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ICT Quality of Service Regulation:

Practices and Proposals

BACKGROUND PAPER

EXECUTIVE SUMMARY

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Summary

For many years some telecommunications regulators have had schemes for quality of service monitoring that recognised its importance in their markets. More recently other regulators have been drafting regulations and, in some cases, publishing results. Yet there have been various apparent setbacks: various regulators appear to have stopped their work on quality of service after publishing consultation papers, regulations or initial quality of service measurements. The problem overall may be that the resources of regulators are insufficient: regulators have many urgent and important tasks and require time to appreciate fully the aims of, and tasks in, quality of service monitoring.

Several regulators have just held or are now holding consultations on quality of service monitoring. This paper is intended to help those and other regulators, by starting to study how experience so far can guide quality of service monitoring in the future, particularly in countries where it is not yet well established. The paper only starts this study.

Section looks at the question of when quality of service monitoring by regulators is desirable. Broadly speaking, the section concludes that quality of service measurements can be beneficial in several ways, at least if they are published for all operators, but that quality of service targets can be detrimental unless they are applied only to dominant operators. Though there are exceptions to this conclusion it suggests that fewer targets are needed than are currently imposed.

Section deals with operational arrangements for quality of service monitoring by regulators. There are various ways in which operators can be involved in the arrangements for defining measurements, setting targets, making measurements, publishing measurements and auditing measurements. There are also ways in which customers can be involved, even in defining measurements, making measurements and administering penalties (by receiving compensation). The cases studied illustrate wide variations in how quality of service monitoring is done. The more and less successful aspects of the cases are not always what might be expected.

Section turns to the question of what quality of service monitoring by regulators is desirable. Many measurements have been defined and many targets have been set. Regulators and operators need to choose those that match their main aims. The section describes criteria for choosing the measurements to be made, the measurements to be published and the targets to be adopted. It also discusses various other choices that regulators and operators must make, such as how measurements are to be made (particularly for voice and related means of communication) and which services are to be monitored in current network and Next Generation Network (NGN) environments. These choices are particularly important as communication services become layered on Internetwork Protocol (IP) networks, when operators will use wholesale services, and bundle retail services, both within and between layers.

Quality of service monitoring inevitably differs in different countries, with their own industry structures and customer preferences. It is unlikely ever to be perfect, as regulators are unlikely ever to have full enough information about the markets. This paper does not pretend to say what regulators always ought to do. However, it does suggest the following overall guidelines for discussion:

- Consultations should be widespread and taken into account fully before regulations are introduced.
- The measurements made should be important to customers, practical for operators and comparable between operators. They should concentrate on few aspects of services.
- The measurements published should be helpful to customers and fair to operators. They should be publicised in ways appropriate to the culture of the intended users.
- Any targets adopted should be useful and realistic. They are most likely to be desirable for wholesale services of dominant operators.
- Monitoring should entail regularly examining, and understanding the basis for, the measurements.

Some of these guidelines may seem too obvious to discuss, but they are not followed everywhere.