

**Committee T1 Performance  
Standards Contribution**

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STANDARDS PROJECT: Analog Interface Performance Specifications for Digital  
Video Teleconferencing/Video Telephony Service (T1Q1-  
12)

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SUBJECT: ITU-T Activity on video quality assessment

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SOURCE: NTIA/ITS

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KEY WORDS: video quality, subjective, objective, performance assessment,  
multimedia, ITU-T, digital cable television, MPEG2

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**ABSTRACT**

This contribution provides information concerning the current work in the ITU-T in the areas of subjective and objective performance assessment of video and audiovisual quality. There is related work in these areas taking place in the ITU-T in Study Groups 9 and 12 and in the ITU-R in WP11E. This work is being contributed by several institutions in the world and this contribution includes the work of some of them. It is expected that more institutions will contribute to this standardization effort in the near future.

## ITU-T Activity on Video Quality Assessment

### Summary

- 7 - 18 April 1997      Study Group 12 End-to-end transmission performance of networks and terminals
- 21 - 25 April 1997      Study Group 9 - Television and sound transmission

#### Study Group 12

- Question 10 - Subjective methods for evaluating audiovisual quality in multimedia services
- Question 11 - Objective methods for evaluating audiovisual quality in multimedia services

These two questions met jointly. They were previously under one question (Q22/12) last study period and continue a close connection in study items. The most significant actions taken during this meeting are listed below.

1. The first draft of P.DEL was contributed by the U.S. and Mr. Al Morton of ATT agreed to serve as editor. P.DEL is the draft new Recommendation "Multimedia communication delay, synchronization, and frame rate measurement" and it contains portions of the text of the ANSI Standard T1.801.04.
2. Approval by the Study Group to form a Joint Rapporteurs' Group on subjective and objective methods for the assessment of audiovisual quality. This group is now formed between Study Groups 9 and 12 of the ITU-T. It is hoped that ITU-R WP11E will participate informally until such time as the JRG can span across the T and R sectors.
3. Workplan established for P.OVQ, Objective assessment of video quality. (Se attached meeting WP2/12 report.)

#### Study Group 9

- Question 22 - Measurement and control of the Quality of Service of digital television transmission on contribution and/or distribution networks
- Question 23 - Development of an assessment aid for MPEG2 codecs

These two questions were discussed in drafting group D of Working Party 1/9. The most significant actions taken during this meeting are listed below.

1. First draft of J.SVQ "Subjective video quality assessment for digital cable television systems.
2. First draft skeleton of J.OVQ "Objective video quality assessment for digital cable television systems.
3. The division of the video quality space into six classes and the division of objective assessment methods into "in-service" and "out-of-service" methods. (See attached document J.OVQ.)