



**International
Standard**

ISO/IEC 23093-6

**Information technology — Internet
of media things —**

**Part 6:
Media data formats and application
programming interface (API) for
distributed artificial intelligence
(AI) processing**

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

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Introduction

The ISO/IEC 23093 series provides an architecture and specifies APIs and compressed representation of data flowing between media things (MThings).

The APIs for MThings facilitate the discovery of other MThings in the network, as well as connecting and efficiently exchanging data between Them. The APIs also support transaction tokens to access valuable functionalities, resources, and data from MThings.

MThing-related information comprises characteristics and discovery data, mission descriptions from system designers and end-users, raw and processed sensed data, and actuation information. The ISO/IEC 23093 series specifies input and output data formats for media sensors, actuators, storages, and analysers. In addition, media analysers can process sensed data from media sensors to produce analysed data, which can be cascaded to other media analysers to extract semantic information. Multiple MThings can be gathered and operated autonomously using mission descriptions given by system designers and end-users.

This document contains the tools to describe data generated from media analysers capable of distributed AI processing and their APIs. It addresses the normative aspects of the data and APIs for media analysers and illustrates non-normative examples.

Information technology — Internet of media things —

Part 6:

Media data formats and application programming interface (API) for distributed artificial intelligence (AI) processing

1 Scope

This document specifies the syntax and semantics of description schemes to represent data exchanged by media analysers for distributed artificial intelligence (AI) processing. Moreover, it specifies the application programming interfaces (APIs) to exchange these data between media things.

This document does not specify how analysis is carried out, but defines the interfaces between the media things.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes the requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 23093-1, *Information technology — Internet of media things — Part 1: Architecture*

ISO/IEC 23093-2, *Information technology — Internet of media things — Part 2: Discovery and communication API*

ISO/IEC 23093-3:—¹⁾, *Information technology — Internet of media things — Part 3: Media data formats and API*

ISO/IEC 23005-5:2019, *Information technology — Media context and control — Part 5: Data formats for interaction devices*

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- [2] IEEE 754-1985, *IEEE Standard for Binary Floating-Point Arithmetic, 1985-10-12*
- [3] ISO/IEC 10646, *Information technology — Universal Coded Character Set (UCS)*
- [4] <https://www.w3.org/2001/XMLSchema-instance>
- [5] ISO/IEC 23005-6:2019, *Information technology — Media context and control — Part 6: Common types and tools*