

最近のインターネットガバナンスに関する ホットトピック — ITU IPv6グループを中心に

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ITU IPv6グループ

- 2009年7月 – A study on the IPv6 Allocation and Distribution Method
 - http://www.itu.int/dms_pub/itu-t/oth/3B/02/T3B020000020002PDFE.pdf
 - ITUがRIRsと同列に並ぶレジストリとなって、IPv6アドレスの分配をIANAから受ける
 - 各国にCountry-based Internet Registry (CIR)を置き、各国に合わせたポリシーでIPv6アドレスの分配を受ける



A Study on the IPv6 Address Allocation and Distribution Methods

Disclaimer: Some of the thoughts and opinions invested in this study are elements of the research made by students towards their research studies at NAv6. The views here reflect the views of the authors at the time of writing this article. Even standards change over time, so may the views expressed here.

28 July 2009

ITU + IPv6?

- ・ なんかデジャビュな感じが。。。。
- ・ またおんなじことやってるのか？

Houlin Zhaoって覚えてますか？

Some thoughts on the ITU-T Proposal regarding IPv6 Address Distribution

May 2005
Geoff Huston
APNIC

Introduction

The purpose of this document is to take a look at the ITU-T's proposal for introducing competition into the allocation of IP addresses through the proposed establishment of national IPv6 address registries. This document will examine some of the assumptions about IP addresses that underlie the proposal and will provide a list of the significant issues that the proposal raises regarding Internet infrastructure and the related task of address resource management. It is certainly the case that the basic assumptions about the role of addresses in the Internet that underlie this proposal are important ones to consider. However, it is also the case that the proposal as it stands could trigger some quite tough unintended outcomes for the Internet, and some tough consequences for all of us as users of this rather unique public utility. This document describes some of the key issues that are raised by this ITU-T proposal, such as the dilution of mutual interest in a common network, the creation of policy dilution and the elimination of routing integrity and security, and some thoughts on potential next steps here.

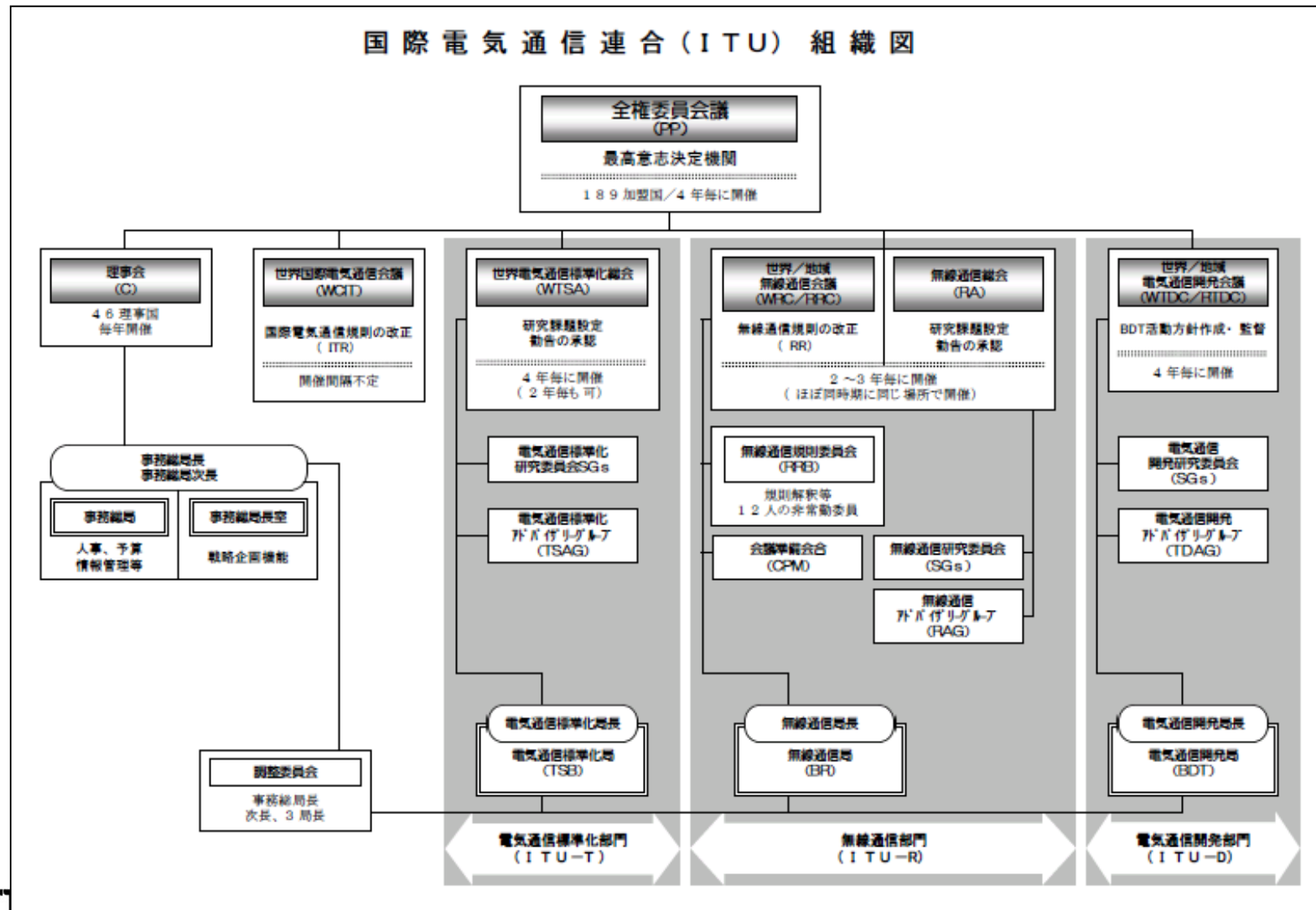
The Proposal

In recent months a proposal has been made for the introduction of competition into the system of allocation of IP addresses. The proposal has been made by Houlin Zhao of the ITU-T for the ITU-T to establish new IPv6 address registries in each nation, each of which would compete with the existing Regional Internet Registries (RIRs).

This proposal can be found at: <http://www.itu.int/ITU-T/tsb-director/tut-wsis/files/zhao-netgov02.doc>

This proposal has been published as part of the broader program of work associated with Phase II of the World Summit on the Information Society (<http://www.wsis.org>).

http://www.ituaj.jp/03_pl/itu/sosikizu.pdf



2005年 世界情報社会サミット(W SIS) チュニスアジェンダ

- ・ <http://www.itu.int/wsis/docs2/tunis/off/6rev1.html>
- ・ 69. We further recognize the need for **enhanced cooperation** in the future, to enable **governments**, on an equal footing, to carry out their roles and responsibilities, in **international public policy** issues pertaining to **the Internet**, but not in the day-to-day technical and operational matters, that do not impact on international public policy issues.
- ・ 71. The process towards **enhanced cooperation**, to be started by the UN Secretary-General, involving all relevant organizations by the end of the first quarter of 2006, will involve all stakeholders in their respective roles, will proceed as quickly as possible consistent with legal process, and will be responsive to innovation. **Relevant organizations should commence a process towards enhanced cooperation** involving all stakeholders, proceeding as quickly as possible and responsive to innovation. The same relevant organizations shall be requested to provide annual performance reports.

2006年ITU全権委員会議(アンタルヤ)

- ・ 決議102(改訂)

- http://www.itu.int/osg/csd/wtpf/wtpf2009/documents/ITUresolution102_publicpolicy_IPbasednetworks_PP06.html
- TSB、BDTに対して、検討や活動を深化させる活動を続け、年次理事会で報告するように指示
- instructs the Director of the Telecommunication Standardization Bureau
 - ・ 1 to ensure that the ITU Telecommunication Standardization Sector (ITU-T) performs its role in technical issues, and to continue to contribute ITU-T expertise and to liaise and cooperate with appropriate entities on issues related to the management of Internet domain names and addresses and other Internet resources within the mandate of ITU, such as **IP version 6 (IPv6)**, ENUM and IDNs, as well as any other related technological developments and issues, including facilitating appropriate studies on these issues by relevant ITU-T study groups and other groups;

2008年世界電気通信標準化総会(ITU-T総会)

- **決議64 – IP address allocation and encouraging the deployment of IPv6**
 - http://www.itu.int/dms_pub/itu-t/opb/res/T-RES-T.64-2008-PDF-E.pdf
 - TSB局長に、BDT局長との密な協力により、IPv6の普及に向けた活動を進め、理事会に報告するように指示
 - ここで、「IPv6アドレスの割り当てと登録」に関して、特に調査して、2009年理事会に報告するように指示

WTSA-08 – Resolution 64 (Johannesberg, 2008)

IP address allocation and encouraging the deployment of IPv6 (1/5)

- The World Telecommunication Standardization Assembly (Johannesburg, 2008),
- *recognizing*
 - a) **Resolution 102 (Rev. Antalya, 2006)** of the Plenipotentiary Conference, and its instructions to the Director of the Telecommunication Standardization Bureau;
 - b) the results of the ITU workshop on IPv6, which took place on 4–5 September 2008;
 - c) that **IPv4 to IPv6 migration is an important issue** for Member States and Sector Members,
- *noting*
 - a) that IP addresses are fundamental resources that are essential for the future development of telecommunication/information and communication technologies IP-based networks and for the world economy;
 - b) that **many countries believe** that there are **historical imbalances** related to **IPv4** allocation;
 - c) that large contiguous blocks of IPv4 addresses are becoming scarce and that it is urgent to promote migration to IPv6,

WTSA-08 – Resolution 64 (Johannesberg, 2008)

IP address allocation and encouraging the deployment of IPv6 (2/5)

- *considering*
 - a) that, among the relevant stakeholders in the Internet community, there is a need to continue discussions related to **IPv6 deployment** so that countries better understand these important issues;
 - b) that IPv6 deployment is an important issue for Member States and Sector Members,
- *resolves*
 - to instruct Study Groups 2 and 3, each according to its mandate, to study the allocation and economic aspects of IP addresses, taking into consideration the challenges and issues identified in the report of the chairman of the 4–5 September 2008 workshop on IPv6,
- *instructs the Director of the Telecommunication Standardization Bureau, in close collaboration with the Director of the Telecommunication Development Bureau*
 - 1 to initiate **a project to assist developing countries**, responding to their regional needs as identified by the Telecommunication Development Bureau (BDT); this project should be carried out jointly by the Telecommunication Standardization Bureau (TSB) and BDT, taking into consideration the involvement of those partners willing to participate and to bring their expertise;


WTSA-08 – Resolution 64 (Johannesberg, 2008)

IP address allocation and encouraging the deployment of IPv6

- 2 to establish a **website** that provides information about global activities related to **IPv6**, to facilitate awareness-raising and the importance of IPv6 deployment for all ITU members and interested entities, and provides information related to training events being undertaken by relevant entities in the Internet community (e.g. regional Internet registries (RIR), local Internet registries (LIR), operator groups and the Internet Society (ISOC));
- 3 to promote awareness of the importance of IPv6 deployment, to facilitate joint training activities, involving appropriate experts from the relevant entities, and to provide information to developing countries,
- *further instructs the Director of the Telecommunication Standardization Bureau*
 - **to study the question of IPv6 address allocation and registration** for interested members and, especially, developing countries and to report to the 2009 session of the ITU Council,
- J**· *invites Member States and Sector Members*
 - to contribute to these activities.

2009年9月：寄書29

- ・ 2009年1月のITU-T SG3において、IPv6アドレスの分配に関する途上国の懸念が複数呈されたこと。
- ・ Nav6(National Advanced IPv6 Centre)レポートの提出
- ・ IPv6グループの設立が提案

Council 2009 Geneva, 20-30 October 2009	 International Telecommunication Union
Agenda item: PL 4.5	Document C09/29-E 22 September 2009 Original: English
Report by the Secretary-General	
DIRECTOR TSB REPORT ON WTSA RESOLUTION 64 "IP ADDRESS ALLOCATION AND ENCOURAGING THE DEPLOYMENT OF IPV6"	
Summary WTSA-08 Resolution 64 (Johannesburg, 2008) instructs the Director of TSB, in close collaboration with the Director of BDT, to initiate a project to assist developing countries, responding to their regional needs as identified by BDT; to establish a website to provide information about global activities related to IPv6; and to promote awareness of the importance of IPv6 deployment, to facilitate joint training activities, and to provide information to developing countries. WTSA-08 Resolution 64 (Johannesburg, 2008) further instructs the Director of TSB to study the question of IPv6 address allocation and registration for interested members and, especially, developing countries and to report to the 2009 session of the ITU Council. This document presents a summary of the actions carried out in response to Resolution 64. Action required	

CIRスキーム

- ・ 現在の五つのRIRに加え、ITUがRIR同様にIANAからIPv6アドレスの割り振りを受ける。
- ・ ITUレジストリから、国ごとに設置されるCIRにIPv6アドレスが再分配される。
- ・ CIRから分配されるアドレスに関しては、各国の事情を配慮して制定された細やかなポリシーがCIRによって制定される。
 - また、このことがインターネットのルーティングを破壊する危険性は無い。
- ・ 現RIRによる独占状態には問題があり、競争環境が必要である。

2010年2月：コミュニティコンサルテーション セッション@APNIC29クアラ Lumpur

- ・ JPNIC News & Views vol.731 APNIC29ミーティング
報告 [第1弾] 全体報告
 - <http://www.nic.ad.jp/ja/mailmagazine/backnumber/2010/vol731.html>
- ・ このCIRスキームという考え方に対して、APNICコミュニティ全体から異議が唱えられた
- ・ コミュニティ声明文としてまとめられ、「IPv6グループ会合に対する寄書」として認められた。

2010年3月:ITU IPv6グループ会合@ジュネーブ

- ・ 発言者として挙げられている会員国は10ヶ国
- ・ このうち、CIRスキームを支持したのは、2ヶ国
 - CIRスキーム支持の理由:IPv4におけるアドレス分配の地域偏在インターネット用国際専用線の費用負担におけるアンバランス...
- ・ 会員国の中にも、現行のRIRスキームを支持し、これに新たなスキームを加えることは適切でないという姿勢
- ・ RIR陣営:全RIRに対して同一サイズのIPv6 ブロックが既に分配済みであること等を理由に「現行スキームでニーズは満たしている」
- ・ 体制の整備
 - IPv6普及問題を検討するCorrespondence Group 1
 - CIRスキームを検討するCorrespondence Group 2
 - ITU-T SG2、3、17 およびITU-D SG2へのリエゾン
- ・ 次回会合は、2010年9月1日～2日に、ジュネーブで開催

2010年3月以降現在まで ITU IPv6グループの動向

- ・ Correspondence Groupでのメール: 2,3通

考察

- ・ ITUの中でもCIRスキームを支持するのは、限られた国々
- ・ これに反対するインターネット関係者や会員国の 主張が多勢を占める
 - すぐに大きな動きにつながるものでなさそう
- ・ しかし、
 - IPv6グループ:ITUの意思決定機構の枠外
 - 2003年のWSISジュネーブフェーズ:実際にICANN体制に対する異議 が大きな議論を呼んだ
 - 今後のITUの動きがIPアドレス管理体制や、インターネットガバナンス全体に関する大きな動きを再び巻き起こす可能性は否定できない。

その他の話題

ICANNブリュッセル会合から1枚



ありがとうございました

- ・ メールマガジン JPNIC News & Views 是非ともご購入
読下さい。
 - <http://www.nic.ad.jp/ja/mailmagazine/>

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