



# RIPE NCC

## Activities and Services



# Overview

- **What is the RIPE NCC**
- **RIPE NCC Membership**
- **RIPE NCC Tasks**
- **RIPE NCC Services**



# What is the RIPE NCC?

- **Not for profit membership association**
  - Since 1997 (active since 1992)
  - Funded by members, thus autonomous
- **Bottom up structure**
  - Industry self-regulation
  - Open and transparent
  - Neutral and impartial



# RIPE NCC Membership

- **Membership is open to all interested parties**
- **RIPE NCC members:**
  - Elect Executive Board
  - Guide activities & budget
  - Approve fees
- **3800+ participating LIRs (members)**

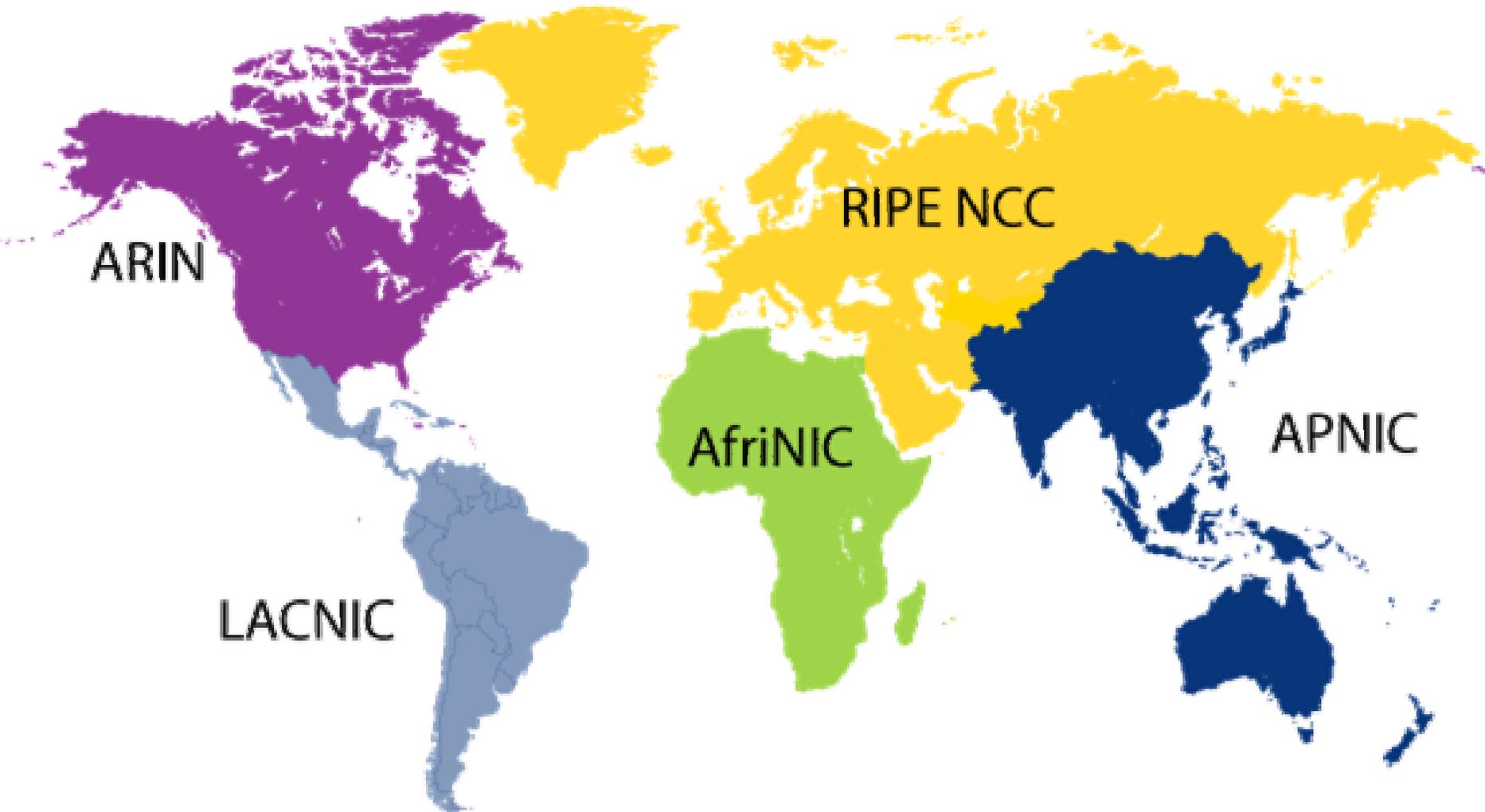


# RIPE NCC Tasks

- **Co-ordination and provision of services for its members & RIPE community**
  - Membership Services
  - Co-ordination Services
  - Information Services
- **One of 5 Regional Internet Registries (RIRs)**
  - Responsible stewardship of Internet Resources
    - IPv4, IPv6 addresses, AS Numbers
    - Allocation and Registration
  - AfriNIC, APNIC, ARIN, LACNIC, RIPE NCC



# RIR Service Regions



# RIPE NCC Who Is Who



Executive Board



Chief Scientist

Managing Director



CFO

CTO

Head Member Services



**90+ staff (24 nationalities)**



# RIPE NCC Services



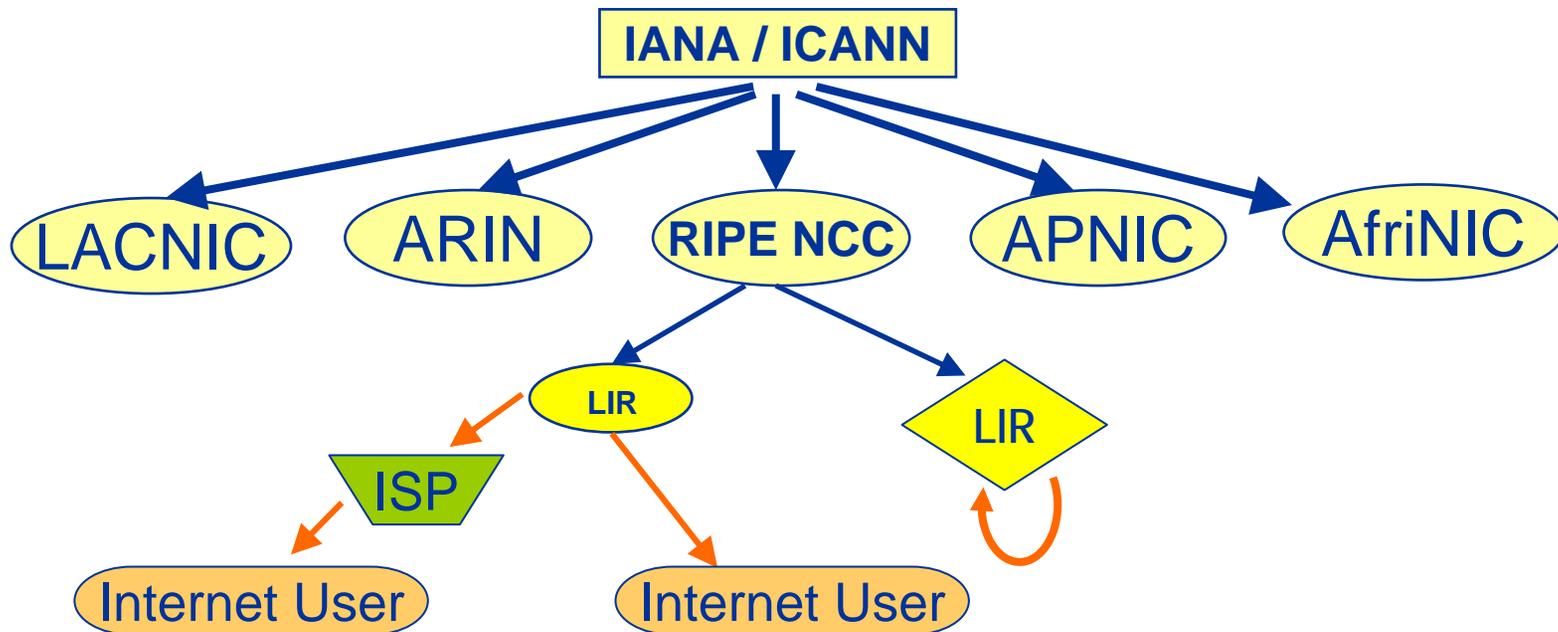
# RIPE Whois Database

- **Public Database**
  - IP addresses
  - AS Numbers
- **Software**
  - RIPE NCC
  - Requirements by RIPE community
- **Content**
  - LIRs, Internet Users, RIPE NCC
  - **Not** responsibility of RIPE NCC
- **1,800,000+ objects in the RIPE Database**

# Registration Services

- **Allocation and registration of:**
  - IPv4 addresses
  - IPv6 addresses
  - AS Numbers
- **Putting policies into practice**
- **Information on resource distribution**
- **Member service**

# IP Address Distribution



**AGGREGATION**

less routes in the global routing table

**CONSERVATION**

less address space wasted

**REGISTRATION**

uniqueness / troubleshooting

# Training

- **LIR Course**
  - How to request IP addresses and AS Numbers
  - RIPE policy process
- **Routing Registry Course**
  - Use of routing registry and RPSL
  - RIPE NCC routing related services
- **DNSSEC Course**
  - Explanation of DNS vulnerabilities
  - Introduction of DNS security extensions

# Other Services

- **Information Services**
  - **DNSMON**
    - Monitoring of main DNS servers
    - Objective and up-to-date
  - **DISI**
    - Internet-wide security issues
  - **RIS**
    - Global routing information for operators:
  - **Test Traffic Measurements**
    - In-depth connectivity information
- **Operation of DNS rootserver “k”**

# Summary

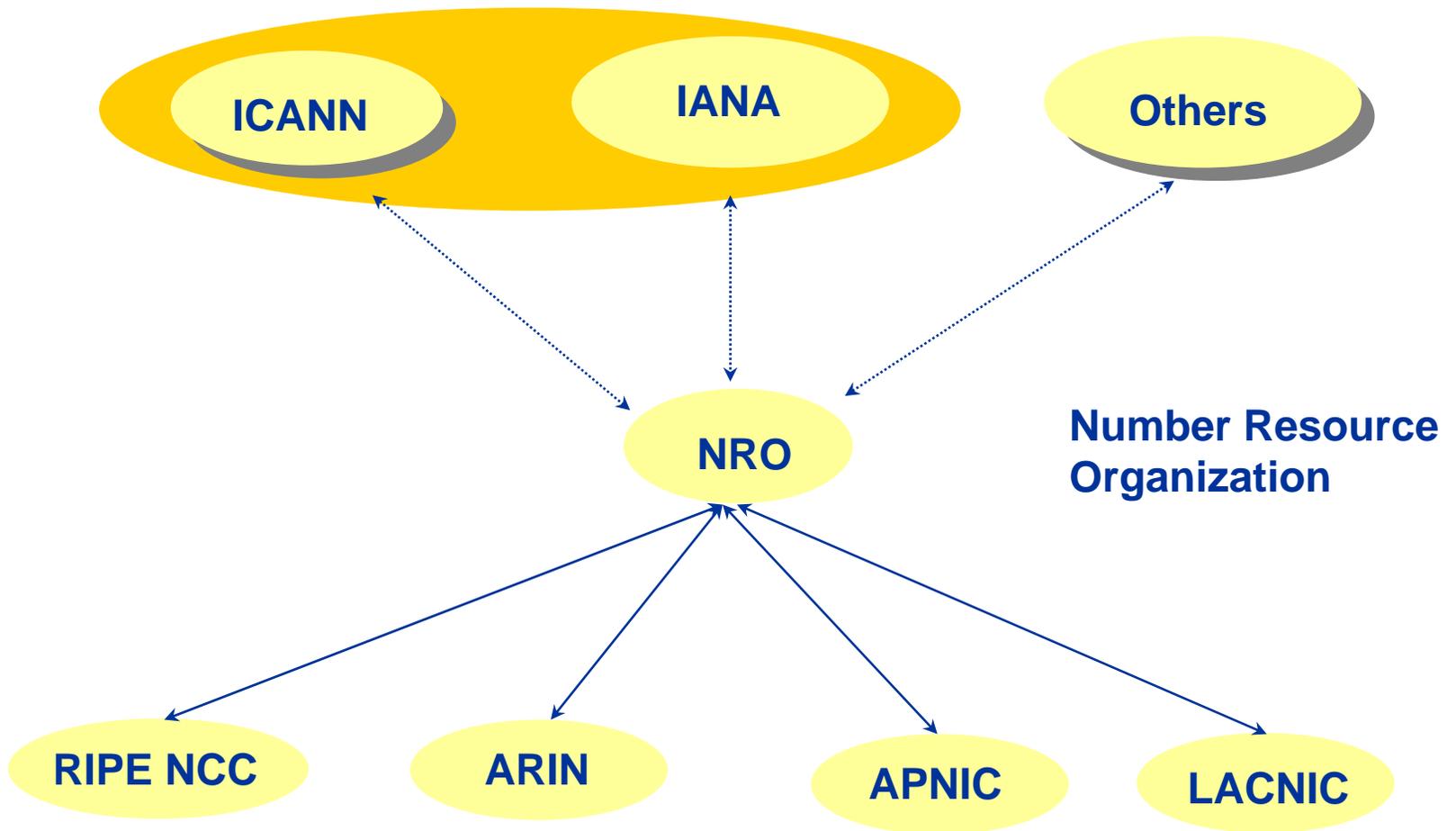
## RIPE NCC:

- Economically and politically independent
- Not for profit membership association
- Bottom-up self governing structure

# What is the NRO?

- Number Resource Organisation
  - “Coalition” of all RIRs
- For carriage of joint RIR activities
  - Technical coordination and services
    - DNS, ERX, whois, 6to4, IPv6 unique local ...
  - RIR point of contact and representation
  - Global policy coordination
  - Negotiation and Liaison with other bodies
    - ICANN, IETF, UN/ITU/WSIS etc
- Independent of ICANN
  - Able to operate with or without ICANN
  - But intended to support and work with ICANN

# Political Context



# Questions



# Internet Myths

- **Myth 1: We are running out of Addresses**
- **Myth 1a: Some Countries cannot get Addresses**
- **Myth 2: ICANN Makes Addressing Policies**
- **Myth 3: US controls Root Nameservers**
- **Myth 4: National address administration will make the world a better place**

# Myth 1: We are running out of Addresses

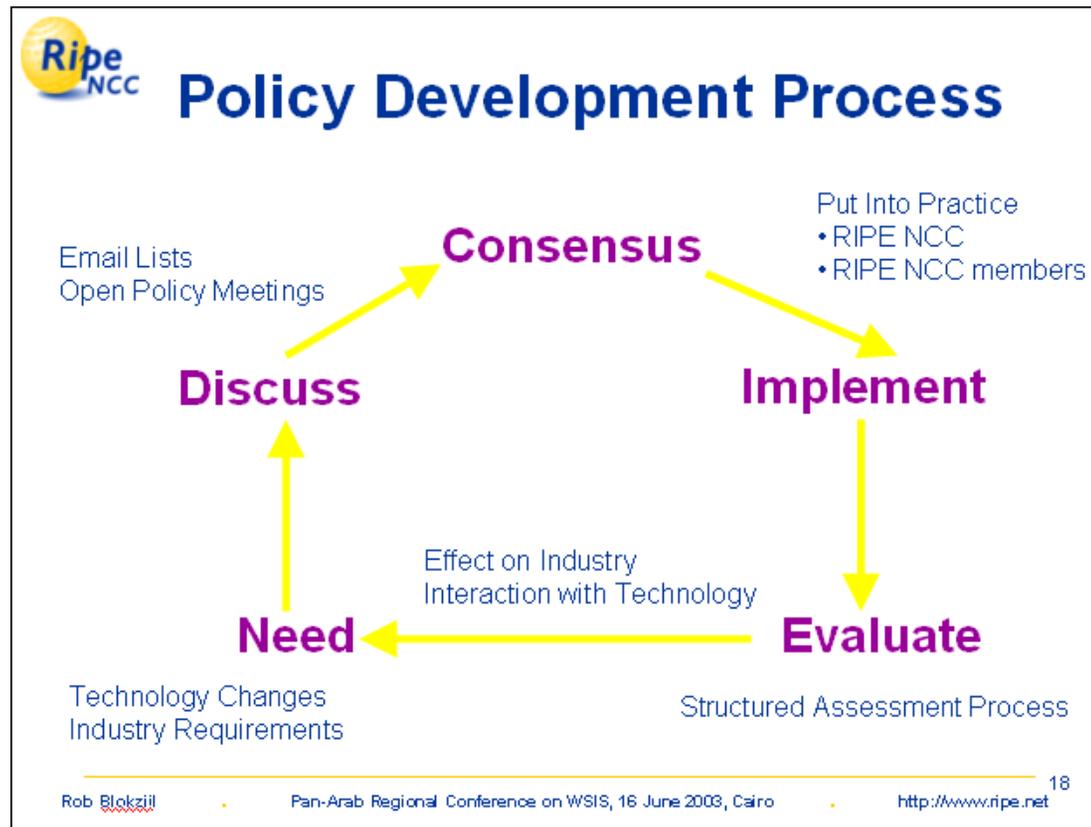
- **Information Services on IPv4**  
<http://www.ripe.net/info/info-services/ipv4/>
- **Regional Internet Registries facilitate**
  - Considerable slowing of address consumption rate
  - Dramatic increase in efficiency of usage
- **Extrapolating current trends points to “Expiry Date” in between 2020 and 2040.**



# Myth 1a: Some Countries cannot get Addresses

- **Addresses are held in a global pool of unallocated resources**
- **Anybody, Anytime will receive addresses based on “demonstrated need”.**
- **Ensuring longevity of resource pool while ensuring fair distribution**

# Myth 2: ICANN Makes Addressing Policies



**ICANN does not feature in the Policy Development Process**

# Myth 3: US controls Root Nameservers



**More than 80 and the number is growing**



# Myths 4: National address administration will make the world a better place

- Internet resources have no attribute that links them to geography
- National reserves would be wasteful and further depletion
- **Detrimental to Internet stability**
  - Proliferation of routing information
- **Response to ITU comments:**  
<http://www.nro.net/documents/nro17.html>