ISO/IEC JTC 1/SC 29

Secretariat: JISC

Date: 2024-09-09

Information technology — Internet of media things — ____

Part 1: Architecture

Technologies de l'information — <u>L'InternetInternet</u> des objets media —

 $\textit{Partie 1: } \underline{\textit{L'architecture IoMTArchitecture}}$

SO/IEC FDIS 23093-1

Copyright notice

This FDIS stage

iTeh Standards (https://standards.iteh.ai) Document Preview

ISO/IEC FDIS 23093-1

© ISO-document is a Draft International Standard and is copyright-protected by ISO. Except as permitted under <u>/IEC 2025</u>

All rights reserved. Unless otherwise specified, or required in the applicable lawscontext of the user's country, neither its implementation, no part of this ISO draft nor any extract from it publication may be reproduced, stored in a retrieval system or transmitted or utilized otherwise in any form or by any means, electronic, or mechanical, including photocopying, recording or otherwise or posting on the internet or an intranet, without prior written permission being secured:

Requests for permission to reproduce should be addressed to . Permission can be requested from either ISO at the address below or ISO's ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CP 401 • Ch. de Blandonnet 8
CH-12111214 Vernier, Geneva 20
Tel. Phone: + 41 22 749 01 11

Fax + 41 22 749 09 47

E-mail: copyright@iso.org WebWebsite: www.iso.org

Reproduction may be subject to royalty payments or a licensing agreement.

Violators may be prosecuted.

s·//standards iteh ai

Document Preview

ISO/IEC FDIS 23093-1

T_{2}	ıh	Ы	Λf	co	nt	Δ٢	1tc
_			$\mathbf{\sigma}$				ILJ

Published in Switzerland

iTeh Standards (https://standards.iteh.ai) Document Preview

ISO/IEC FDIS 23093-1

Contents

Fore	word	vi
Intro	duction	
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
3.1	Internet of media things terms	
3.2	Internet of things terms	2
4	Architecture	4
5	Use cases	
5.1	General	6
5.2	Smart spaces: Monitoring and control with network of audio-video cameras	10
5.3	Smart spaces: Multi-modal guided navigation	18
5.4	Smart audio/video environments in smart cities	22
5.5	Smart audio/video environments in smart rural areas	
5.6	Smart multi-modal collaborative health	
5.7	Blockchain usage for IoMT transactions authentication and monetizing	39
5.8	Metaverse usage of IoMT technologies	40
Rihli	ography iToh Standards	44

(https://standards.iteh.ai) **Document Preview**

ISO/IEC FDIS 23093-

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iso.org/www.iso.

ISO and IEC draw attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO and IEC take no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO and IEC had received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents and https://patents.iec.ch. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards...

<u>ISO/IEC FDIS 23093-1</u>

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*.

This third edition cancels and replaces the second edition (ISO/IEC 23093-2:2022), which has been technically revised.

The main changes are as follows:

- complementary use cases;
- sequence diagrams and mission state diagrams for the use-case description in order to enhance the readability of the document.

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 and www.iec.ch/national-committees.

Introduction

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

The APIs for the media things facilitate discovering other media things in the network, connecting and efficiently exchanging data between media things. The APIs also provide means for supporting transaction tokens in order to access valuable functionalities, resources, and data from media things.

Media things related information consists of characteristics and discovery data, setup information from a system designer, raw and processed sensed data, and actuation information. The ISO/IEC 23093 series specifies data formats of input and output for media sensors, media actuators, media storages, media analysers, etc. Sensed data from media sensors can be processed by media analysers to produce analysed data, and the media analysers can be cascaded in order to extract semantic information.

This document does not specify how the process of sensing and analysing is carried out but specifies the interfaces between the media things. This document describes the architecture of systems for the internet of media things.

iTeh Standards (https://standards.iteh.ai) Document Preview

ISO/IEC FDIS 23093-1