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**Question 1/1:** Policy, regulatory and technical aspects of the migration from existing networks to broadband networks in developing countries, including next-generation networks, m-services, OTT services and the implementation of IPv6

**SOURCE:** American Registry for Internet Numbers (ARIN) (United States of America)

**TITLE:** Regional internet basics

**Action required:** Participants are invited to consider this document.

*Keywords:* IPv6

**Abstract:**

Internet identifiers are coordinated globally, so that each identifier is uniquely assigned to only one party - thus enabling successful and reliable communication among parties on the Internet. For Internet numbers (commonly referred to "IP addresses"), this coordination occurs via the efforts of the five Regional Internet Registries (RIRs), which work together as one global Internet numbers registry system. This paper gives a high level understanding of the Regional Internet Registry (RIR) system.

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## 1. Introduction

Each RIR operates in its respective region as a not-for-profit member-based association in accordance with the laws in the countries in which they are located. The five RIRs are as follows: AFRINIC (established 2005, serving Africa and based in Mauritius), APNIC (established 1993, serving Asia Pacific region and based in Australia), ARIN (established 1997, serving the United States, Canada, many Caribbean and North Atlantic islands and based in the United States), LACNIC (established 2002, serves Latin America and the Caribbean and based in Uruguay) and RIPE NCC (established 1992, serving Europe, Central Asia and the Middle East and based in The Netherlands). Specific RIR information and coverage areas can be found at:

- [www.afrinic.net](http://www.afrinic.net)
- [www.apnic.net](http://www.apnic.net)
- [www.arin.net](http://www.arin.net)
- [www.lacnic.net](http://www.lacnic.net)
- [www.ripenncc.net](http://www.ripenncc.net)

## 2. Role of RIRs

The RIRs provide services for the administration, management, distribution and registration of Internet number resources, specifically IPv4 and IPv6 addresses and Autonomous System numbers, within their respective regions. Services are based, in part, upon policies that the communities of each RIR develop in a multistakeholder bottom-up approach that is open to all. The Policy Development Process applicable for each RIR region defines the way these policies are developed and adopted. The key services that the RIRs provide are administration of the Internet number resources to insure uniqueness, stewardship in their distribution to those who need these number resources, and the global publication of the registry of all assignments.

More information can be found at: <https://www.nro.net/about-the-nro/rir-governance-matrix>.

## 3. RIR Communities

The RIR communities that develop policies, and provide the governance for each of the RIRs, are comprised of a variety of organizations; Internet service providers of various types, governments at all levels, universities, civil society, for-profit and not-for-profit enterprises of all sizes and across all business sectors. The communities are open to anyone that wants to participate in the policy-making process and related discussions. The communities make policy via open, transparent and community bottom-up processes. Governments and their representatives are able to and do participate in this process, but do not have a privileged role as such. However, given the important role that governments play in shaping public policy relating to the Internet, their contribution to the RIR policy process is quite important and the five RIRs individually engage in a range of outreach activities to encourage government participation in their respective regions.

To participate in the discussions and the policy-making process, people subscribe to public mailing lists created for these purposes. Discussions also take place at RIR meetings, which are also open for everyone to participate physically or remotely.

While these discussions occur at a regional level, the Internet itself has no geographic limits and interconnection with networks in other geographic areas is an important precondition for the proper functioning of the Internet. Therefore, participation in regional RIR discussions by people from other regions is encouraged. Anyone with an interest in the development of RIR policies is allowed and encouraged to participate in the different policy making processes in other regions. The RIR community consists of more than thirty thousand entities around the world.

#### **4. Policy-making process**

RIR policy-making processes are designed so that anyone with an interest in participating can do so. Anyone can propose a policy or an amendment to a current policy. Once a participant submits a policy proposal, other participants can submit their comments, or provide support or objection to the proposal. These processes adhere to established timeframes within which anyone can submit their feedback to the proposal. If the community of an RIR needs more time to consider a particular proposal, these time frames can be expanded.

For a policy proposal to become an RIR policy (or amend an existing policy), consensus must be reached. This means that there should not be any arguments or objections that have not been addressed. It is the task of the community leadership (e.g. working group chairs, advisory council members) to assess that all arguments have been addressed and there is wide enough support to declare consensus on the proposed changes.

In turn each RIR is bound by its operational rules to execute the policies that have been developed by their communities through open, transparent and bottom-up policy development processes. This obligation is detailed in the agreements that each RIR signs with their constituents.

Specifics on the Policy Development Processes for each region can be found at:  
<https://www.nro.net/about-the-nro/rir-governance-matrix#policydevelopment>.

#### **5. RIR oversight and stability**

Each RIR is governed by a member elected board. Boards can be comprised of six (6) to nine (9) members. Boards provide fiduciary oversight, strategic guidance, and verification of the policy development process. RIRs have implemented mechanisms to avoid capture through their election, bylaws, and incorporation articles, and membership provisions.

#### **6. Upcoming RIR meetings**

- AFRINIC – 22 | Tunis, Tunisia | 24 May – 5 June 2015
  - APNIC 39 | Fukuoka, Japan | 24 February – 6 March 2015
  - ARIN 35 | San Francisco, California, USA | 12 – 15 April 2015
  - LACNIC 23 | Lima, Peru | 3 – 8 May 2015
  - RIPE NCC 70 | Amsterdam, Netherlands | 11-15 May 2015
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