

# TECHNICAL REPORT

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## Alignment of heterogeneous media data streams

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**Alignment of heterogeneous media data streams**

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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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- reconfirmed,
- withdrawn, or
- revised.

## 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.

## **1 Scope**

This document describes multimedia services that combine heterogeneous media data and proposes 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.

## **2 Normative references**

There are no normative references in this document.

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