

# TECHNICAL REPORT

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**Alignment of heterogeneous media data streams**

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## CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references .....	6
3 Terms, definitions, and abbreviated terms .....	6
3.1 Terms and definitions.....	6
3.2 Abbreviated terms.....	6
4 Overview .....	6
4.1 Purpose .....	6
4.2 Combination of media data .....	7
4.2.1 General .....	7
4.2.2 Photorealistic virtual world.....	8
4.2.3 Interactive 3D multimedia content.....	8
4.2.4 Remote collaboration system.....	9
4.3 Classification of media data .....	9
4.4 Concept of alignment of heterogeneous media data streams.....	10
4.4.1 General .....	10
4.4.2 Input layer .....	11
4.4.3 Process layer.....	11
4.4.4 Output layer.....	12
4.5 Items of standardization.....	12
4.5.1 Potential items of standardization .....	12
4.5.2 Standards gap analysis of related technologies .....	13
4.5.3 Focus items for standardization .....	15
5 Case study .....	15
5.1 Photorealistic virtual world .....	15
5.1.1 Virtual city exploration .....	15
5.1.2 Virtual tour.....	15
5.2 Interactive 3D multimedia content - Virtual music events experience.....	16
5.3 Remote collaboration system .....	16
5.3.1 Remote guided tours .....	16
5.3.2 Remote work guidance .....	16
5.3.3 VR meeting.....	16
Bibliography.....	17
Figure 1 – Abstraction of services by heterogeneous media data .....	7
Figure 2 – Combination of media data.....	7
Figure 3 – Example of MovieMap .....	8
Figure 4 – Example of T-Leap.....	9
Figure 5 – Sequential alignment of video and audio streams in multimedia .....	10
Figure 6 – Concept of alignment of heterogeneous media data streams.....	11
Figure 7 – Alignment process .....	12
Figure 8 – Flexible alignment of multimedia streams .....	12

Table 1 – Media types.....	9
Table 2 – Potential items of standardization.....	13
Table 3 – Mapping of potential standardization items to existing standards.....	13
Table 4 – Mapping of potential standardization items to emerging standards .....	14

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**Alignment of heterogeneous media data streams**

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IEC TR 63669 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:

Draft	Report on voting
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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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

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## INTRODUCTION

Driven by advances in digital technologies, new multimedia services have emerged. These services combine advanced media types—such as sensor signals and haptic data – alongside enhanced versions of video and audio—such as 360° video and 3D audio. While standards exist for combining conventional media data (e.g. video, audio) into "multimedia data", currently there is no standard covering these emerging media data. Consequently, each service independently implements its own approach for combining these media data. This leads to problems such as limited interoperability, reduced reusability, scalability concerns, and data silos. This document clarifies multimedia services that combine emerging heterogeneous media data and the concept of alignment of heterogeneous media streams to address the common challenges these services face. Based on the conceptual model and the analysis of relevant technologies and standards, this document also proposes items for future standardization.

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