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Title: Mapping between ITU-T (Y.1541/Y.1221) and 3GPP (TS 23-107) QoS Classes and Traffic Descriptors

LIAISON STATEMENT

To: 3GPP, ETSI TISPAN WG 5

Approval: ITU-T Study Group 13 meeting

For: Information/Action (for 3GPP)

Contact: H. Kim, Question 6 Rapporteur
Korea Telecom

Tel: +82 2 526 5190
Fax: +82 2 526 5567
Email: hans9@kt.co.kr

Study Group 13 wishes to clarify mapping between ITU-T (Y.1541/Y.1221) and 3GPP (TS 23-107) QoS classes and traffic descriptors.

QoS interworking between 3GPP wireless and non-3GPP wireline networks will be essential if future IP-based NGNs are to provide assured-quality IP flows.

Wireless/wireline interworking would be most effective if it were based on the same QoS classes and parameters. We believe that the Y.1541 QoS classes should be globally supported. And an alternative is to define a mapping between the two QoS specification regimes. In the event that the latter approach is pursued, the relevant specifications should be revised along the following lines.

1. The 3GPP requirements for SDU transfer delay should be expressed as means rather than as maxima. This will facilitate performance apportionment or concatenation, since means can generally be added while maxima cannot. If specifications for maxima must be retained, the means should be specified as well.

2. The 3GPP specifications should define and establish at least one numerical objective for SDU transfer delay variation. Delay variation must be limited to support interworking and the operation of jitter buffers in customer equipment, and it cannot be limited adequately by specifying only a transfer delay maximum. The delay variation should be expressed using the same statistic defined in Y.1541, i.e., upper 10^{-3} quantile minus minimum.

3. The 3GPP specifications should define numerical target values for the various "priority levels" in the interactive QoS class, to enable quantitative support for Y.1541 classes 2-4. As TS 23-107 notes, there is a definite need to differentiate between quality levels for

bearers within the interactive class. Users envision substantially different applications for services in this category and will expect them to be supported with numerical objectives.

For comparability, the SDU should be defined to correspond to an IP packet in 3GPP specifications of QoS requirements for IP-based services. An evaluation interval of 1 minute should be used in assessing both mean delay and delay variation. Payload sizes of 160 and 1500 octets should be used in specifying and evaluating performance values.

Attachment: D 533 (SG 13)