



# About the NRO

The Number Resource Organization (NRO) is the coordinating body for the five Regional Internet Registries (RIRs) that manage the distribution of Internet number resources – IPv4 and IPv6 addresses, and Autonomous System Numbers.

Since 2003, the NRO has provided global industry partners and other interested parties with a single point of contact for communication with the RIRs.

[www.nro.net/about-the-nro](http://www.nro.net/about-the-nro)

## Goals

- Protect the unallocated Internet number resource pool
- Promote and protect the bottom-up policy development process
- Act as a focal point for Internet community input into the RIR system

## Activity Highlights

The NRO provides a vehicle for the RIRs to align their strategies and share solutions in the interest of the global Internet community.

• **IPv6 Deployment:** The RIRs and the NRO have worked for several years to promote the urgent need for IPv6 deployment and to ensure smooth transition to an IPv6-enabled Internet. There is a special emphasis on supporting capacity building in developing economies and regions. In some RIR communities it is already the case that new networks and users seeking IP address blocks can only get the large number of needed addresses by obtaining an IPv6 block.

[www.nro.net/ipv6](http://www.nro.net/ipv6)

• **IPv4 Stewardship:** In response to the challenges of IPv4 address exhaustion and community-based policies, the RIRs are developing mechanisms for inter-regional transfers of IPv4 address resources.

• **Domain Name System Security Extensions:** DNSSEC is an enhanced level of Internet security that allows authentication to be added to domain name records to ensure they are correct and not tampered with. This prevents hackers from falsifying DNS records in an attempt to re-direct people to fake, phishing or criminal sites. DNSSEC helps protect the Internet by digitally 'signing' data in DNS records to assure validity. DNSSEC will ensure that end users are actually connected to the sites they visit and the services associated with them.

[www.nro.net/dnssec](http://www.nro.net/dnssec)

• **Resource Certification** (often referred to as RPKI): Resource certification is the process of introducing digital signatures to resource registration records, so that registrations can be validated in an automatic and reliable manner. Resource certification is available to any network operator who wishes to use it, whether to secure their own registration and routing records, or to validate the records of others.

[www.nro.net/certification](http://www.nro.net/certification)

