



**International  
Standard**

**ISO/IEC 23093-5**

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

**Part 5:  
IoMT autonomous collaboration**

*Technologies de l'information — Internet des objets media —  
Partie 5: Collaboration autonome dans l'IoMT*

**First edition  
2025-03**



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Published in Switzerland

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## Foreword

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

A list of all parts in the ISO/IEC 23093 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html) and [www.iec.ch/national-committees](http://www.iec.ch/national-committees).

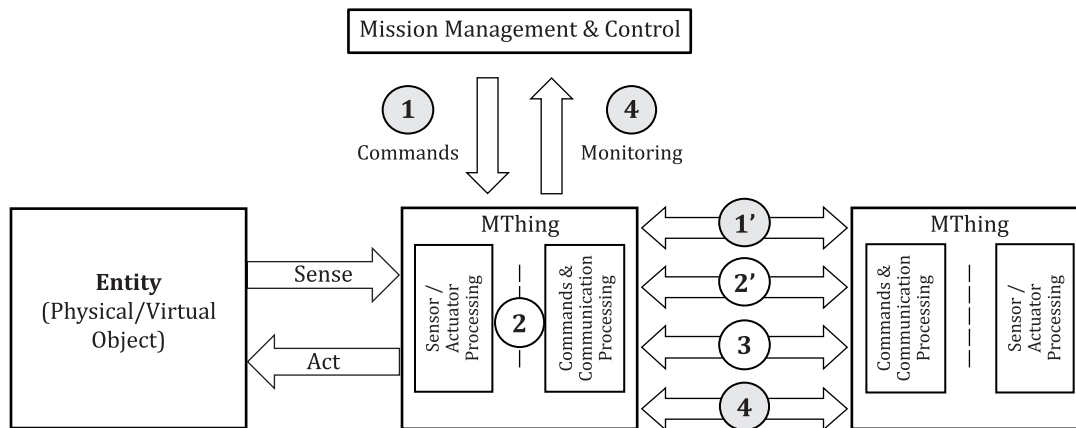
## Introduction

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

The APIs for the MThings facilitate discovering other MThings in the network, connecting and efficiently exchanging data between MThings. 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 data formats and APIs to complete missions from system managers and end-users to operate multiple MThings autonomously. Refer to [Figure 1](#) (items 1 and 1').



**Figure 1 — Architectural view of the IoMT**



# Information technology — Internet of media things —

## Part 5: IoMT autonomous collaboration

### 1 Scope

This document specifies data formats and APIs for the mission management and control between MThings and end-users/system managers. Specifically, the following interfaces, protocols and associated media-related information representations are within the scope of this document:

- structured data formats (XML) representing the mission assigned by the user to the network of IoMT, for the data formats;
- structured data formats (XML) representing user commands to one or several MThings, possibly in a modified form (e.g. a subset of 1);
- APIs to exchange the data for mission management and control.

### 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, *Information technology — Internet of media things — Part 3: Media data formats and APIs*

ISO/IEC 23093-6, *Information technology — Internet of media things — Part 6: Media data formats and APIs for distributed AI processing*