



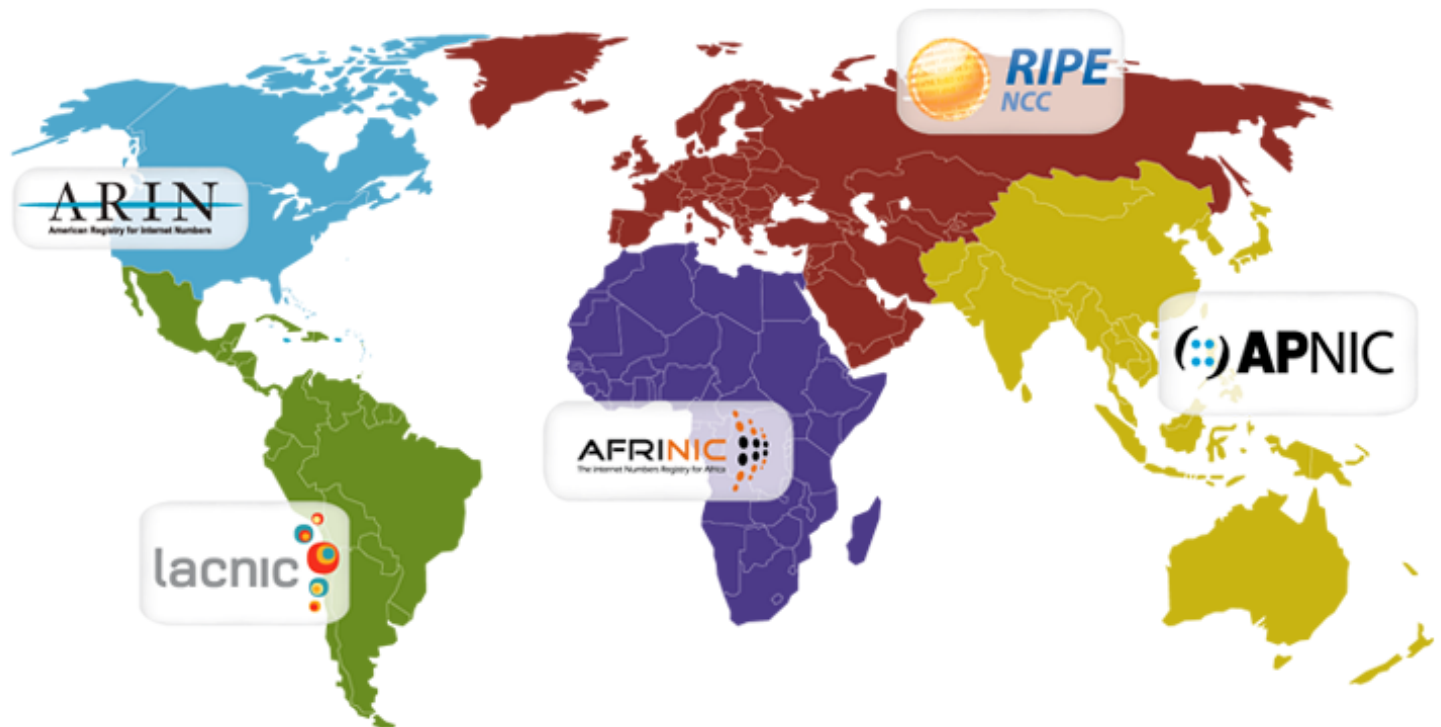
NRO NC Report: Activities of the ASO AC

Jorge Villa/Ricardo Patara
ASO Address Council
LACNIC 22
Santiago de Chile, Cl
30 October 2014

Agenda

- The NRO NC / ASO AC
- Global Policy & Policy Development Process
- ASO AC recent activities

Regional Internet Registries (RIRs) manage, distribute, and register Internet number resources (IPv4 and IPv6 addresses and Autonomous System Numbers) within their respective regions.



Internet Authority for Assigned Numbers (IANA)

IPv4/IPv6 Address Blocks / ASN

AFRINIC

APNIC

RIPE

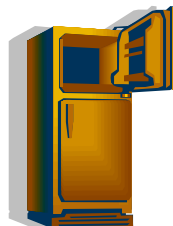
ARIN

LACNIC

IPv4/IPv6 Address Blocks / ASN

Local Internet Registries (LIR), National Internet Registries (NIR), Internet Service Providers (ISP), Critical Infrastructures (NAP, IX, RIR, ccTLD, rootDNS), Organizations (end-user)

IPv4/IPv6 Address



IANA is responsible for **global coordination** of the Internet Protocol addressing systems, as well as the Autonomous System Numbers used for routing Internet traffic.

IANA's various activities can be broadly grouped in to three categories:

Domain Names

IANA **manages the DNS Root**, the .int and .arpa domains, and an IDN practices resource.

Number Resources

IANA **coordinates** the global pool of IP and AS numbers, providing them to Regional Internet Registries (as described by **global policies**).

Protocol Assignments

Internet protocols' numbering systems are **managed** by IANA in **conjunction** with standards bodies.

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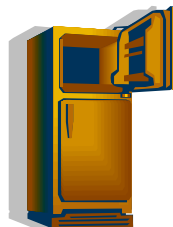
LACNIC

Number Resource Organization (NRO)

IPv4/IPv6 Address Blocks / ASN

Local Internet Registries (LIR), National Internet Registries (NIR), Internet Service Providers (ISP), Critical Infrastructures (NAP, IX, RIR, ccTLD, rootDNS), Organizations (end-user)

IPv4/IPv6 Address



- Formed by the **NRO MoU** (24 October 2003)
(<http://www.nro.net/documents/nro-memorandum-of-understanding>) (signed by AFRINIC in April 2005)
- Purpose
 - Coordination roll for 5 RIRs to act collectively
 - Perform joint operational / external activities
 - Protect unallocated number resources
 - Promote and protect the bottom-up policy development process
 - Act as a focal point for the Internet community input into the RIR system
- Consists of
 - **NRO EC**
 - **NRO NC**
 - **NRO Secretariat (German Valdez + RIR staff)**

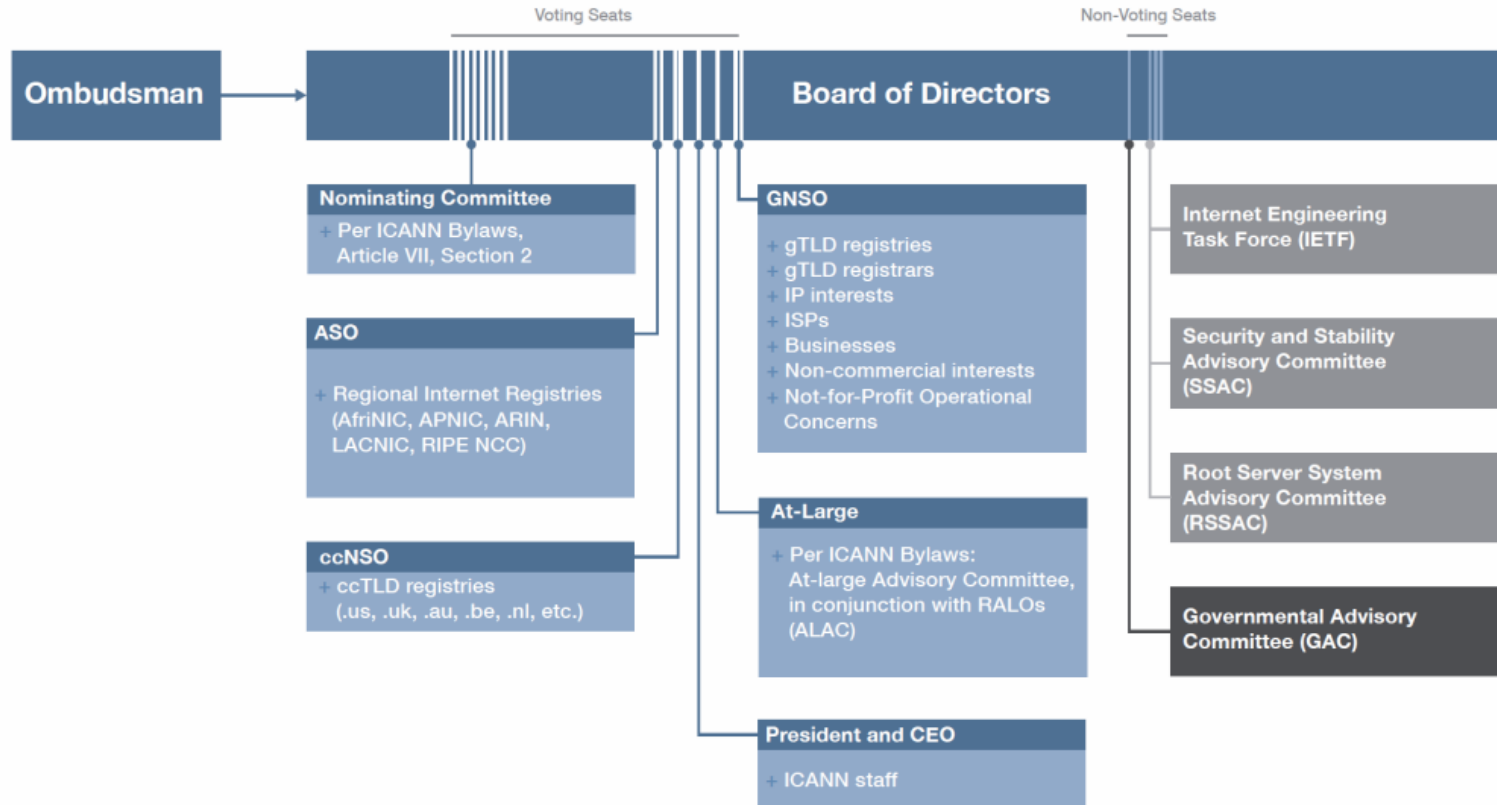
NRO Executive Council

- One member **appointed** from **each of the 5 RIR's boards**
 - Typically the **RIR CEO / Managing Director**
- Represents the NRO in external activity
- Represents the RIRs on issues the RIR delegates
 - **Speaks** on behalf of the 5 RIRs **with one voice**
- Commits RIR resources in support of NRO activities

2014 Executive Council positions:

- **Chairman:** Adiel Akplogan (AFRINIC)
- **Secretary:** Axel Pawlik (RIPE NCC)
- **Treasurer:** Ernesto Majó (LACNIC)
- **Members:** John Curran (ARIN), Paul Wilson (APNIC)

ICANN Organization Chart



What is the ASO AC?

- ICANN Address Supporting Organization
- Independent body separate from RIR management and board to:
 - Oversee global number resource policy work
 - Appoint 2 Directors to the ICANN Board
 - Serve on various ICANN bodies as needed
 - Advise ICANN Board on number resource matters

NRO Numbers Council

overseeing recommendations on IP address policy, including the management of policy development activities, and appoint members to the ICANN Board of Directors

- **Performs the function of the ASO AC**
- Three members appointed from each of the 5 RIR's regions
 - Two elected by the community
 - one appointed by RIR board

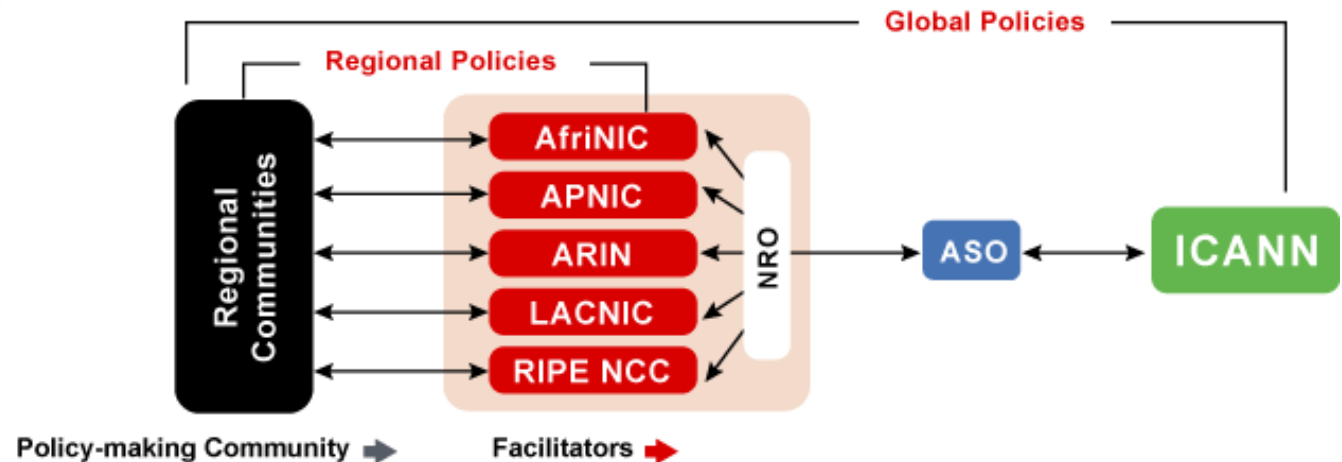
- ICANN Address Supporting Organization
 - ICANN signed the ASO MoU with APNIC, RIPE NCC and ARIN (19 October 1999)
 - Amended in January 2001
 - Updated 30 October 2002 to add LACNIC
 - NRO and ICANN signed MoU (21 October 2004) [<http://www.nro.net/wp-content/uploads/2004/10/aso-mou-signed.pdf>] that:
 - replaces the previous MoU.
 - Established the NRO NC will perform the function of ASO AC
 - Defines the roles and process for global policy development
 - Defines how to provide advice to the ICANN board regarding number policy

Registry	Member
	Fiona Asonga
	Alan Barrett* [Vice Chair]
	Douglas Onyango
	Naresh Ajwani [Vice Chair]
	Tomohiro Fujisaki
	Aftab Siddiqui*
	Ron da Silva*
	Louis Lee [Chair]
	Jason Schiller
	Hartmut Glaser*
	Ricardo Patara
	Jorge Villa
	Dmitry Kohmanyuk
	Wilfried Woeber*
	Filiz Yilmaz

Global Policy

- A Global Policy
 - “Global policies are defined within the scope of this agreement as Internet number resource policies that have the agreement of all RIRs [Regional Internet Registries] according to their policy development processes and ICANN, and require specific actions or outcomes on the part of IANA or any other external ICANN-related body in order to be implemented.”
 - Global policies determine number allocation policy for requests that involve IANA
 - Global policies may also specify regional number allocation policy
- There are currently no new Global Policy Proposals

Global Policy Development



- Each region has its own policy development process
 - All open, transparent, and bottom-up
- Global policy proposals are submitted in all 5 regions
- Each region follows its own process
- It then gets passed to the NRO for review
- And forwarded to the ICANN board

Global Policy Development

- The NRO NC must
 - Validate the proposal went through the policy development process of each region
 - Adequate consideration of viewpoints
 - The same text passed in all regions
 - Or any rewrite from the NRO EC is not a substantive change compared to what the individual region passed
- The NRO NC then recommends to the ICANN board to ratify
- ICANN Board can ratify, ask for clarification, or send it back for specific reconsideration of concerns

ICANN Participation

- **ASO AC face to face meeting at ICANN 50 in London June 22-26**
 - Discussed the revamp of the NRO web site
 - Discussed the need for a Global (coordinated) Policy on IPv4 address transfers
 - Updated our operating procedures
 - Process for appointments
 - Discussed a need to expedited ASO AC member selection
- **Met with ICANN Board**
- **ICANN Board Selection**



ICANN Participation

- **2 Hour ASO AC work shop (ICANN 50)**
 - LACNIC IPv4 runnot announcemnt
 - APNIC, RIPE, LACNIC soft landing policies
 - Current transfer policy status
 - IPv6 adoption and World IPv6 Launch
 - IANA redistribution policy



ICANN Participation

- **SO/AC Led High Interest Topic Session**
- **ASO Meeting with the ALAC**
- **IGC Meeting with ALAC**
- **Meeting with the Board**
- **IGC Meeting with the GAC**
- **ASO Information Session**
 - **IANA Transition**
 - **16 bits ASN assignment**
- **Community Discussion with ICG**

IANA Advice

- On April 15th IANA asked ASO AC for advice regarding the ASN allocation issue because of limited number (less than 500) of 2-byte ASN in the available pool.
- Policy: **Internet Assigned Numbers Authority (IANA) Policy for Allocation of ASN Blocks to Regional Internet Registries.**

ASN Allocation Policy

- IANA allocates ASNs to RIRs in blocks of 1024 ASNs.
- After 31st December 2010 there was no distinction between 16-bit and 32-bit only ASN and allocation started from 32-bit allocation pool.
 - “16-bit “ASNs are the AS Numbers in the range: 0 - 65535
 - “32-bit only” ASNs are the AS Numbers in the range: 65536 - 4294967295
 - “32-bit” ASNs are the AS Numbers in the range: 0 - 4294967295

ASN Allocation Policy

- Additional Allocation - An RIR is eligible to receive (an) additional ASN block(s) from the IANA if one of the following conditions is met:
 1. The RIR has assigned/allocated 80% of the previously received ASN block, or
 2. The number of free ASNs currently held by the RIR is less than two months need. This projection is based on the monthly average number of ASNs assigned/allocated by the RIR over the previous six months.
- An RIR will be allocated as many ASN blocks as are needed to support their registration needs for the next 12 months, based on their average assignment/allocation rate over the previous six months, **unless the RIR specifically requests fewer blocks than it qualifies for.**

Question Raised by RIRs

- The RIRs raised a question about allocations of AS Numbers to the RIRs and whether their holdings of 16-bit AS Numbers can be set to one side when evaluating a request for additional AS Numbers from the IANA AS Numbers registry.

Formal Response to IANA

- When judging if an RIR is eligible to receive (an) additional ASN block(s) from the IANA per section 3, the **IANA must consider utilization of the total undifferentiated pool of ASNs** that contains both 16-bit ASNs and 32-bit only ASNs.
- How RIRs manage their undifferentiated **pool is within each RIR's consideration per their operating procedures and policies**.
- There **is no requirement in the policy** to form the block of 1024 AS Numbers from a contiguous set of numbers, thus allocating from 2 or more different value-ranges is acceptable
- Per this advice, the past practice that an RIR has the option of requesting a block of 1024 AS Numbers that consists of a non-contiguous block of a specific amount of 16-bit ASNs and 32-bit only ASNs **may continue**.

Formal Response to NRO-EC

- In the AC's August teleconference, the ASO AC noted that past precedence for ASN requests to the IANA would allow for each RIR to **take only 99 16-bit ASNs on their next ASN request from the IANA**. If such an agreement is to be reached, the AC advises that it should be done so transparently, and openly, and the RIR communities should be informed of such an arrangement so that the outcome is anticipated.

New 16-bit ASN Allocations

- **APNIC (2nd September 2014)**

- **Range 1**

- 99 ASN 16bits: 64000-64098
 - 925 ASN 32 bits: 133632-134556

- **Range 2**

- 1024 ASN 32 bits: 134557-135580

- **LACNIC (5th September 2014)**

- **Range 1**

- 99 ASN 16bits: 64099 - 64197
 - 925 ASN 32 bits: 263680 – 264604

- **Range 2**

- 1024 ASN 32 bits: 264605 – 265628

Current Status:

- Remaining IANA Pool
 - 64198-64495 - (298 ASN)



Recent Appointments

- APNIC elected Dr Ajay Kumar to the ASO AC
- Appointed **Hans Petter Holen** to the ICANN 2015 NomCom (2nd Term).
- Selected **Hartmut Glasser** to the IANA Oversight Transition Coordnation Group

Current Appointments: ICANN Board Selection



- ICANN Board Seat 9
 - Raymond A. Plzak
 - Current term: May 2009 – Annual General Meeting 2015
 - Committees: Structural Improvements (Chair), Audit, Board Governance, Compensation, New gTLD Program

Seat 9 selection schedule

Nomination Phase: 24 Oct - 31 Dec 2014

Comment Phase: 1 Jan – 31 March 2015

Interview Phase: 1 Feb – 31 March 2015

Selection Phase: 1 April – 17 April 2015

Due Diligence Review 18 April – 31 May 2015

Current Appointments: ICANN Board Selection



english

español

português

ASO AC convoca la presentación de candidaturas

De acuerdo con el Memorando de Entendimiento de ASO y los estatutos de ICANN, el Consejo de Direcciones de la Organización de Apoyo para Direcciones (ASO AC) convoca la presentación de candidaturas para ocupar la Banca no. 9 en el Directorio de ICANN.

El período de nominaciones cerrará el miércoles, 31 de diciembre de 2014 a las 23:59 UTC.

El cronograma del proceso de selección es el siguiente:

- - Fase de nominaciones – 24 de octubre de 2014 al 31 de diciembre de 2014
- - Fase de comentarios – 1ro de enero de 2015 al 31 de marzo de 2015
- - Fase de entrevistas – 1ro de febrero de 2015 al 31 de marzo de 2015
- - Proceso de selección – 1ro de abril de 2015 al 17 de abril de 2015
- - Revisión de diligencia debida – 18 de abril de 2015 al 31 de mayo de 2015
- - Anuncio – 1ro de junio de 2015, a más tardar

El estatuto de ICANN establece que una Organización de Apoyo no puede seleccionar dos directores de una misma región geográfica. Dado que el director seleccionado por ASO AC para ocupar la Banca no. 10 es originario de la región de APNIC, los nominados para la Banca no. 9 no podrán ser originarios de dicha región.

Todos los candidatos deberán firmar una Carta de Certificación declarando su buena conducta. El candidato seleccionado será sometido a una revisión de diligencia debida independiente por parte de un contratista de ICANN y el anuncio del candidato se hará una vez que esta revisión se haya completado con éxito.

Se invita a los miembros de la comunidad a enviar sus nominaciones por correo electrónico a nominations2015@aso.icann.org. La nominación deberá incluir la siguiente información:

- - Nombre completo de la persona nominada
- - Dirección de correo electrónico de contacto de la persona nominada
- - Número telefónico de contacto de la persona nominada (de ser posible)



Thank you.
Questions?