

INTERNET GOVERNANCE FORUM EXAMINES WAYS TO ACCELERATE IMPLEMENTATION OF INTERNET PROTOCOL VERSION TAKING INTO ACCOUNT RAPID GROWTH IN USER NUMBERS

The Internet Governance Forum, meeting for a third day in Hyderabad, India, today held panel discussions related to managing critical internet resources, specifically, the issue of the needed evolution of the Internet protocol (IP) system in view of the rapidly approaching depletion of IP addresses, which are numerical identifications assigned to devices participating in the Internet and are essential to its functioning. Also discussed was the issue of global, regional and national arrangements in managing critical Internet resources. As of today, 1,280 participants from 94 countries were attending the Forum, representing government, business, civil society and the Internet community.

All panellists speaking this morning stressed the importance of accelerating the transition from IP version 4 to version 6 in view of the rapid depletion of available IP addresses under IPv4, which allowed for 4 billion different addresses, a number that is quickly being reached with the growing number of Internet users and of devices that connect to the Internet. The slow deployment since 1999 of IPv6, which would allow for 16 quintillion (or 16 billion billion) connections, was seen as a problem, partly attributed to the fact that the transition would not bring obvious improvements for the user, which meant that operators were not interested in investing when there was no user demand. However, panellists said setting a deadline would not be helpful, and favoured an awareness raising approach.

In the second panel, on global, regional and national arrangements, panellists stressed the role of coordination and harmonization in the management of critical Internet resources, which include the management of domain name systems (DNS) and Internet protocols, the management of root servers, standards, interconnection points, and telecommunications infrastructures. There were different views expressed about what arrangements do or could constitute "enhanced cooperation". In this conjunction, reports were requested by the United Nations on enhanced cooperation from global organizations.

Parallel workshops also held today covered such issues as "An Interpol for the Internet", online privacy and protection of personal data, promoting low-cost access for the poor, capacity building, an environmentally sustainable Internet, measures to protect children, emerging cyber law issues, and mainstreaming human rights in the work of the IGF. Dynamic Coalition meetings examined child online safety, an "Internet Bill of Rights", and access to knowledge.

Panel Discussion on Transition from IPv4 to IPv6

The panel discussion on the transition from IPv4 to IPv6 was chaired by Gulsham Rai, who is the Director of the Indian Computer Emergency Response Team (CERT-IN) at the Indian Ministry of Communications and Information Technology. The panel was moderated by Bernadette Lewis, Secretary General of the Caribbean Telecommunication Union (CTU), Trinidad and Tobago, who reminded the audience that IPv4, with its four billion addresses, was introduced in 1981, and IPv6, with 16 billion billion possible addresses, was introduced in 1999. But the deployment has been somewhat slow.

The chairperson underlined that the world had more than 3 billion mobile connections and 1 billion Internet users, and that number is going to double. IPv6 had also been designed to cover more features, such as address routing, more effective security, and translations, as well as mobility. Many countries, including India, are working very aggressively to transfer from IPv4 to IPv6.

Tulika Pandey, Additional Director of the Indian Department of Information Technology, drew attention to the need to have a mechanism and standardization for the coexistence of both protocols to avoid unacceptable service interruptions and any possible damage to critical distributed applications. She recalled that India had the second largest number of service providers, but the demand for IP services and Internet penetration was yet to happen in that country. Cultural diversity and the need for localized content will be essential to push the case for demand for more IP addresses. Edutainment, combining education and entertainment, is another social requirement that may push the case for a demand for IP addresses.

Adiel Akplogan, Chief Executive Officer of AFRINIC Limited -- the Internet numbers resource registry for Africa since 2004 -- said IPv6 implementation should be made easy for the operators, and they should be given support in this respect. Only 15 per cent of networks globally are IPv6-ready or are doing something about IPv6 today. He said the two protocols would coexist for a very long period of time before IPv6 would take over IPv4. He also said an awareness campaign is very important, so that user operators integrate the IPv6 factor in their requests from vendors. Having a deadline will probably not solve the issue. He concluded that the protocol has evolved but it won't make the Internet safer or more secure.

Kurtis Lindqvist, managing director of Autonomica, contributed some insights from an operational perspective, while Jonne Soininen, from Nokia Siemens network, presented a vendor perspective. Mr. Lindqvist said he believed IPv4 and IPv6 would coexist for at least all of our lifetime. Sounding a positive note, he said that a French Internet service provider (ISP) was becoming famous because they had been able to actually deploy v6, and today they have 250,000 subscribers who actually choose to use IPv6. Mr. Soininen said the transition from IPv4 to IPv6 has been already ongoing for quite some time, and version 6-ready devices are already there. He also recalled that when we run out of address space in version 4, that, of course, won't mean that the Internet itself would stop to exist. But the growth of the Internet could be hampered by not having enough address space to grow.

Satoru Yanagishima, responsible for Internet resource issues at the Japanese Ministry of Communications, said Japan was thinking about making IPv6 the standard Internet service for Japanese customers. Paul Wilson, head of APNIC, the regional Internet registry that allocates IP and AS (Autonomous System) numbers in the Asia Pacific region, spoke about the formal development process of regional Internet registries (RIRs), saying the policy development process is open to all newcomers and insisting that closed-door decision-making was not possible under the current open systems adopted by RIRs.

Milton Mueller, Internet Governance Project, USA, said that the issue of instituting a secure routing protocol that would authenticate route objects raises major governance issues and could fundamentally change the role of the Internet Assigned Numbers Authority (IANA) and the regional Internet registries (RIRs). He advocated the need to maintain the regional Internet registries as neutral, transnational technical coordinators, and felt we should not try to load up their activities with public policy functions. He added that it is fairly easy to come to consensus and agreement when dealing with the homogeneous community of technical experts who are operating Internet service providers or hosting sites, but with the heterogeneous set of advocacy groups, governments and policy interests, it was much more difficult, as was learned in ICANN.

Panel Discussion on Global, Regional and National Arrangements

Emily Taylor, Director of Legal and Policy at Oxford - Nominet (UK), moderated the second panel of this morning, which was chaired by Ramlinga Raju, Founder and Chairman of Satyam Computer Services Limited. Panellists discussed which arrangements should be adopted to enhance cooperation in the area of managing critical Internet resources, and the role of international and intergovernmental organizations in this respect, such as the International Telecommunication Union and the Organisation for Economic Co-operation and Development (OECD), as well as institutions such as the Internet Corporation for Assigned Names and Numbers (ICANN).

Haiyan Qian, Acting Director, Division for Public Administration and Development Management, United Nations Department of Economic and Social Affairs (UNDESA), recalled that the Under-Secretary-General of UNDESA, Mr. Sha Zukang, invited nine organizations concerned to provide annual performance reports on the steps they have undertaken towards enhanced cooperation on Internet-related public policy issues. The organizations include the Council of Europe, ITU, ICANN, ISOC, NRO, OECD, UNESCO, WIPO and W3C. The information obtained shows that the focus of cooperation in this area ranges from information and experience-sharing, consensus-building and fund-raising, to transferring technical knowledge and capacity training. A summary report will be prepared and a separate report on information and communication technologies for development would be submitted by July 2009.

Everton Lucero, of the Brazilian Ministry of Foreign Affairs and Brazilian representative on ICANN's Governmental Advisory Committee, said intergovernmental organizations such as the International Telecommunication Union (ITU) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) are promoting enhanced cooperation at their own pace, which may not cope with the pace of technological development and innovation that characterizes the Internet. He said it was argued that the main reason for enhanced cooperation having been included in the Tunis Agenda was precisely ICANN, because even if ICANN is not for profit, it is market-driven. And ICANN is under the oversight of one single government. He felt we should work towards having no governments at all, like the case of the Internet Engineering Task Force, the World Wide Web Consortium (W3C) and the Number Resource Organization (NRO), or we could have all governments on board, like ITU or UNESCO. But we should avoid coming up with a model restricted to a few. "And, please, let's also avoid models driven by one single government, like ICANN", said the Brazilian representative. He also said the Internet is supposed to be centred on people, not money; on people, not markets; on people, not profit. His question to ICANN was, when would it pledge to accept and incorporate that vision as its main driving force, instead of granting privileges to a small group of private industries that earn a great deal of money by selling domain names?

For his part, Richard Beard, Senior Deputy Coordinator in International Communications Policy at the U.S. Department of State, said the Internet in its uses has begun to involve governments, the private sector and civil society in new forms of enhanced cooperation on an unprecedented scale. He said that the International Telecommunication Union (ITU) and the Organisation for Economic Co-operation and Development (OECD) represent the kind of enhanced cooperation which complements not only the driver of access and the driver of innovation, but also suggests a vision of the future where enhanced cooperation may take us. In particular, ITU's Global Cybersecurity Agenda is a framework for multistakeholder cooperation in the area of cybersecurity. He said the IGF was itself a remarkable example of a new enhanced cooperation and underscored the importance of a forum like the IGF, which offers an opportunity for interests with diverse views, which are united by a shared commitment to the constructive evolution of the Internet and its uses. This, by the way, was the original vision of the Internet and of the IGF that came from the Tunis World Summit on the Information Society in 2005, and the IGF will remain vital if it preserves this original vision.

Byron Holland, President and CEO of the Canadian Internet regulation authority, or CIRA, said the need to cooperate with a wide range of stakeholders is not merely some theoretical construct, but the very essence of how we manage our business daily. A secure and stable Internet infrastructure is essential to our economy, to our security, and the way that we live in the developed world. But it is also critical for the developing world if they are ever going to be able to bridge the gap and be fully integrated into the global economy. The nature of the Internet means that there are many challenges whose solutions require global coordination. But just as important, they need national and regional implementation for widely varying contexts. The way to do this is through enhanced cooperation among multiple stakeholders.

The meeting also heard Raul Echeberria, chief executive of the Latin American and Caribbean Internet Addresses Registry (LACNIC), who said that, at the Tunis Summit in 2005, there was a majority view that Internet governance could be improved, and the notion of enhanced cooperation which was put forward aims at allowing the participation of all stakeholders in different organizations. Some work is still necessary in many forums in order to improve enhanced cooperation. But the results achieved until now are really very remarkable.

Parminder Singh, Director of IT for Change and a coordinator of the civil society Internet Governance Caucus, said the Governmental Advisory Committee in ICANN is a key process for enhanced cooperation and is part of a public policy process. It is global, but it is not legitimate. The Internet and the Information Society represent a transnational phenomenon where new constituencies have arisen, and the global public interest is not only represented by a collection of governments. That is not an adequate process. The impact of the Internet is global but is not representative of global constituencies.



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