposed policy. The NRO Executive Council (NRO EC) then refers the coordinated proposal to the ASO Address Council (ASO AC), which reviews the process by which the proposal was developed and, under the terms of the ASO Memorandum of Understanding, passes it to the ICANN Board of Directors for ratification as a global policy.



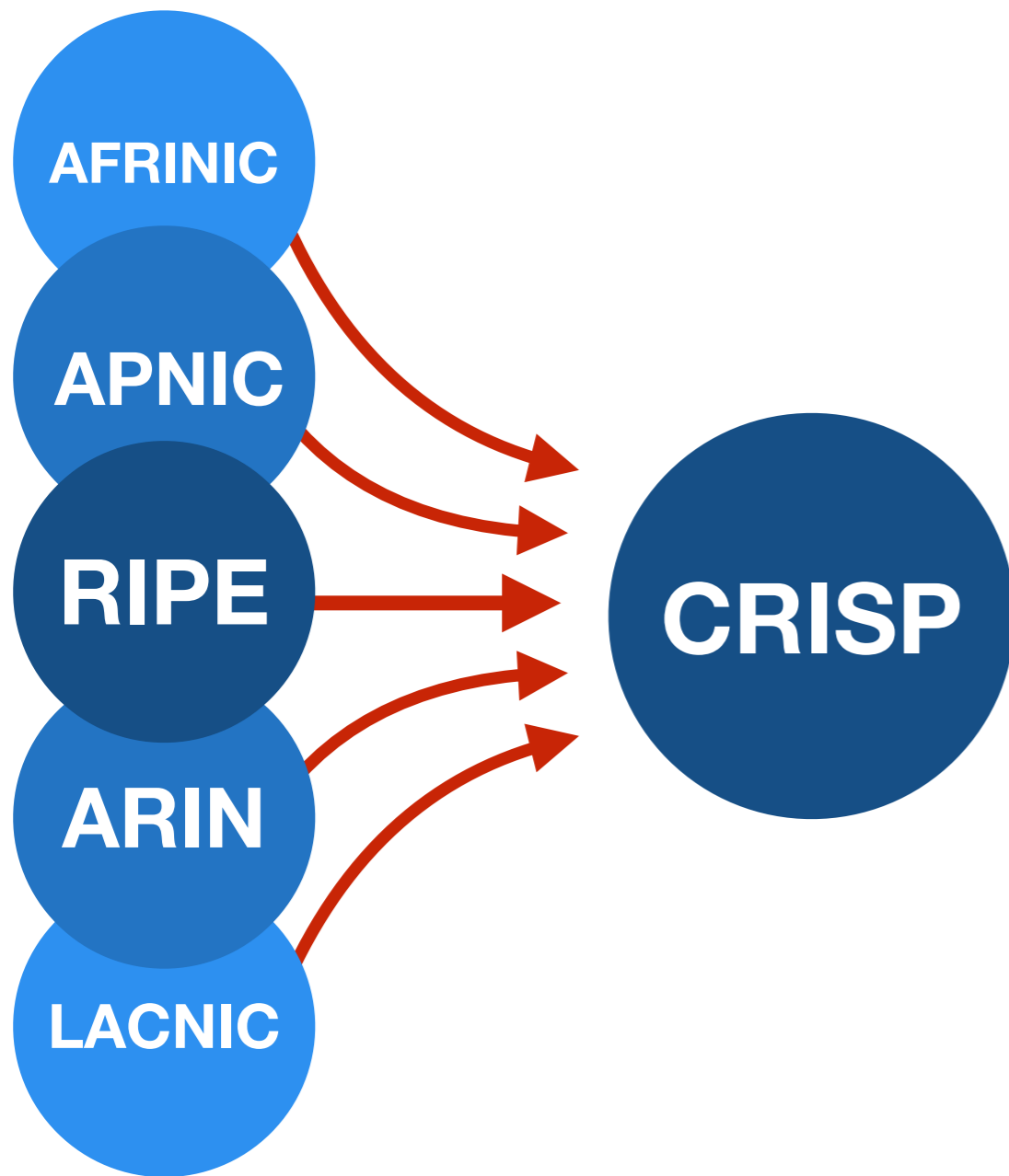
IANA Stewardship Process: RIR Communities



- Five RIR communities each holding their own discussions
- Proposal submitted 15. January 2015
- <https://www.ripe.net/iana-discussions>
 - RIPE Cooperation WG mailing list archive
 - Summaries of other RIPE community discussions
 - Links to other RIR discussions
 - Links to global discussions (ICANN, IGF)



IANA Stewardship Process: CRISP



- Consolidated **RIR IANA Stewardship Proposal** (CRISP) Team
- Consolidate five RIR community outputs into a single proposal
- 15 members selected
- Works transparently via a public mailing list:
- <https://www.nro.net/mailman/listinfo/ianaxfer>

Formation of the CRISP Team

- A call for volunteers was issued during RIPE 69
- RIPE Chair, Hans Petter Holen, appointed two representatives from the community at RIPE 69
 - **Nurani Nimpuno** (Netnod)
 - **Andrei Robachevsky** (ISOC)
 - **Paul Rendek** (RIPE NCC)
- Selection was made in consultation with the RIPE NCC Executive Board
 - Received community support in the RIPE 69 Closing Plenary session

CRISP Team Members - RIPE NCC Service Region



Nurani Nimpuno

Head of Outreach & Communications at Netnod



Andrei Robachevksy

Technology Programme Manager at the Internet Society



Paul Rendek

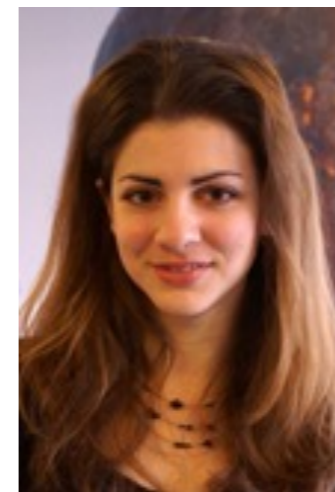
Director External Relations, RIPE NCC

Support from:



Chris Buckridge

Sr. External Relations Officer, RIPE NCC

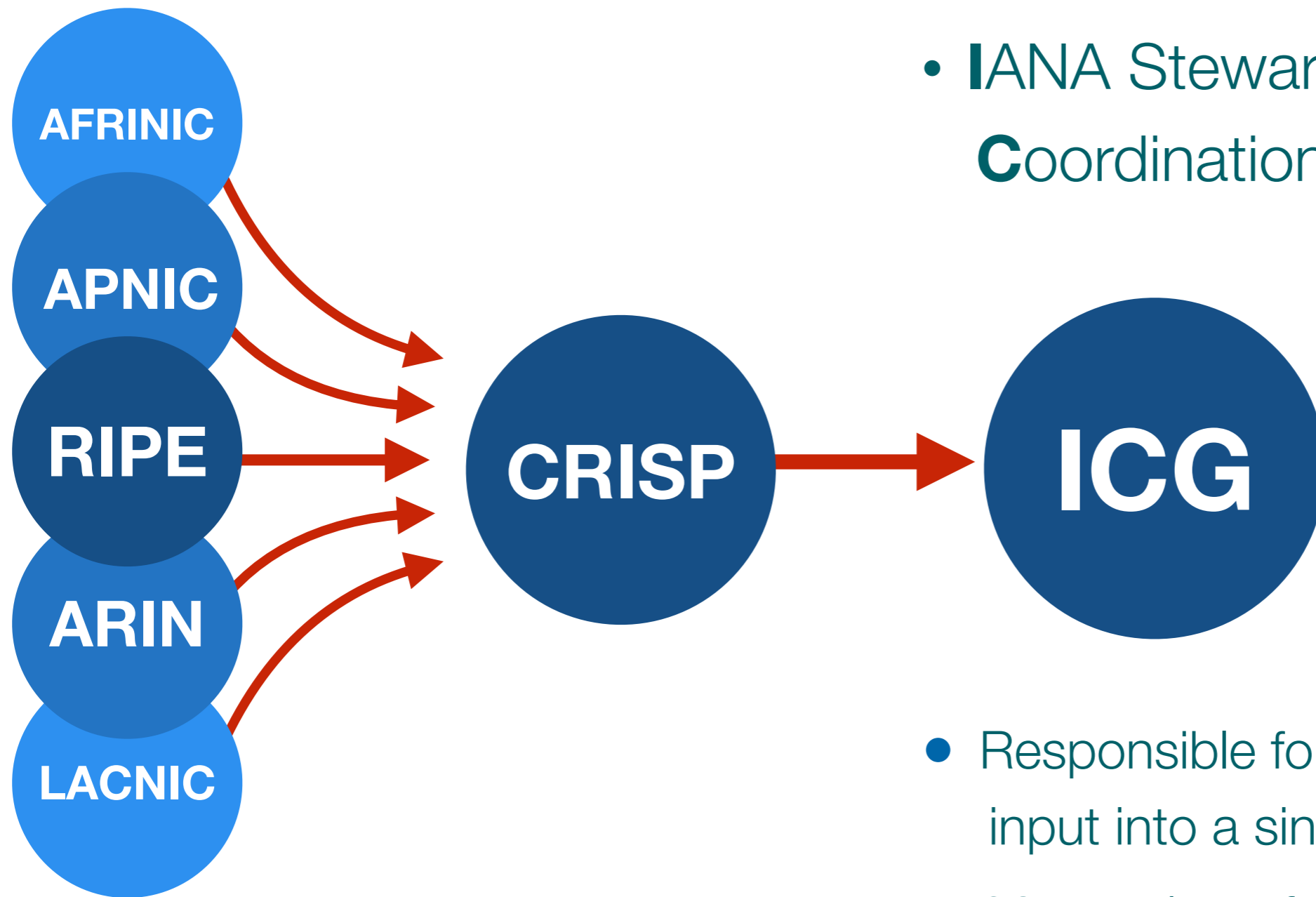


Athina Fragkouli

Sr. Legal Counsel, RIPE NCC



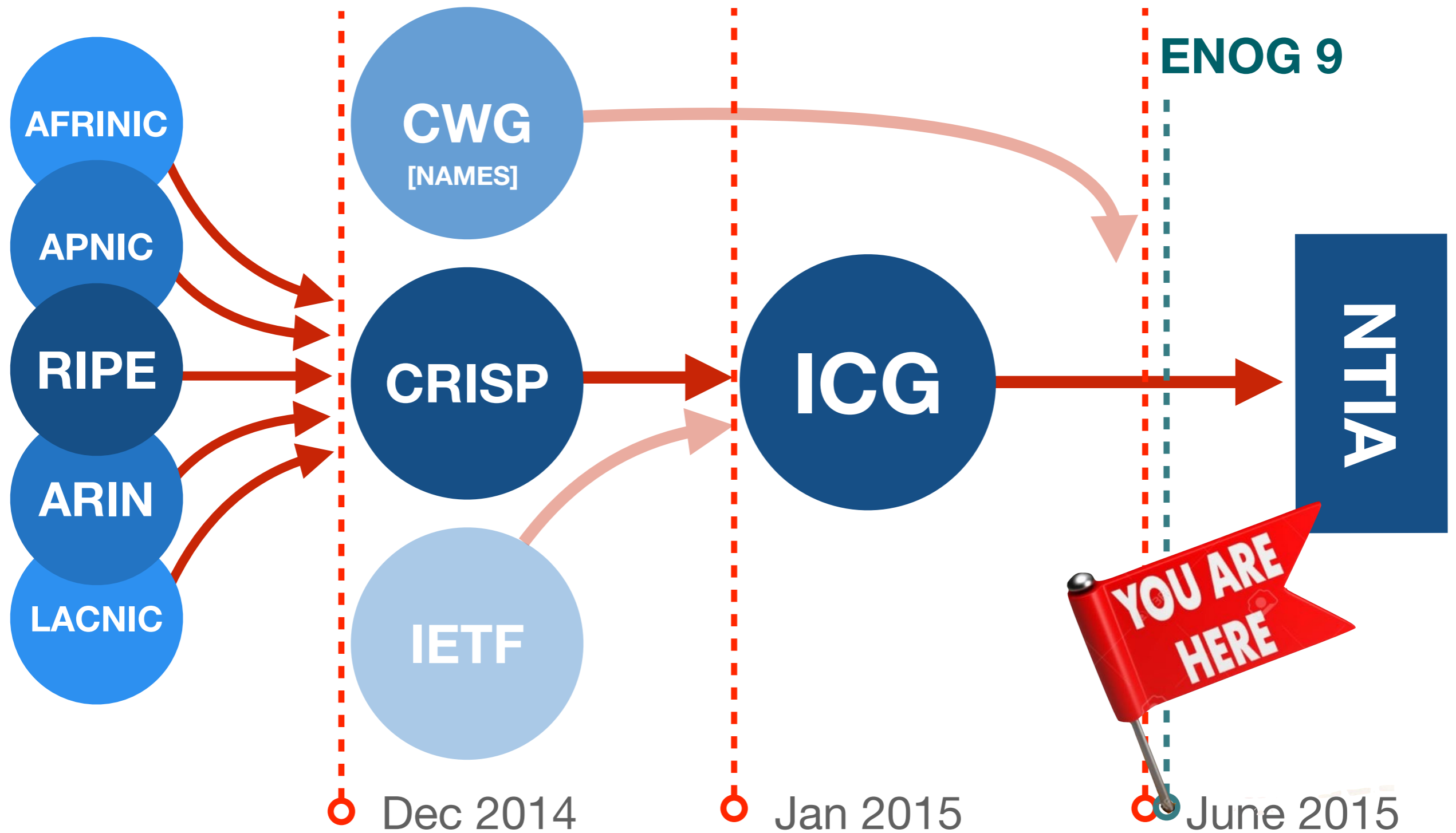
IANA Stewardship Process: ICG



- IANA Stewardship Transition Coordination Group (ICG)

- Responsible for consolidating all input into a single proposal
- 30 members from various stakeholder groups

Overview of the process



Key Principles

- RIR communities are the ultimate stewards of number policy and registration
 - A working model already in place
 - Bottom-up, open and inclusive
- No new structures; build on existing structures and relationships
 - Operational and policy relationships already clearly defined
 - Minimal operational change
 - ICANN has provided excellent service as IANA operator

Engaging the Communities

- We present this information at all RIPE and RIPE NCC Regional meetings
 - A summary of the feedback is documented online
<https://www.ripe.net/iana-discussions>
- Very important that everybody in the RIPE NCC service region is heard in this discussion

Stay informed and participate in this important process

Crisp proposal is done - but SLA remaining!



Essence of the proposal

- The **oversight** provided by the NTIA is replaced by a **contractual** relationship with the RIRs representing the Numbering communities
- **The community** can, through the RIRs, change the IANA operator just as the NTIA in the past could have changed the IANA operator.

Components of the proposal

- **IANA function stability and reliability:** ICANN to continue as the IANA Numbering Services Operator, orderly transition to another operator should such need arise
- **Replace the role of the NTIA with the RIRs** (as representatives of the Internet Numbers community): RIRs to establish a service level agreement with the IANA Numbering Services Operator
- **Establishment of a Review Committee:** To review the performance of IANA Numbering Services and advise the RIRs
- **Clarify IPR-related issues:** Intellectual property rights (IPR) related to the provision of the IANA services stay with the community

IANA SLA Principles

1. Separation of policy development and operational roles **Article 2**
2. Description of services provided to RIRs **Article 4**
3. Obligation to issue reports on transparency and accountability **Article 6**
4. Security, performance and audit requirements **Article 7**
5. Review of the IANA operation **Article 8**
6. Failure to perform **Article 9**
7. Term and termination **Article 10**
8. Continuity of operations **Article 11**
9. Intellectual property rights and rights over data **Article 12**
10. Dispute resolution **Article 13**
11. Cost-based Fee **Article 5**

[Section III.A.3. of the proposal]

Review Committee

- **Advise RIRs on review of the service level** described in SLA
 - Provide feedback from the community's perspective
- **Community representatives** from each RIR service region
 - Equal representation from each RIR service region
- The process of **selecting representatives** will be driven by the **RIRs based on open and bottom-up principles**

IANA trademark and iana.org

- Intellectual property rights on IANA trademark and IANA.org:
 - Clarity needed on these issues in case of a change of IANA operator
- Section III.A.3 last paragraph:
 - “The transfer of the IANA trademark and IANA.ORG domain to the IETF Trust will require additional coordination with the other affected communities of the IANA Services, namely, protocol parameters and names. It is the preference of the Internet Numbers Community that all relevant parties agree to these expectations as part of the transition.”



IANA Numbering Services Operator

Policy

ICANN ASO
Address
Council



IANA



Global numbering community

IPv4
IPv6
ASN

Implementation



Questions?

