



TECHNICAL REPORT



User's quality of experience on multimedia conferencing services – Part 1: General

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**USER'S QUALITY OF EXPERIENCE ON MULTIMEDIA
CONFERENCING SERVICES –****Part 1: General****FOREWORD**

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

The language used for the development of this Technical Report is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 63478 series, published under the general title *User's quality of experience on multimedia conferencing services*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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INTRODUCTION

With the global COVID-19 pandemic, business and education meetings have shifted from offline to online environments. Consequently, a range of multimedia conferencing services has been developed, enabling users to choose and enjoy conferencing services based on personal preferences. To ensure optimal user experience, it is essential to measure the quality of experience (QoE) for multimedia conferencing services. However, there is currently a lack of standardized methods for measuring a user's QoE in this context. Thus, there is a pressing need to provide guidelines for measuring and evaluating a user's QoE for multimedia conferencing services.

Traditionally, quality of service (QoS) has been measured for network data communication, represented by objective index values like delay, throughput, and jitter. In contrast, QoE represents a user's level of satisfaction with a specific service and reflects human emotional quality. As such, QoE is subject to overall service performance from the user's perspective. In the case of multimedia conferencing services, measuring QoE is challenging due to varying user preferences/requirements and service/application characteristics. Therefore, a unified framework is necessary to measure and evaluate a user's QoE for multimedia conferencing services.

This document aims to provide guidelines for enhancing a user's QoE for multimedia conferencing services. The series specifies general considerations and requirements to enhance a user's QoE and measurement methods for associated QoE parameters.

The IEC 63478 series consists of the following parts:

- Part 1: General;
- Part 2: Requirements; and
- Part 3: Measurement methods.

Part 1 of IEC TR 63478-1 (Technical Report) describes general considerations to measure user's QoE.

Part 2 of IEC 63478-2 (International Standard) describes the requirements to be considered to measure user's QoE.

Part 3 of IEC 63478-3 (International Standard) describes the measurement methods for QoE parameters.

USER'S QUALITY OF EXPERIENCE ON MULTIMEDIA CONFERENCING SERVICES –

Part 1: General

1 Scope

This part of IEC 63478 describes general considerations to be taken for measurement of a user's quality of experience (QoE) on multimedia conferencing services.

2 Normative references

There are no normative references in this document.