NRO

Continuing Cooperation

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The Number Resource Organization has participated in the World Summit on Information Society (WSIS) and related activities since the beginning, and it is a process to which we are strongly devoted.

We represent the global system of Internet address space management that is carried out by five Regional Internet Registries (RIRs), an important responsibility among the many we undertake in the interests of maintaining and developing the Internet and its unique characteristics.

The NRO presents this report in response to the Tunis Agenda, to illustrate the many efforts and successes of our member organizations in our area of responsibility. It is divided according to the major themes of the Internet Governance Forum: Access, Diversity, Openness, Security and Critical Internet Resources.

The NRO represents a 15-year effort toward creating an inclusive system involving multiple stakeholders. These efforts are part of our fundamental operating principles and have been subjected to a long period of development and refinement, which continues today.

This report is titled "Continuing Cooperation" to illustrate our work and its ongoing nature. We hope it will help to further enhance mutual awareness and understanding, toward even better cooperation in future.

Raymond Plzak
Chairman
NRO Executive Council

Access to decision-making:

The RIR system allows everyone access to the decision-making process through open, transparent, bottom-up policy development. All policy discussions are archived and publicly available, as are minutes of the RIRs' executive board meetings.

Proposals, discussions and debates are all conducted publicly, with each RIR hosting an open mailing list devoted to the discussion of policy developments in its region. Discussion continues at open policy meetings, and proposals only become policy if community consensus in favor of the proposal is achieved.

For more information on the RIR policy development processes, see:

www.nro.net/policy

LACNIC´s "IPv6 Tour", a series of short events aimed at promoting the adoption of IPv6 address space in the LACNIC region. During 2005, the program reached a total of 2522 attendees in 10 countries.

Access to education:

Each year, thousands of Internet professionals around the world participate in training programs designed and delivered by the RIRs.

These programs include:

- workshops and seminars
- web-based e-learning
- multimedia presentations
- online documentation, such as technical fact sheets

The RIRs place a particular emphasis on providing accessible education to the Internet community in developing regions. To help achieve this, the RIR training teams can tailor their events and training material to address specific local concerns, through:

- prices that reflect the local economy
- courses delivered in the local language
- collaboration with local Internet community events and organizations

Information on RIR training and education activities can be found on each RIR website.

www.afrinic.net • www.apnic.net • www.arin.net • www.lacnic.net • www.ripe.net

TRANSPARENT

Diversity

The Internet's current stability and success owe a great deal to the cooperation of a diverse community of stakeholders. Network engineers, employees of Internet-related businesses such as Internet Service Providers (ISPs), industry regulators and government officials from all over the world have an interest in how the Internet is run. The RIRs provide the forums in which these diverse interests can be represented.

The RIRs have taken an active role in outreach projects around the world, connecting with underrepresented sectors in their communities through speaking engagements, trade shows and other industry activities. The RIRs also participate in a range of projects aimed at fostering the Internet in developing regions.

These include:

- The FRIDA Program (Regional Fund for Digital Innovation in Latin America and the Caribbean) in the LACNIC region

- The PAN ICT R&D Grants Program in the APNIC region

- Collaboration with the Association of African Universities through financial incentives and training to encourage research on Internet technologies in the AfriNIC region

ARIN, LACNIC and the Caribbean Telecommunications Union (CTU) also recently signed a declaration of cooperation affirming their intent to work together to promote the effective use of the Internet and Internet-based resources in the Caribbean.

COOPERATIVE

Openness

Every year, thousands of people from around the world participate in meetings organized by the five RIRs. These open policy meetings give industry professionals the chance to meet with each other and with representatives from other stakeholders, such as governments and regulatory organizations. Participants do not have to be RIR members, and anyone is free to propose a policy or to argue for or against a policy proposal. Final decisions are made by consensus, so everyone's voice is heard.

By creating an open and inclusive environment in which all stakeholders can contribute, RIR meetings serve an essential role in bridging the gap between the private and public sectors.

RIRs are constantly seeking to improve the openness and accessibility of their meetings and documentation. Many meetings are accessible via remote participation tools, such as webcast and online chat, allowing interested parties to follow the meetings from their home or office and contribute to the discussions in real time. Several RIRs have also employed simultaneous translation in different languages, new forms of digital transmission (such as podcasts), and innovative e-learning projects.

AfriNIC, APNIC and LACNIC all fund scholarship programs that pay the meeting attendance costs of Internet professionals from developing areas. Over recent years, these programs have helped individuals from 49 different economies to attend AfriNIC, LACNIC and APNIC open policy meetings.

Information on upcoming RIR meetings is available on the respective RIR websites, or through:

www.nro.net/meetings.

Security

As the Internet has grown and become intertwined with all aspects of our lives, having a secure and robust service has become paramount. The RIRs have played a key role in the stable operation and continuing growth of the Internet to date.

In their role as registries, the RIRs have employed technologies such as PGP encryption and X.509 certificates to ensure the security of their members' data. The RIRs have also developed relationships with law enforcement agencies around the world to ensure awareness of the existing registry system and how it can be used.

Beyond their registry role, the RIRs are active in a range of projects that contribute to the stability and reliability of the Internet. This includes contributing to the ongoing global deployment of mirror sites of the 13 root DNS servers.

The RIPE NCC has managed K-root, one of the 13 root servers, since 1997, and has deployed 17 nodes across Europe, Asia and North America.

Since 2002, APNIC has worked with root server operators, such as the Internet Systems Consortium (ISC), Autonomica and the RIPE NCC, to deploy 21 root server nodes throughout the Asia Pacific region.

LACNIC has also worked in cooperation with the ISC, partners from the private sector and governments to help deploy five mirror copies of the F-root server in the Latin American and Caribbean region.

Wide-scale deployment of these root servers is an important factor in defending against Distributed Denial of Service (DDoS) attacks and in maintaining a robust and secure Internet.

ROBUST

Critical Internet Resources

The RIRs are responsible for Internet number resources, including IPv4 and IPv6 address space and Autonomous System numbers. These are a critical component of the Internet's operational infrastructure.
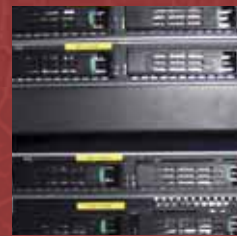
The technical design of the Internet places constraints on the availability and usage of these number resources. The RIRs have a responsibility to coordinate the provision of these resources in support of both present Internet operations and sustainable future development. The RIR system provides universal access to Internet number resources, while supporting the stability of the Internet.

As not-for-profit, membership-based organizations, the RIRs act as both impartial registries for their respective regions, and as representatives for the specific needs of their regional Internet communities.

The RIRs are guided by the following principles:

- Policy development should be achieved through accessible, open, objective, transparent, non-discriminatory, and bottom-up procedures

- Allocation policies should be objective, transparent, non-discriminatory and proportionate

- Allocation decisions should be made in an objective, transparent and non-discriminatory manner, following allocation policies

- The system guarantees continuity of operations

In recent years, discussions within the WSIS and IGF processes have focused on Internet governance, including the management of Internet number resources. The NRO has welcomed these discussions and has been an active participant throughout.

All of the RIRs have been actively involved in the WSIS process since its inception in 2004, with Raúl Echeberría, CEO of LACNIC, acting as a member of the United Nations Working Group on Internet Governance (WGIG). He and Adiel Akplogan, CEO of AfriNIC, have also participated as members of the IGF Multistakeholder Advisory Group (MAG).

RESPONSIBLE

About the NRO

There are five Regional Internet Registries (RIRs) in the world. Each RIR registers and distributes Internet number resources (IPv4 and IPv6 addresses and Autonomous System numbers) within a specific geographical region, supports the development of regional and global addressing policies, and liaises with its region's governmental and regulatory bodies.

The Number Resource Organization (NRO) represents these five RIRs collectively. Through the NRO, the RIRs can speak with a single voice on matters related to the technical coordination of the Internet or when the interests of the Internet community need to be represented at a global level.

NASA, Imagery from Visible Earth (http://visibleearth.nasa.gov/)

The NRO allows the five RIRs to act collectively to:

• Protect the unallocated pool of Internet number resources

• Promote the RIR system's open, transparent and bottom-up policy development process

• Act as the point of contact for the global Internet community

The NRO was established in 2003 under a Memorandum of Understanding (MoU) between APNIC, ARIN, LACNIC and the RIPE NCC. AfriNIC signed the MoU shortly after its establishment in 2005. The NRO's Executive Council (EC) is made up of the respective CEOs of the RIRs. The positions of Chair, Secretary and Treasurer rotate annually.
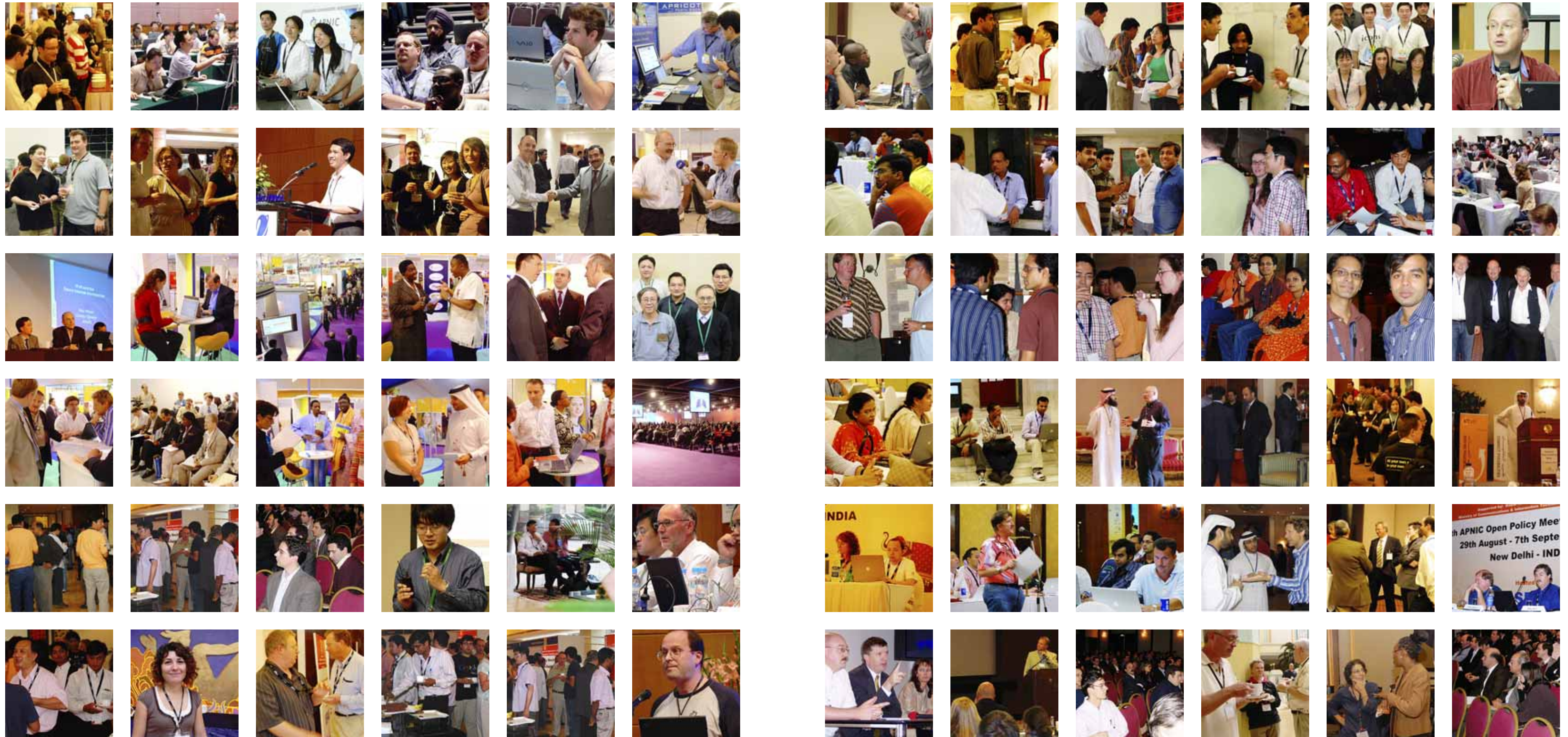
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