

ITU-D Regional Development Forum for the Asia Pacific Region

**“NGN and Broadband, Opportunities and Challenges”
Yogyakarta, Indonesia, 27 – 29 July 2009**

Tariffs and Accounting Issues under discussion in ITU

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Yogyakarta, Indonesia, 27-29 July 2009

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Introduction

- ❑ A key task of Study Group 3 is the complicated job of recommending some principles for the harmonization of global interconnection rates. Interconnection rates are the costs between telecommunication service providers when linking networks for the exchange of traffic.
- ❑ This work has become increasingly complex with the more widespread use of VoIP, and the move to IP based or next generation networks (NGN). More recently SG3 has surveyed international mobile termination rates, with a view to determining whether there are differences by region and, if possible, what might be causing those differences.
- ❑ SG3's aim is to keep rates fair, and as low as possible without compromising service. Interconnection rates are a key concern for our members and in particular for the developing world.

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Structure of the ITU-T SG3

- ❑ The sole group which deals with tariff and charging issues for int'l telecom. services under UN as well as a non-technical study group within the ITU-T;
- ❑ Responsible for studies relating to :
 - tariff and accounting matters (including costing methodologies) for international telecommunication services and study of related telecommunication economic, accounting and policy issues;
 - foster collaboration among its members with a view to the establishment of rates at levels as low as possible consistent with an efficient service and taking into account the necessity for maintaining independent financial administration of telecommunication on a sound basis;
- ❑ Focuses on broad area of telecommunication services from traditional telephone services to new services incl. NGN;
- ❑ Attracts 160 delegates from 60 countries, from service providers, research institutes, governments, regulatory bodies, etc.

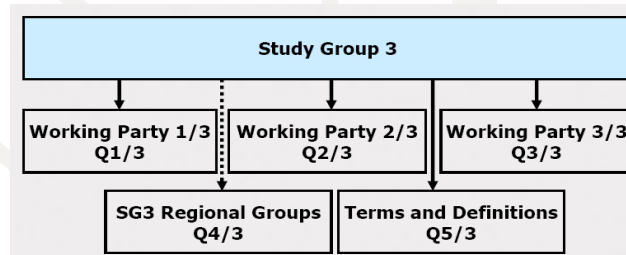
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Source :
SG3 RGAO Meeting Hanoi, Vietnam, 4-6 March
2009, Kishik PARK Ph.D. ITU-T SG3 Chairman

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Structure of the ITU-T SG3

- ❑ **WP1: Network capabilities and service features' tariff principles;**
- ❑ **WP2: Charging, Accounting and Settlement of traditional services;**
- ❑ **WP3: Study of economic and policy factor for international telecommunication services;**
- ❑ **SG3 Regional Group [RG]: Africa, Asia and Oceania, Latin America and the Caribbean, Europe and Mediterranean Basin, Arab[?]*;**
- ❑ **Rapporteur Group on Terms and Definitions dealing with tariff and accounting principles ;**
- ❑ **Ad-hoc Group on developing country issues**



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Structure of the ITU-T SG3

QUESTIONS	TITLE
Q 1/3	Development of charging and accounting/settlement mechanisms for international telecommunications services using the Next Generation Networks (NGNs) and any possible future development, including adaptation of existing D-series Recommendations to the evolving user needs; (Mobile communications, "IP Telephony", IIC, Traffic Flow Multifactors and Internet Traffic Flow Methodology, NGN, Accounting and settlement based on IPDR, enhanced signaling)
Q 2/3	Development of charging and accounting/settlement mechanisms for international telecommunications services, other than those studied in Question 1/3, including adaptation of existing D-series Recommendations to the evolving user needs Mobile/Fixed Termination Rate, Flat rate for mobile/fixed, Accounting/Settlement rates for fixed, Alternative accounting procedures, Mobile roaming, Tariff issues for cross-border, etc.
Q 3/3	Study of economic and policy factors relevant to the efficient provision of international telecommunication services Policy and economic issues, Network externalities, Universal service obligations, Impact of the choice of accounting rate currency, Impact of convergence of services, ITRs, etc.
Q 4/3	Regional studies for the development of cost models together with related economic and policy issues
Q 5/3	Terms and definitions for Recommendations dealing with tariff and accounting principles
SG3RG-AFR	Study Group 3 Regional Group for Africa
SG3RG-AO	Study Group 3 Regional Group for Asia and Oceania
SG3RG-LAC	Study Group 3 Regional Group for Latin America and the Caribbean

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Highlights of the discussions

- **WTSA-08 Results Implementation**
 - Restructuring of the SG3 Working Parties and Management Team;
 - Approval of the newly agreed Questions to be studied in 2009-2012 study period
- **Working Methods**
 - Having an agreed objective and a timeline for attaining the objective, in particular for Rapporteur groups;
 - Inviting a half-day session of workshop or panel discussion at each meeting
- **Collaboration with SG3 Regional Groups**
 - Strengthening cooperation and liaison between SG3 and regional groups ;
 - Strengthening cooperation between each regional group (e.g. adding "collaboration with other regional group" to agenda items)
- **Approved Recommendations**
 - Approval of the revised D.93, "Charging and accounting in the international land mobile telephone service (provided via cellular radio systems)"

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2009, Kishik PARK Ph.D. ITU-T SG3 Chairman

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Highlights of the discussions

- **International Internet Connectivity**
 - Studying on tariff and economic issues regarding IIC including ways and means to reduce the cost of IIC, the use of IXs to reduce the cost of IIC ;
 - A mini panel on reducing the cost of IIC will be organized at the next SG3 meeting (Sep 2009, Uganda)
- **Traffic Flow Multifactors and Internet Traffic Flow Methodology**
 - A draft Recommendation D.51, "Use of Border Gateway Protocol Routers to Estimate Traffic Flows" by China, which proposes a method for computing traffic flow for the technical layer to be referred to in bilateral negotiations, has been discussed;
 - Technical aspects regarding D.51 has to be further studied;
 - A timeline and work plan for achieving the objective will be developed at the next SG3 meeting (Sep 2009, Uganda).
- **NGN**
 - Study on enhancing Recommendation D.271, "Charging and accounting principles for NGN" will be continued incorporating IP Data Records and enhanced signalling issues.

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Highlights of the discussions

□ Mobile Roaming

- By recognizing the increasing interest in international mobile roaming and studies being undertaken by many fora worldwide, a Rapporteur group has been created;
- The objective of the work is to explore relevant studies and market developments that are related to a reduction in mobile roaming rates;
- Developed ToR, deliverables, and timeline (TD37-PLN/3).

□ Guidelines Based on International and Regional Practices for Resolution of Disputes Regarding Charging

- Contributions from GSC (Global Settlement Carrier), USA have been introduced which stressed the importance of dispute prevention and settlement process;
- A Rapporteur group has been created with the objective to develop possible guidelines or Recommendations with a view to standardizing the handling of incoming and/or outgoing declarations or invoices so as to prevent disputes by encouraging the use of standard processes and forms.

Highlights of the discussions

□ Policy and Economic Issues –IPv6

- Following-up on WTSA-08 Resolution 64, BDT had begun on collaboration for the project to study the allocation and economic aspects of IP address;
- A half-day panel regarding IPv6 issues that falls within the SG3 mandate to be held at the next SG3 meeting;
- Experiences concerning the transition to IPv6 to be discussed at the next SG3 meeting.

□ Network Externalities

- At the WTSA-08, D.156, "Network Externalities" has been approved with reservations from 28 countries;
- Items to be further studied are included as an Appendix to D.156, and the objective is to complete the study by the 2011 SG3 meeting;
- Contributions are invited in particular from those countries that had expressed reservations and from the regional groups.

Highlights of the discussions

- **Financial Aspects of Network Security**
 - A study for TAS on Financial Aspects of Network Security: Malware and Spam, the report of the TAS Seminar on the Economics of Cybersecurity, Brisbane, Australia, 15 Jul 08 have been reviewed.
 - Considering its importance and interest to developing countries, the report is to be submitted to ITU-D Programs 1, 2, and 4, and contributions from ITU-D related to economic effects of cybersecurity will be requested;
- **Misuse of Facilities and Services**
 - Liaison from SG2 on "Alternative Calling Procedure and Phantom Traffic" has been noted which provides information on use of alternative calling procedure, including call-back, refilling, hubbing, bypass, etc. resulting negative impact on developing countries' concern of development of sound ICT networks and services.

Contribution Topics expected for the next meeting

- Economic effects of call blocking on developing countries (Resolution 61);
- How to expedite its work on international connectivity, to collect data with respect to the implementation and practical effects of relevant resolutions and Recommendations (Resolution 62);
- Allocation and economic aspects of IP addresses (Resolution 64);
- Economics of cybersecurity (especially regarding items 17-21 of TD17(Plen/3)) ;
- Impact of the growing scarcity of IPv4 addresses on settlement rates for voice traffic over IP networks at the wholesale level, termination rates for IP telephony, IIC, NGN ;
- IP Telephony Rapporteur group's objectives, deliverables, work plan, timeline;
- Ways and means to reduce the cost of IIC;
- TFMF issues (in need of traffic flow data offering from membership)
- Dispute process standardization, dispute management guidelines;
- Efficiency of bill and keep in relation to billing for call termination
- Experiences in transitioning to IPv6

SG03RG AO Work Highlights

- ❑ SG03RG Asia Oceania (used to be TAS Group) conduct study on TAS Cost Model Enhancement from cost orientated to LRIC approach for:
 - TAS group cost elements for inward IDD services;
 - Apportionment methodology for an incoming IDD telephone traffic cost model;
- ❑ SG03RG also conduct survey (questionnaire) on the Tariff situation in the countries of Asia and Oceania (accounting rate, transit etc);
- ❑ Seminar on Tariff and accounting principles including related telecommunication economic and policy issues will conduct before SG03RG AO meeting (Coordinate by BDT);

Others SG03RG Work Highlights

1. An example of the work of regional study group is well illustrated by the outcome of a meeting of ITU-T's Tariff Group for Africa (TAF) where a set of rules designed to keep the revenue from inter-African telephone calls within the continent were agreed. Transit rules typically mean that the last carrier of a call or 'transit center' receives a portion of the revenue of that call.
2. Often, however, this has meant that - even if the call is between African countries - a carrier outside of Africa is the main beneficiary. The regional ITU-T Recommendation for Africa will encourage the use of transit mechanisms within Africa, to ensure that revenue benefits operators there.

Others SG03RG Work Highlights

- ❑ Recommendations from SG03 ITU-T affects major financial flows, which can be in the order of billions of dollars, so careful study and consideration is required before revising existing Recommendations or agreeing new Recommendations;
- ❑ The work of Study Group 03 will be more critical to developing countries as well as developed ones;
- ❑ To achieve expected outcome, we should have a clear and agreed objective with specific timeline for each study item;
- ❑ Regional study on tariff accounting and economic issue is needed to ensure the benefits for operators/countries in the regions.

Thank You.