Summary of NRO Response to ITU Comments on the Management of Internet Protocol (IP) Addresses

Introduction

On 21 October 2004, the Director of ITU TSB published a memorandum, “ITU and Internet Governance” for public comment. The text below is a summary of the Number Resource Organization’s (NRO) public response on behalf of the Regional Internet Registries: APNIC, ARIN, LACNIC and RIPE NCC. These Regional Internet Registries are funded and governed by over 8,000 organisations worldwide, representing the users of the Internet number resources.

The full text of the Number Resource Organization’s public response is available at: http://www.nro.net/documents/nro17.html

Summary

The ITU memorandum has proposed a new IPv6 address space distribution process, based solely on national authorities. This proposal appears to be based on certain assumptions about the history and status of IPv4 address space and the current allocation principles for allocating IPv6 address space, and an attempt to safeguard what the memorandum terms the “sovereignty connected to the registration of addresses”.

It also appears that behind the proposal is an assertion of primacy of public sector interest in the administration of address resources for the Internet. Since the inception of the Regional Internet Registry (RIR) system in the early 1990s, the RIRs have recognized not only the legitimacy of this public sector interest but also that of the private sector. The RIRs believe that the balance of these two interests requires careful consideration. The RIRs work within a broad spectrum of stakeholders in Internet address administration, and have developed open regional policy development processes that include the active participation of both public and private sector bodies as well as civil society.

The IPv6 address space distribution proposal in the ITU memorandum overlooks the success of the RIRs in including public and private sector considerations in open regional policy development processes. It also disregards the widely accepted and long-held views that IP addresses are endpoint network identifiers that intrinsically have no national attributes, and that allocation principles regarding their distribution must be guided primarily by technical considerations relating to the viability of the operation of the Internet.

In addition, the memorandum makes assertions about IPv4 and IPv6 address space which are inconsistent both with authoritative statistics about IP address space and with the established consensus-based allocation principles developed by the global Internet community.
Rather than addressing the diversity of requirements of the global Internet community or the body of experience already gained in the operation of the global IP address distribution function, the ITU memorandum proposes a uniform model of Internet address distribution as a public sector activity within autonomous national boundaries. The memorandum ignores any consideration of the technical impacts of its proposal on the global Internet (specifically on address space routability) and simply suggests that considerations of “details and constraints, in particular issues related to routing table size” should be postponed until an unspecified time in the future.

This proposal, if adopted, would disrupt the stable, proven mechanisms for IP address space distribution on which the success of the Internet has been founded and on which the global Internet community relies for future operational stability and continued growth.

**Conclusion**

The RIRs observe that the ITU is proposing a model of IP address space distribution that is based on a limited set of considerations and has not adequately considered the need to ensure stable, fair and consistent distribution of a global resource. The ITU proposal has no means to guarantee stable mechanisms for IP address space distribution, and for the benefit of the Internet (including the ITU’s own constituency), we urge the ITU to carefully reconsider this proposal.

There are many issues within the area of what has come to be known as "Internet Governance", particularly issues of fairness and a level playing field on a global level that accommodates public and private sector interests The Regional Internet Registry system has evolved over more than a decade to become one of the successes in this area. Internet number resource distribution is fair and accessible to all. Its policy development process is open and transparent.

The NRO welcomes the opportunity to contribute to this memorandum, and looks forward to further discussion with the ITU TSB on these important matters.

**More information**

The full text of the Number Resource Organization’s public response is available at: [http://www.nro.net/documents/nro17.html](http://www.nro.net/documents/nro17.html)