

**BUREAU OF INDIAN STANDARDS**  
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**मसौदा भारतीय मानक**

सूचना प्रौद्योगिकी - कंप्यूटर ग्राफिक्स, इमेज प्रसंस्करण और पर्यावरण डेटा  
निरूपण- स्मार्ट शहरों के निरूपण और दृश्य के लिए दिशानिर्देश

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***Draft Indian Standard***

Information Technology — Computer Graphics, Image Processing and  
Environmental Data Representation — Guidelines for Representation  
and Visualization of Smart Cities

ICS: 35.140

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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 to ISO/IEC TS 5147:2023 ‘Information technology — Computer graphics, image processing and environmental data representation — Guidelines for representation and visualization of smart cities’ issued by International Organization for 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 Council.

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 TS 5147:2023 is as follows:**

This document specifies guidelines for the representation and visualization of smart cities. This document:

- a) describes the concepts of a smart city, smart city object and smart city data,
- b) describes categories of data associated with smart cities,
- c) provides guidance for representation of smart cities,
- d) describes guidance for visualization of smart cities,
- e) provides guidance in selecting the appropriate representation and visualization technique for different categories of smart city data using standards, and
- f) provides use cases for applying standards to the representation and visualization of smart cities.

**Doc No. : LITD 23 (25555)**  
**Draft IS/ISO/IEC TS 5147: 2023**  
**May 2024**

**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 TS 5147: 2023 or kindly contact.

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