

**Speech and multimedia Transmission Quality (STQ);
QoS and network performance metrics
and measurement methods;
Part 4: Indicators for supervision of Multiplay services**

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Foreword

This ETSI Standard (ES) has been produced by ETSI Technical Committee Speech and multimedia Transmission Quality (STQ), and is now submitted for the ETSI standards Membership Approval Procedure.

The present document is part 4 of a multi-part deliverable covering the QoS metrics for telecommunication services and network performance metrics for transport networks, as identified below:

EG 202 765-1: "General considerations";

ES 202 765-2: "Transmission Quality Indicator combining Voice Quality Metrics";

EG 202 765-3: "Network performance metrics and measurement methods in IP networks";

ES 202 765-4: "Indicators for supervision of Multiplay services".

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1 Scope

The present document aims at identifying and defining indicators and methodologies for a use in a context of end-user quality characterisation and supervision of Multiplay services.

In this context the measurements and metric determinations are performed by analysing signals accessible on user-end services and not on the network.

The present document concerns: Internet access, voice messaging service, IPTV and VoD.

The assessment methods are intrusive and non intrusive.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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2.1 Normative references

The following referenced documents are necessary for the application of the present document.

- [1] ETSI EG 202 057-4: "Speech Processing, Transmission and Quality Aspects (STQ); User related QoS parameter definitions and measurements; Part 4: Internet Access".
- [2] ITU-T Recommendation G.1030: "Estimating end-to-end performance in IP networks for data applications".
- [3] ITU-T Recommendation G.1010: "End-user multimedia QoS categories".
- [4] IETF RFC 792: "Internet Control Message Protocol".
- [5] ETSI TS 102 250-2: "Speech and multimedia Transmission Quality (STQ); QoS aspects for popular services in GSM and 3G networks; Part 2: Definition of Quality of Service parameters and their computation".
- [6] ITU-T Recommendation P.800: "Methods for subjective determination of transmission quality".
- [7] ITU-T Recommendation P.862: "Perceptual evaluation of speech quality (PESQ): An objective method for end-to-end speech quality assessment of narrow-band telephone networks and speech codecs".
- [8] ITU-T Recommendation P.862.1: "Mapping function for transforming P.862 raw result scores to MOS-LQO".
- [9] ITU-T Recommendation P.862.2: "Wideband extension to Recommendation P.862 for the assessment of wideband telephone networks and speech codecs".
- [10] ITU-T Recommendation P.862.3: "Application guide for objective quality measurement based on Recommendations P.862, P.862.1 and P.862.2".
- [11] ITU-T Recommendation P.800.1: "Mean Opinion Score (MOS) terminology".
- [12] ITU-T Recommendation P.505: "One-view visualization of speech quality measurement results".