



NRO update

**To be the flagship and global leader
for collaborative Internet number
resource management as a central
element of an open, stable and
secure Internet**

ARIN 38, October 21st 2016
Dallas, TX, USA



Presentation Summary

- **NRO Introduction**
 - What is the NRO
 - Key Focus Areas
 - NRO in 2015 & Finance
- **NRO Activities**
 - NRO Global Information
 - RIR Accountability
 - IANA Stewardship Transition
 - Internet Governance Forum

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
62:109:128 195:048:02:03 193:0.0.203 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
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

NRO in 2016

- **Executive committee**
 - Oscar Robles (Chair) – LACNIC
 - John Curran (Secretary) – ARIN
 - Paul Wilson (Treasurer) – APNIC
 - Alan Barrett- AFRINIC
 - Axel Pawlik – RIPE NCC
- **Secretariat**
 - Hosted by ARIN
 - Executive Secretary: German Valdez (since April 2013)
- **Coordination Groups**
 - CCG (Communications), ECG (Engineering), RSCG (Registration Services).

NRO Finances

- **Expenses**

- Travel (ASO AC Chair and Executive Sec).
- Communications (Webex), NRO CG coordination (Meeting room) and outreach (IGF, ICANN, etc).
- IGF Contribution
- Contribution to ICANN.
 - \$823,000 for 2015-2016 FY
 - 2016 – 2017 FY contribution to be determined by the new SLA with ICANN
- Staff cost (Executive Secretary)

- **Budget**

- Shared proportionally based on registration services revenue.

- **Joint RIR Stability Fund**

- to help ensure reliable operation of the Internet's IP address management system globally in case of disruptions or emergencies.
- Pledges for over 2.1 million US Dollars
- <https://www.nro.net/joint-rir-stability-fund>



NRO

NRO Global Information

- **Internet Number Status Report**

- Updated quarterly.
- Global stats on IPv4, IPv6, ASN
- <https://www.nro.net/statistics>

- **Comparative Policy Overview**

- Updated quarterly
- New information on RIRs membership policy (access to delegation and registration services)
- <https://www.nro.net/comparative-policy>

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
62:109:128 195:048:02:03 193:0.0.203 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
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

RIRs Accountability

- **Governance Matrix**

- Overview of the governance frameworks of the RIRs.
- Information on Bylaws, Regional PDP, Dispute Resolutions, Use of Whois, Privacy issues, Budget, Activity planning etc.
- <https://www.nro.net/governance-matrix>
- Ongoing process to improve RIR accountability mechanisms

- **RIR Accountability Q&A**

- <https://www.nro.net/rir-accountability>

- **Joint RIR Independent Accountability Review**

- Independent review currently in process in all RIRs.
- Results will be made public

IANA Transition

- **IANA Stewardship Transition – Number Community Proposal**
 - Support of Consolidated RIR IANA Stewardship Proposal (CRISP) Team to drive Internet Number Community consultation process
 - Meetings records, charter, members
 - <http://www.nro.net/crisp-team>
 - Community Proposal submitted to ICG
 - <http://www.nro.net/crisp-final-proposal>
 - SLA development discussions in the RIR
 - <http://www.nro.net/sla-development>
 - NRO Comments to ICG proposal
 - <http://www.nro.net/nro-comments-icg-proposal>
 - IANA Numbering Services Review Committee Charter defined and created
 - <https://www.nro.net/news/iana-numbering-services-review-committee-composition>

IANA Transition

- **RIR - IANA Service Level Agreement**

- Fully based and in compliance with CRISP proposal.
- Final version signed during ICANN 56 in Helsinki and since October 1st 2016 in effect
 - <http://www.nro.net/sla>

IANA Transition

- **CCWG on ICANN Accountability**

- Active participation through numbers community representatives on enhancing ICANN's Accountability
 - Appointment of RIR staff and Numbers Community members.
 - Izumi Okutani (APNIC Region)
 - Athina Fragkouli (RIPE NCC Staff)
 - Fiona Asonga (AFRINIC Region)
 - Jorge Villa (LACNIC Region)
- Important component of the IANA transition process. Currently discussing accountability improvements in ICANN after-transition period.

IANA Transition

- **Review Committee**

- Key element of the Internet Number Community Proposal, to ensure that the IANA Numbering Services Operator maintains the service level defined in the SLA.

AFRINIC

- Fiona Asonga, Douglas Onyango – community representatives
- Madhvi Gokool – staff representative

APNIC:

- Dr Ajay Kumar, Tomohiro Fujisaki – community representatives
- George Kuo – staff representative

ARIN:

- Louie Lee, Jason Schiller- community representatives
- Nate Davis – staff representative

LACNIC:

- Nicolas Antoniello, Edmundo Cazares- community representatives
- Ernesto Majó- staff representative

RIPE NCC:

- Filiz Yilmaz, Nurani Nimpuno- community representatives
- Andrew de la Haye – staff representative

- More Info:
 - <https://www.nro.net/iana-numbering-services-review-committee>
- Review Committee Charter:
 - https://www.nro.net/wp-content/uploads/Review-Committee-Charter_FINALclean.pdf

IANA Transition

- **Intellectual Property Rights**

- The Proposal to Transition the Stewardship of IANA Functions to the Community included a requirement for certain IANA IPR to be transferred from ICANN to an independent entity. The IPR consists of trademarks and domain names.
- The IETF Trust agreed to hold the IANA IPR.
- The IANA Community Coordination Group (CCG) provides guidance, advice, and if expressly specified in the IPR agreement, approvals, to the IETF Trust regarding the stewardship of the IANA IPR.
- The CCG is comprised of nine (9) individuals, three (3) appointed by each of the Operational Communities.
- The NRO EC agreed that the NRO officeholders rotating each year would be appointed to the CCG.
 - Chair – Oscar Robles (CCG Co-chair)
 - Secretary – John Curran
 - Treasurer – Paul Wilson

IANA Transition

- **RIR Legal Team**

- The NRO would like to thank the RIR legal team for their hard work and dedication during the long process of the IANA Stewardship Transition for the benefit of the Global Number Community

- Ashok Radhakisson (AFRINIC)
- Craig Ng (APNIC)
- Michael Abejuela (ARIN)
- Eduardo Jimenez (LACNIC)
- Athina Fragkouli (RIPE NCC)



NRO

Internet Governance Forum

- **Participation in the 10th IGF in Brazil**
 - NRO supports annually to the IGF - 100K USD.
 - NRO Booth
 - NRO Brochure Cooperation
 - IPv6 Around the World
 - Two NRO Workshops (including IPv6 deployment) and RIR Open Forum
 - Support of IPv6 Best Practice Forum



Thank You

- <http://www.nro.net>

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
62:109:128 195.048.02.03 193.0.0.202 2001:610:240 193.0.0.203 2001:610:240:0 193.0.0.202
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 2001:610:240 193.0.0.203 195.048.02.03
Number Resource Organization