TECHNICAL REPORT

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Multimedia systems and equipment – Quality assessment – Audio-video communication systems

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

MULTIMEDIA SYSTEMS AND EQUIPMENT – QUALITY ASSESSMENT – AUDIO-VIDEO COMMUNICATION SYSTEMS

FOREWORD

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Technical reports do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful by the maintenance team.

IEC 62251, which is a Technical Report, has been prepared by IEC technical committee 100: Audio, Video and Multimedia Systems and Equipment.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
100/561/DTR	100/662/RVC

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

MULTIMEDIA SYSTEMS AND EQUIPMENT – QUALITY ASSESSMENT – AUDIO-VIDEO COMMUNICATION SYSTEMS

1 Scope

This Technical Report specifies items to be measured by objective methods, methods of measurement together with measuring conditions, processing of the measured data and presentation of acquired information for objective assessment of end-to-end quality of audio-video communication systems over digital networks. The measurements are supposed to be conducted in a double-ended and a full reference. The systems are assumed to have electrical interface channels at the input and at the output of audio-video signals for objective assessment.

The extension for systems that do not have such channels is left for further study.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies

IEC 60268-4, *Sound system equipment – Part 4: Microphones*

IEC 60268-5, *Sound system equipment – Part 5: Loudspeakers*

IEC 61146-1:1994, *Video cameras (PAL/SECAM/NTSC) – Methods of measurement – Part 1: Non-broadcast single-sensor cameras*

IEC 61146-2:1997, *Video cameras (PAL/SECAM/NTSC) – Methods of measurement – Part 2: Two- and three-sensor professional cameras*

IEC 61966-2-1:1999, *Multimedia systems and equipment – Colour measurement and management – Part 1: Colour management – Default RGB colour space – sRGB*

Amendment 1 (2003)

IEC 61966-2-1, *Multimedia systems and equipment – Colour measurement and management – Part 2-1: Colour management – Default RGB colour space – sRGB*

IEC 61966-3:2000, *Multimedia systems and equipment – Colour measurement and management – Part 3: Equipment using cathode ray tubes*

IEC 61966-4:2000, *Multimedia systems and equipment – Colour measurement and management – Part 4: Equipment using liquid crystal display panels*

IEC 61966-5:2000, *Multimedia systems and equipment – Colour measurement and management – Part 5: Equipment using plasma display panels*

IEC 61966-9:2000, *Multimedia systems and equipment – Colour measurement and management – Part 9: Digital cameras*

CIE 15.2:1986, *Colorimetry*

ITU-R BS.1387-1 :2001, *Method for objective measurements of perceived audio quality*

ITU-R BT.601-5 :1995,*Studio encoding parameters of digital television for standard 4:3 and wide-screen 16:9 aspect ratios*

ITU-T J.144 :2001, *Objective perceptual video quality measurement techniques for digital cable television in the presence of a full reference*

ITU-T P.931 :1998, *Multimedia communications delay, synchronization and frame rate measurement*