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TECHNICAL REPORT

Virtual reality equipment and systems – Market, technology and standards requirements

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

VIRTUAL REALITY EQUIPMENT AND SYSTEMS – MARKET, TECHNOLOGY AND STANDARDS REQUIREMENTS

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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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INTRODUCTION

Virtual reality (VR) is an interactive computer-generated experience, which allows the user to feel he is in a virtual world where he can interact in and control a virtual environment. The interaction between the user and the virtual world is mainly through auditory and visual stimuli, but it can also include other types of sensory feedback, such as haptic technology.

This Technical Report focuses on VR equipment and systems that are within the scope of TC 100. Firstly, the ecosystem of VR is described, based on a brief view of market trends and analysis of some typical use cases of VR equipment and systems. Then technologies used in VR equipment and systems are listed, in order to introduce a C-P-N-D (Content, Product, Network and Device) based VR system model. Finally, after studying the standardization activities of related standards developing organizations (SDOs), some suggestions are given, including potential standardization topics within the scope of TC 100.

VIRTUAL REALITY EQUIPMENT AND SYSTEMS – MARKET, TECHNOLOGY AND STANDARDS REQUIREMENTS

1 Scope

This document discusses the market of virtual reality (VR) and the technical domains pertaining to a VR system. This document provides clarity on how existing standards can be used and highlights further requirements for standards within the scope of TC 100.

2 Normative references

There are no normative references in this document.