FINAL DRAFT
International Standard

ISO/FDIS 23387

Building information modelling (BIM) — Data templates for objects used in the life cycle of assets

Modélisation des informations de la construction (BIM) — Modèles de données pour les objets utilisés durant le cycle de vie des biens

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Foreword

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This document was prepared by Technical Committee ISO/TC 59, *Buildings and civil engineering works*, Subcommittee SC 13, *Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM)*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 442, *Building Information Modelling (BIM)*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 23387:2020), which has been technically revised.

The main changes are as follows:

— the data model has been harmonised with ISO 12006-3:2022;

— an XML Schema Definition has been provided.

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.

Introduction

Building information modelling (BIM) provides a digital process for describing and displaying information required in the planning, design, construction and operation of assets. This approach encompasses all aspects of the built environment, including civil infrastructure, utilities and public space.

The ISO 19650 series sets out the concepts and principles for busiess processes across the built environment sector in support of the management and production of information during the life cycle of assets when using building information modelling (BIM). To support the management and production of information in these business processes, standardization is of the highest importance. Machine-interpretable data are essential to providing a reliable and sustainable exchange of information in an asset life cycle process.

Data templates provide a standardizd data structure to describe the characteristics of objects enabling seamless information exchanges of construction sector business semantics through the life cycle of assets.

Tis document enables data templates to be standardized and made available across the built environment sector, and where applicable through data dictionaries based on ISO 12006-3.

Data templates can be used in conjunction with Industry Foundation Classes (IFC) in ISO 16739-1.

The target audience of this document is:

— software developers, for embedding the data structure in software, platform etc;

— built environment sector domain experts appointed to create data templates based on sources describing information needs;

— sector practitioners, as they provide the demand, use of data, and process et;

— authorities, as they review and check all relevant submissions;

— research and development perconnel, as they support the innovation and continuous development of data templates;

— educational institutions, as the concept of data templates, same as BIM, and digital information principles should be merged into educationand training programs;

— developers (asset owners), as they need a clearer vision on data template, hence to put this as part of the tender documents.