Conceptual model of standardization for haptic multimedia systems
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## CONTENTS

**FOREWORD** ..................................................................................................................... 5

**INTRODUCTION** .................................................................................................................. 7

1 **Scope** ............................................................................................................................... 8

2 **Normative references** ........................................................................................................ 8

3 **Terms and definitions** ........................................................................................................ 8

4 **Overview of haptics in multimedia systems** .................................................................... 10

4.1 **Purpose** .......................................................................................................................... 10

4.2 **Device categories** .......................................................................................................... 10

4.3 **Items of standardization** ................................................................................................ 11

4.4 **Purposes of haptic feedback** ........................................................................................... 12

4.5 **Reality class** ................................................................................................................. 12

4.6 **Interaction modality** ..................................................................................................... 12

4.7 **Data format and network topology** ................................................................................ 13

4.7.1 **General** ..................................................................................................................... 13

4.7.2 **Acceptable delay** ....................................................................................................... 13

4.7.3 **Frame rate** ............................................................................................................... 13

4.7.4 **Quantization** ............................................................................................................. 13

4.7.5 **Data compression** ..................................................................................................... 13

4.8 **Device property** .......................................................................................................... 13

4.8.1 **General** ..................................................................................................................... 13

4.8.2 **Spatial resolution** ..................................................................................................... 13

4.8.3 **Use of universal parameters** .................................................................................... 14

4.8.4 **Diversity of sensitivity** ............................................................................................. 14

4.8.5 **Safety** ....................................................................................................................... 14

4.8.6 **Calibration method** .................................................................................................. 14

5 **Examples** .......................................................................................................................... 14

5.1 **Games and entertainment** .............................................................................................. 14

5.1.1 **General** ..................................................................................................................... 14

5.1.2 **Computer games** ...................................................................................................... 14

5.1.3 **Immersive cinema** .................................................................................................... 15

5.1.4 **Sports broadcasting** .................................................................................................. 15

5.1.5 **E-sports** ..................................................................................................................... 16

5.2 **Car driver support** ........................................................................................................ 16

5.2.1 **General** ..................................................................................................................... 16

5.2.2 **Centre console interface** .......................................................................................... 16

5.3 **Haptic feel transfer** ...................................................................................................... 17

5.4 **Haptic communication** .................................................................................................. 17

**Annex A (informative) Use case of vibrotactile vest** ............................................................ 19

A.1 **Description of the use case** ............................................................................................ 19

A.1.1 **Name of use case** ....................................................................................................... 19

A.1.2 **Version management** .................................................................................................. 19

A.1.3 **Scope and objectives of use case** .............................................................................. 19

A.1.4 **Narrative of use case** ................................................................................................ 19

A.1.5 **General remarks** ....................................................................................................... 19

A.2 **Diagram of use case** ...................................................................................................... 20

A.3 **Technical details** .......................................................................................................... 20
Figure B.1 – Use case diagram of vibrotactile IPTV .............................................................. 28
Figure B.2 – Relationship between channel number and actuator position ............................ 35

Table 1 – Items of haptics standardization ............................................................................. 11
Table B.1 – Assigned channel number for each use case ..................................................... 36
INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONCEPTUAL MODEL OF STANDARDIZATION FOR HAPTIC MULTIMEDIA SYSTEMS

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IEC TR 63344 has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment. It is a Technical Report.

The text of this Technical Report is based on the following documents:

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<th>Draft</th>
<th>Report on voting</th>
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<td>100/3573/DTR</td>
<td>100/3630/RVDTR</td>
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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/standardsdev/publications.
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- amended.

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INTRODUCTION

The multimedia devices covered by TC 100 used to be primarily stationary audio and video devices, but now comprise mobile and wearable devices, for which it is necessary to consider different specifications from conventional stationary devices. At first, this Technical Report clarifies the conceptual model of haptics issues under the scope of TC 100, and then the details are described to understand the standardization items of haptics-related issues under the scope of TC 100.
1 Scope

This document describes the conceptual model of vibro-tactile-based haptics in multimedia systems and equipment used in electrical appliances, computer interfaces, automobiles, amusements, and communication devices. This model describes possible standardization items.

NOTE  Ergonomic aspects of haptics systems are standardised in the ISO 9241 series. The scope of that standard is focused on the physical specifications of the devices, signal properties and formats to ensure the common use with compatibility among various types of devices in haptics systems.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1 haptic sensation
sensation, including tactile sensation and kinesthetic sensation perceived by bathyesthesia

3.2 tactile sensation
sensation detected by skin receptors

3.3 haptic display
device to produce touch sensation

3.4 tactile display
device that stimulates the skin receptors

3.5 haptic reproduction
creating realistic haptic sensation in VR and tele-manipulation, targeting a real sensation

3.6 haptic notification
notifying a user of necessary information by haptic stimulation