INTERNATIONAL TELECOMMUNICATION UNION



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PLENARY MEETING

Report by the Secretary General

1 Subject:

RESOLUTION 101 (Minneapolis, 1998): INTERNET PROTOCOL (IP)-BASED NETWORKS; RESOLUTION 102 (Rev. Marrakesh, 2002): MANAGEMENT OF INTERNET DOMAIN NAMES AND ADDRESSES; RESOLUTION 133 (Marrakesh, 2002): ROLE OF ADMINISTRATIONS OF MEMBER STATES IN THE MANAGEMENT OF INTERNATIONALIZED (MULTILINGUAL) DOMAIN NAMES; AND INTERNET GOVERNANCE

2 Purpose

To report on ITU activities related to Internet Protocol (IP)-based networks and management of Internet domain names and addresses; including activities related to Internet governance.

3 Background

Resolution 101 (Minneapolis, 1998): Internet Protocol (IP)-Based Networks. Activities reported previously to Council in documents C2000/27 and C2000/27Add.

Resolution 102 (Rev. Marrakesh, 2002): Management of Internet domain names and addresses. Activities reported previously to Council in documents C99/51, C2000/27, C2000/27Add.B, C01/EP/8, C02/46 and C03/27.

Resolution 133 (Marrakesh, 2002): Role of administrations of Member States in the management of internationalized (multilingual) domain names.

4 Recommendation

The Council is invited to endorse the activities described in this report and to take any appropriate measures.

5 Implications

The discussed activities are undertaken using existing resources.

Ref. doc.

Res. 101 (PP-98) Res. 102 (Rev. PP-02) Res. 133 (PP-02)

C99/51 C2000/27 C2000/27Add.A C20000/27Add.B C01/EP/8 C02/46 C03/27

Yoshio UTSUMI Secretary General RESOLUTION 101: INTERNET PROTOCOL (IP)-BASED NETWORKS; RESOLUTION 102: MANAGEMENT OF INTERNET DOMAIN NAMES AND ADDRESSES; RESOLUTION 133: ROLE OF ADMINISTRATIONS OF MEMBER STATES IN THE MANAGEMENT OF INTERNATIONALIZED (MULTILINGUAL) DOMAIN NAMES; AND INTERNET GOVERNANCE

1. Introduction

1.1 Resolution 101 (Minneapolis, 1998) on <u>Internet Protocol (IP)-Based Networks</u> was adopted in 1998 and reported on in C2000/27 and C2000/27Add.A. Resolution 102 on <u>Management of Internet domain names and addresses</u> was originally adopted at the 1998 Plenipotentiary and was revised at the 2002 Plenipotentiary in Marrakesh. Previous activities have been reported to Council in documents C99/51, C2000/27, C2000/27Add.B, C01/EP/8, C02/46 and C03/27. Resolution 133 (Marrakesh, 2002) on the <u>Role of administrations of Member States in the management of internationalized (multilingual) domain names</u> is a new resolution adopted in 2002. ITU activities related to these resolutions since Council 2003, as well as ongoing developments in this area, are discussed below. This report also describes activities related to "Internet governance", as referred to in the Declaration of Principles and Plan of Action, resulting from the first phase of the World Summit on the Information Society (WSIS), held in Geneva in December 2003.

2. ITU and its Activities Related to Internet-Protocol (IP) Networks

- 2.1 As a follow-up to Resolutions 101, 102 and 133, the ITU Strategy and Policy Unit (SPU), in cooperation with the TSB and BDT, has prepared a new report on how Internet Protocol (IP) networks and the Internet, as well as their convergence with other kinds of networks, have impacted on ITU's activities. The report provides a current overview (March 2004) of the wide scope of the ITU's activities related to IP networks and the Internet—ranging from technical standards to regulatory and policy matters to development initiatives. This report can be found at:
 - http://www.itu.int/osg/spu/ip/

3. IP Policy Manual

- 3.1 Following a decision by Council 2003, the Director of TSB, in cooperation with the Director of BDT, has created a project group to prepare an IP Policy Handbook. The purpose is to advise Member States, especially developing countries, on issues related to Internet-Protocol (IP) based networks, including the management of Internet domain names and related issues. The intended audience is policy makers at the national level who are or may be called upon to influence or to decide national policies with respect to IP-based networks and/or IP-based services. Full details, including a questionnaire and draft table of contents, are in TSB Circular 168 and its Addendum 1, available at:
 - http://www.itu.int/md/meetingdoc.asp?type=sitems&lang=e&parent=T01-TSB-CIR-0168
- 3.2 The status of the work, including membership of the project team, replies to questionnaires, input contributions, and the current draft of the Handbook is available at:
 - http://www.itu.int/ITU-T/special-projects/ip-policy/index.html

4. Top Level Domain Management of ".int"

4.1 In accordance with Resolution 102, the Director of TSB organized a workshop on 15-16 September 2003, in cooperation with the Internet Corporation for Assigned Names and Numbers (ICANN), to develop a Recommendation to clarify the management of the Internet top level domain

- ".int". The workshop was co-chaired by Mr. Francis Gurry, Assistant Director General and Legal Counsel, World Intellectual Property Organization (WIPO), and Mr. Paul Twomey, President and CEO, ICANN.
- 4.2 Information on the workshop, including the agreed output, is available at:
 - http://www.itu.int/ITU-T/worksem/int/index.html
- 4.3 The output of the meeting included a first draft of an ITU-T Recommendation, temporarily numbered as E.int. This draft was submitted to Study Group 2 (TD 126 WP1) and discussed at the 25-31 October 2003 SG2 meeting in Florianopolis, Brazil. On the basis of contributions and discussions, SG2 appointed Ms. Cathy Handley (United States) as editor for the recommendation. Editor's Group meetings were held on 23 March 2004 and 13 April 2004. On the basis of contributions received subsequent to the 25-31 October 2003 meeting, and discussions during the Editor's Group meetings, a new draft has been prepared and submitted for discussion at the 18-28 May 2004 Study Group 2 meeting in Geneva, Switzerland.

5. DNS Root Server System

- 5.1 Given recent discussions concerning the distribution of the Internet Domain Name System (DNS) root server system (e.g., ref. 13(d) of the WSIS Plan of Action, see 13.1 below) attention is drawn to ITU-T SG2 Information Document 23, *DNS root server mirror service*, which provides information for Member States on the potential benefits of locating a mirror of a DNS root server within their national context. Potential benefits include: national infrastructure protection and self-sufficiency; performance; costs; resilience; and, emergency response. The document was brought to the attention of SG2 via TD 118 WP1 and provides information on how to arrange a mirror of the Internet F root server. The document is available at:
 - http://www.itu.int/itudoc/itu-t/com2/infodocs/index.html
- 5.2 Information about the APNIC root server trial in the Asia-Pacific region is available at:
 - http://www.apnic.net/services/rootserver/
- 5.3 Guidelines for hosting a mirror instance of the Internet K root server are at:
 - http://k.root-servers.org/

6. ITU-D Workshops and Symposia

- 6.1 In accordance with Resolution 102 and the Istanbul Action Plan (WTDC-02), the BDT has organized several workshops to discuss general policy, operational and technical issues concerning the Internet, and the management of Internet domain names and addresses, in particular, for the benefit of Member States, especially for least developed countries.
- 6.2 The BDT organized an ITU-NEPAD Workshop in April 2003 in Arusha, Tanzania, aimed at assisting Africa in elaborating an ICT roadmap to meet NEPAD objectives. The Arusha Workshop was attended by delegates from 30 ITU Member States including regional organizations such as ATU and ECOWAS, and resulted in a Declaration requesting, *inter alia*, the following actions to be undertaken:
 - "ITU should assist Africa to establish its own Regional Structure for the Management of Public Internet Resources (IP Addresses, country code top Level Domains)"
- 6.3 An IP Symposium was held in Kigali, Rwanda in July 2003 which brought together representative from governments, industry and Internet organizations from more than 20 African Member States. They made proposals on actions ITU should undertake in addressing policies and strategies for Internet domain names and IP address management for Africa. Further information is available at:

- http://www.itu.int/ITU-D/e-strategy/internet/Seminars/Rwanda/Info-en.html
- 6.4 The Kigali Declaration contained a number of recommendations to ITU on its role in DNS management and IP address allocation, the development of an Internet policy handbook, cooperation with the African Union on the establishment of Afrinic, the development of an international framework for ccTLD management recognizing the sovereign rights of ITU Member States, and the protection of country names. This document is available at:
 - http://www.itu.int/ITU-D/e-strategy/internet/Seminars/Rwanda/documents/kigali-declaration%20E.pdf
- 6.5 An IP Symposium was held in Moscow, Russia in September 2003 which brought together representative from government, industry and Internet organizations from more than 15 CIS States. They made proposals on actions ITU should undertake in addressing policies and strategies for Internet domain names and IP address management for the region. Further information is available at:
 - http://www.itu.int/ITU-D/e-strategy/internet/Seminars/Moscow/
- 6.6 The Moscow Declaration contained a number of recommendations on ITU's role in DNS management and IP address allocation, convergence in naming and addressing systems, best practices and repatriation in ccTLD management, assistance to Member States in the protection of country names, and recommendations on best practices in fostering Internet deployment, VOIP, IPv6, and internationalized domain names. This document is available at:
 - http://web.itu.int/ITU-D/e-strategy/internet/Seminars/Moscow/Docs/moscow-declaration-rev%20eng.pdf
- 6.7 An "ITU and Southern African Telecommunication Association (SATA) Workshop on ICT Trends" was held in February 2004 in Victoria Falls, Zimbabwe. Internet strategies including Internet exchange points, IPv6, broadband challenges and opportunities were discussed. Further information is available at:
 - http://www.itu.int/ITU-D/e-strategy/internet/Seminars/Zimbabwe/index.html
- 6.8 The BDT cooperated with TSB on two related events in 2003/2004:
 - A "Seminar on Standardization and ICT Development for the Information Society" was held in October 2003 in Tashkent, Uzbekistan. Further information is available at http://www.itu.int/ITU-D/e-strategy/Seminars/Uzbekistan/.
 - A workshop on standardization was held in February 2004 in Phnom Penh, Cambodia, which considered standardization and policy activities related to IP-based networks. APNIC presented the situation concerning IP address allocation. 58 participants from two countries attended the workshop. Further information is available at http://www.itu.int/ITU-T/worksem/standardization/cambodia/.
- 6.9 Information on the above events as well as additional activities can be found at:
 - http://www.itu.int/ITU-D/e-strategy/events/.
- 6.10 Future IP Symposia are planned for the Arab States (2004) and in the Americas region (2005). Training workshops on DNS and IP address management are also planned during 2004-2005.

7. ENUM

7.1 ENUM continues to merit close attention by ITU Member States, due to its potential impact on national policy, regulatory and/or legislative frameworks. ENUM takes numbers from the international public telecommunication numbering plan (ITU-T Recommendation E.164) and

incorporates them into the DNS for the purpose of identifying and finding network resources; this includes the possibility of assigning E.164 resources to IP-based devices. The development of a stable international framework for ENUM deployment will require the assignment of authority over elements of the E.164 number space when mapped into the DNS, as well as the assignment of ongoing management to one or more responsible authorities in each ITU Member State. Work in ITU-T SG2 continues to progress, based on the explicit understanding that the existing role and sovereignty of Member States with respect to the allocation and management of their country code numbering resources, including the potential provisioning of those resources in the DNS, will be respected. A draft ITU-T Recommendation (provisionally entitled E.A-ENUM) is under preparation and will be further discussed in SG2.

- 7.2 Reports on ENUM trial activities within Member States can be found at:
 - http://www.itu.int/ITU-T/inr/enum/trials.html.
- 7.3 General information on ENUM, including a tutorial paper, can be found at:
 - http://www.itu.int/ITU-T/inr/enum.
- 7.4 In addition, recent news and reference material related to ENUM can be found at:
 - http://www.itu.int/osg/spu/enum/
- 7.5 Liaisons have been exchanged between SG2 and the Internet Architecture Board (IAB) on technical and administrative issues related to the administration of the top-level registry for ENUM. See in particular COM 2 LS 55 and COM 2 LS 56.
- 7.6 As reported in 2003, ITU Member States continue to consider the appropriate infrastructure, responsibility, delegation and authority for the ENUM "root zone", which is the location in the DNS where E.164 country code entries would be assigned. While considerable discussion has taken place, no final decision has yet been made. This could have an impact on the interim designation of the domain "e164.arpa" as well as its administration.
- 7.7 In a related activity, the SPU and TSB jointly organized with the Asia Pacific Telecommunity (APT) a workshop on ENUM held in August 2003 in Bangkok, Thailand. The agenda, presentations, and conclusions of that workshop can be found at:
 - http://www.aptsec.org/seminar/meeting-2003/workshop/default.htm.
- 7.8 A second ENUM workshop in cooperation with APT will be held in May 2004 in Brunei Darussalam. Further information can be found at:
 - http://www.aptsec.org/seminar/APT-Seminar.htm
- 7.9 ICANN recently solicited applications for new top level domains. Some of these applications may have implications for the management of the ITU-T E.164 numbering plan. Resolution 133 instructs the Secretary-General "to take any necessary action to ensure the sovereignty of ITU Member States with regard to country code numbering plans and addresses will be fully maintained, as enshrined in Recommendation E.164 of the ITU Telecommunication Standardization Sector, in whatever application they are used". In accordance with this instruction, a letter has recently been sent to the President and CEO of ICANN which can be found at:
 - http://www.itu.int/osg/spu/mina/2004/lettertoicann-20041.pdf

This letter has been brought to the attention of ITU-T Study Group 2, via TD 168 (WP1/2).

8. Internationalized Domain Names

8.1 The deployment of internationalized (multilingual) domain names (IDN) raises a number of complex issues. These include, *inter alia*, technical and interoperability issues, administrative

arrangements for multilingual domains and top level domains, competition policy and market access, intellectual property and dispute resolution, as well as cultural and social issues.

- 8.2 For more information on IDN, please refer to the briefing paper at:
 - http://www.itu.int/mdns/briefingpaper/index.html

and the presentations available at:

- http://www.itu.int/mdns/presentations/index.html.
- 8.3 The SPU and TSB jointly organized with the APT a workshop on IDN in August 2003 in Bangkok, Thailand. The agenda, presentations, and conclusions of that workshop can be found at:
 - http://www.aptsec.org/seminar/meeting-2003/workshop/default.htm.
- 8.4 A second IDN workshop in cooperation with APT will be held in May 2004 in Brunei Darussalam. Further information can be found at:
 - http://www.aptsec.org/seminar/APT-Seminar.htm
- 8.5 The holding of IDN workshops in other locations are under consideration (for example, for Arabic language scripts). Proposals from ITU Member States to host related events are welcome.

9. Country Code Top Level Domains

- 9.1 Following issuance of TSB Circular 160, which contained a Questionnaire on Member States' experiences with ccTLDs, an Addendum was published on 15 September 2003, extending the deadline for replies and pointing to a web site containing the replies that had been received up to that date. Additional replies were received and a summary tabulation was published on 12 December 2003 in Addendum 2 to TSB Circular 160. The summary tabulation as well as the complete set of replies can be obtained at:
 - http://www.itu.int/ITU-T/studygroups/com02/surveys_cctld.html
- 9.2 To follow-up the first Workshop on Member States' Experiences with ccTLDs reported to Council 2003 in C03/27, the Director of TSB, in cooperation with ICANN, is organizing a second workshop in July 2004, in Kuala Lumpur, Malaysia. For further information, see:
 - http://www.itu.int/ITU-T/worksem/cctld/kualalumpur0704/index.html
- 9.3 Recently, the ccTLD .ly corresponding to the Socialist People's Libyan Arab Jamahiriya stopped functioning. A statement by ICANN can be found at:
 - http://www.icann.org/announcements/announcement-14apr04.htm

10. IP addresses

- 10.1 Internet Protocol (IP) addresses are an essential resource required for the operation of IP-based networks. General information on IP addresses, their allocation, and the evolution to a new generation of IP addresses (IPv6) can be found at:
 - http://www.itu.int/itudoc/itu-t/com2/infodocs/015.html
- 10.2 A summary of the activities of the Regional Internet Registries (RIRs), which allocate IP address, can be found in TSAG TD (GEN) 128 Rev 1, SG2 TD (WP1) 75, and SG2 TD (WP1) 111.
- 10.3 Statistics regarding the allocation of IPv4 addresses can be found at:
 - http://www.ripe.net/rs/ipv4-ncc-20031030.html
- 10.4 The RIRs have made some changes to the way they cooperate and interact with external entities (e.g., ICANN) through the creation of an umbrella organization called the Number Resource Organization (http://www.nro.org). A recent description of the background on the

formation of the NRO is available at http://www.nro.org/presentations/2004/lacnic-VI.pdf. ICANN and the NRO have recently proposed to sign a Memorandum of Understanding (MoU). Annex A of this draft MoU, which can be found at http://www.icann.org/aso/icann-aso-mou-30mar04.htm, could be interpreted to imply that global policy making for IP address assignment will become essentially the purview of the NRO.

11. ITU Participation in ICANN Bodies

- 11.1 ITU representatives continue to participate in ICANN bodies. The ITU-T continued its participation in the ICANN Technical Liaison Group, of which ITU-T is a member. Representatives of the SPU, TSB, and BDT continued their attendance at ICANN Government Advisory Committee (GAC) meetings. It should be noted that ICANN has recently been cited as a defendant in lawsuits that raise issues of US competition (anti-trust) law.
- 11.2 ICANN's "Ninth Status Report Under ICANN/US Government Memorandum of Understanding" can be found at http://icann.org/general/status-report-07apr04.pdf.
- 11.3 The GAC has initiated a process to amend its operating rules of procedure (GAC Operating Principles). The ITU Secretariat requested that the following statement be recorded in the minutes of the most recent 29 February-3 March 2004 GAC meeting in Rome, Italy:
 - "The ITU Secretariat notes that its interpretation of provisions for amending the GAC Operating Principles is that the first step is a GAC decision to support the Operating Principles being open to revision at a face-to-face meeting at which there is a quorum (see Principles 43 and 54). Since that step has not been completed, the ITU Secretariat dissociates from the present discussion and decisions regarding amending the Operating Principles."
- 11.4 One of the proposed changes is to change the status of intergovernmental organizations, including ITU, from full GAC members to observers. If that change is approved, the ITU Secretariat will correspondingly adjust its participation in GAC meetings.
- 11.5 Subsequent to the adoption of Resolution 102 (Rev. Marrakesh 2002) and 133 (Marrakesh 2002), there have not been any related discussion at subsequent GAC meetings.

12. Protection of Country Names

- 12.1 The issue of protecting the names of countries in the Domain Name System (DNS) has been raised previously in Council: "No second-level domain name corresponding to the official or common name of a sovereign State should be registered by an entity other than the sovereign State in question. Country names are symbols of sovereignty and it is not unreasonable to request that they be given special protection, just as other aspects of heritage are protected by conventions" (see 2.6 of Council 2002 Summary Record of the Thirteenth Plenary Session, 2 May 2002). The Member States of WIPO recently adopted two decisions in respect of the Report of a Second WIPO Domain Names Process. These decisions constitute recommendations that the Uniform Domain Name Dispute Resolution Policy (UDRP) be amended to permit complaints to be filed in respect of the abusive registration, as domain names, of (i) the names and acronyms of international intergovernmental organizations, and (ii) country names. Full details of the Second WIPO Internet Domain Name Process are at:
 - http://wipo2.wipo.int/process2/

and the final report is at:

- http://wipo2.wipo.int/process2/report/index.html
- 12.2 On 6 October 2003, ICANN created a committee, which included a representative of ITU, "for the purpose of analyzing the practical and technical aspects of implementing the WIPO recommendations, and notably the implications for the UDRP". That committee worked primarily

by electronic methods and is expected to present an interim report to the ICANN Board in May 2004. Although no consensus has been reached within the committee regarding whether or not to recommend implementation of the WIPO recommendations, it is expected that the committee will continue its work and that it will present options for implementation to the Board at a later date, while also reporting any continuing lack of consensus within the committee. For the announcement on the creation of the committee, see:

• http://www.icann.org/announcements/announcement-06oct03.htm

13. Internet Governance and the World Summit on the Information Society

- 13.1 Lengthy, and at times difficult, negotiations concerning the topic of Internet governance were held during the preparatory meetings for the first phase of the World Summit on the Information Society (WSIS). As the differences could not be resolved, the WSIS Declaration of Principles (paragraphs 48-50) and Plan of Action (paragraphs 13 b-d) provide that the "Secretary General of the United Nations to set up a working group on Internet governance". The relevant texts can be found at:
 - http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=1161|1160
- 13.2 At the invitation of the ITU Secretary-General (DM-1108), a Workshop on Internet Governance was held at ITU Headquarters from 26-27 February 2004. The Workshop was organized by SPU as part of the Secretary-General's "New Initiatives" programme. The overall objective of the Workshop was to contribute to the ITU's process that will prepare its inputs and position vis-à-vis the United Nations working group to be established on Internet governance. For complete information, see:
 - http://www.itu.int/osg/spu/forum/intgov04/
- 13.3 Approximately 140 participants took part in the workshop. All contributions and presentations made at the Workshop are being collated, along with the Chairman's report, into a book that will be distributed to all ITU Member States. The Chairman's Report from the workshop is available at:
 - http://www.itu.int/osg/spu/forum/intgov04/workshop-internet-governance-chairmans-report.pdf
- 13.4 A web page has recently been created at http://www.itu.int/osg/spu/intgov/ where it will post resources and information for the ITU Membership related to Internet governance.

14. Countering Spam Activities

- 14.1 During the Geneva phase of the WSIS, unsolicited commercial communication, more commonly known as spam, was identified as one of the major problems affecting today's online world. In this regard, SPU is organizing an "ITU WSIS Thematic Meeting on Countering Spam", which will take place 7 to 9 July 2004, at the International Conference Center of Geneva (CICG). The meeting is organized as a candidate WSIS Thematic meeting for the Tunis phase of WSIS in 2005 subject to approval by the WSIS process. At the invitation of the ITU Secretary-General (DM-1130), the ITU Membership has been invited to participate in this meeting and asked for written contributions. Regularly updated information can be found at
 - http://www.itu.int/spam/
- 14.2 A mailing list for representatives of national bodies with responsibilities in countering spam has been set up to share information on national spam-related initiatives as well as ITU's ongoing activities in this area. For information on participation in this mailing list, please contact counteringspam@itu.int.
