

Standardization of IP Traffic Measurement at the ITU

J. Quittek

Network Laboratories, NEC Europe Ltd.

quittek@netlab.nec.de

What is the ITU?

- International Telecommunication Union
 - a legal standardization body
 - the IETF is not a legal standardization body
 - members are nations and international organizations
- ITU-T is the Telecommunications Standardization sector of the ITU
- ITU-T standardizes PSTN and many other telecommunication networks that provide international services
- ITU-T standardization of IP is limited
 - still some important work on IP internetworking is done at ITU-T
- Work conducted in 13 Study Groups
- Study Groups delegate work to Rapporteur Groups

International Internet Connectivity

- ITU Study Group 3 Rapporteur Group IIC
 - International Internet Connectivity (IIC) and Traffic Flow Methodology
- **Goal:** Give recommendations on the accounting of traffic between Internet service providers
- Just recommendations no obligation
- Highly political issue
- Series D: General Tariff Principles
- Originally covering Teletex
 - Charging and Accounting in International Telecommunication Services - Tariff and International Accounting Principles for the International Teletex Service

D.50 International Internet Connectivity

- Internet Version started in 1997
 - General tariff principles – Principles applicable to GII Internet - International Internet connection
- First version of this ITU-T Recommendation D.50 developed 1997-2000
- The output was 4 lines of text:

"... take into account the possible need for compensation between them [the ISPs] for the value of elements such as traffic flow, number of routes, geographical coverage and cost of international transmission amongst others."
- This statement was already too strong to be supported by Greece and by the USA.

International Internet Connectivity

- Next approach: Extending 4 lines to 6 including a pointer to an addendum
- Taking more properties into account
 - flow-related: service performance, ...
 - not flow-related: dedicated capacity provided, network resilience, ...
- ISP interaction
 - peering, asymmetric charging, ...
- Cost sharing of international connection
- Agreement on new version in autumn 2004
 - China expressed reservation on the appendix