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मसौदा भारतीय मानक

सूचना प्रौद्योगिकी - कंप्यूटर ग्राफिक्स, इमेज प्रसंस्करण और पर्यावरण डेटा
निरूपण मिश्रित और संवर्धित वास्तविकता
(एमएआर) संदर्भ मॉडल

Draft Indian Standard

**Information technology – Computer graphics, image
processing and environmental data representation Mixed
and augmented reality (MAR) reference model**

ICS: 35.140

LITD 23 Coding and Processing Of Audio,
Picture, Multimedia and Hypermedia
Information Sectional Committee

Last date for comments: 09 July 2024

NATIONAL FOREWORD

(Formal clauses will be added later)

This draft Indian Standard which is identical with ISO/IEC 18039:2019 ‘Information technology Computer graphics, image processing and environmental data representation Mixed and augmented reality (MAR) reference model’ issued by International Organization Standardization (ISO) and International Electrotechnical Commission (IEC) will be adopted by the Bureau of Indian Standards on the recommendation of the Coding and Processing of Audio, Picture, Multimedia and Hypermedia Information Sectional Committee, LITD 23 and approval of the Electronics and Information Technology Division.

The text of ISO/IEC Standard *may be* approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appears referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current Practice is to use a point (.) as the decimal marker.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:2022 ‘Rules for rounding off numerical values (Second Revision)’. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

Scope of ISO/IEC 18039:2019 is as follows:

This document defines the scope and key concepts of mixed and augmented reality, the relevant terms and their definitions and a generalized system architecture that together serve as a reference model for mixed and augmented reality (MAR) applications, components, systems, services and specifications. This architectural reference model establishes the set of required sub-modules and their minimum functions, the associated information content and the information models to be provided and/or supported by a compliant MAR system.

The reference model is intended for use by current and future developers of MAR applications, components, systems, services or specifications to describe, compare, contrast and communicate their architectural design and implementation. The MAR reference model is designed to apply to

MAR systems independent of specific algorithms, implementation methods, computational platforms, display systems and sensors or devices used.

This document does not specify how a particular MAR application, component, system, service or specification is designed, developed or implemented. It does not specify the bindings of those designs and concepts to programming languages or the encoding of MAR information through any coding technique or interchange format. This document contains a list of representative system classes and use cases with respect to the reference model..

Note: - The Technical content of this document has not been enclosed as these are identical with the corresponding ISO/IEC Standard. For details please refer to ISO/IEC 18039:2019 or kindly contact.

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