# BUREAU OF INDIAN STANDARDS DRAFT FOR COMMENTS ONLY

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## मसौदा भारतीय मानक

सूचना प्रौद्योगिकी - कंप्यूटर ग्राफिक्स, इमेज प्रसंस्करण और पर्यावरण डेटा निरूपण , मिश्रित और संवर्धित वास्तविकता (एमएआर) के लिए दृष्टि-आधारित स्थानिक पंजीकरण और ट्रैकिंग विधियों की बेंचमार्किंग

### Draft Indian Standard

Information technology – Computer graphics, image processing and environmental data representation Benchmarking of vision-based spatial registration and tracking methods for mixed and augmented reality (MAR)

ICS: 35.140

LITD 23 Coding and Processing Of Audio, Picture, Multimedia and Hypermedia Information Sectional Committee Last date for comments: 9 July 2024

#### NATIONAL FOREWORD

(Formal clauses will be added later)

This draft Indian Standard which is identical with ISO/IEC 18520:2019 'Information technology Computer graphics, image processing and environmental data representation Benchmarking of vision-based spatial registration and tracking methods for mixed and augmented reality (MAR)' 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 18520:2019 is as follows:

This document identifies the reference framework for the benchmarking of vision-based spatial registration and tracking (vSRT) methods for mixed and augmented reality (MAR).

The framework provides typical benchmarking processes, benchmark indicators and trial set elements that are necessary to successfully identify, define, design, select and apply benchmarking of vSRT methods for MAR. It also provides definitions for terms on benchmarking of vSRT methods for MAR.

In addition, this document provides a conformance checklist as a tool to clarify how each benchmarking activity conforms to this document in a compact form by declaring which benchmarking processes and benchmark indicators are included and what types of trial sets are used in each benchmarking activity..

**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 18520:2019 or kindly contact.

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