

<b>STN</b>	<b>Informačné modelovanie stavieb (BIM)</b> <b>Dátové šablóny pre stavebné objekty používané v</b> <b>životnom cykle postavených aktív</b> <b>Pojmy a princípy (ISO 23387: 2020)</b>	<b>STN</b> <b>EN ISO 23387</b>  73 9014
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Building information modelling (BIM) - Data templates for construction objects used in the life cycle of built assets - Concepts and principles (ISO 23387:2020)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/20

Obsahuje: EN ISO 23387:2020, ISO 23387:2020

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 23387**

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English Version

**Building information modelling (BIM) - Data templates for  
construction objects used in the life cycle of built assets -  
Concepts and principles (ISO 23387:2020)**

Modélisation des informations de la construction (BIM)  
- Modèles de données pour les objets de construction  
utilisés durant le cycle de vie des biens construits -  
Concepts et principes (ISO 23387:2020)

Bauwerksinformationsmodellierung (BIM) -  
Datenvorlagen für Bauobjekte während des  
Lebenszyklus eines baulichen Vermögensgegenstandes  
- Konzepte und Grundsätze (ISO 23387:2020)

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**EN ISO 23387:2020 (E)**

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## **European foreword**

This document (EN ISO 23387:2020) has been prepared by Technical Committee ISO/TC 59 "Buildings and civil engineering works" in collaboration with Technical Committee CEN/TC 442 "Building Information Modelling (BIM)" the secretariat of which is held by SN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2021, and conflicting national standards shall be withdrawn at the latest by January 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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## **Endorsement notice**

The text of ISO 23387:2020 has been approved by CEN as EN ISO 23387:2020 without any modification.

# INTERNATIONAL STANDARD

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## **Building information modelling (BIM) — Data templates for construction objects used in the life cycle of built assets — Concepts and principles**

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



Reference number  
ISO 23387:2020(E)

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**ISO 23387:2020(E)****Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 ISO documents 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](http://www.iso.org/directives)).

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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](http://www.iso.org/iso/foreword.html).

This document was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 442, *Building Information Modelling (BIM)*, in collaboration with ISO Technical Committee 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 accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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](http://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 constructed facilities. This approach encompasses all aspects of the built environment, including civil infrastructure, utilities and public space.

ISO 19650 (all parts) sets out the recommended concepts and principles for business processes across the built environment sector in support of the management and production of information during the life cycle of built 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-readable data is essential to provide a reliable and sustainable exchange of information in an asset life cycle process.

Data templates provide a standardized data structure to describe the characteristics of construction objects, enabling seamless information exchanges of construction industry business semantics through the life cycle of any built asset.

Data templates should be standardized and made available across the built environment sector through data dictionaries based on ISO 12006-3:2007.

Data templates should be used in conjunction with Industry Foundation Classes (IFC) in ISO 16739-1 to enable and support open BIM processes.

# Building information modelling (BIM) — Data templates for construction objects used in the life cycle of built assets — Concepts and principles

## 1 Scope

This document sets out the principles and structure for data templates for construction objects. It is developed to support digital processes using machine-readable formats using a standard data structure to exchange information about any type of construction object, e.g. product, system, assembly, space, building etc., used in the inception, brief, design, production, operation and demolition of facilities.

This document provides the specification of a taxonomy model that defines concepts from ISO 12006-3:2007, i.e. objects, collections and relationships between them, to support the information need for the specific purpose of the data template.

This document provides an EXPRESS specification with extensions of the EXPRESS-G notation and specification from ISO 12006-3:2007. These extensions have been provided to support market needs developed since the publication of ISO 12006-3 in 2007.

This document provides the rules for linking between data templates and IFC classes within a data dictionary based on ISO 12006-3:2007.

This document provides the rules for linking between data templates and classification systems within a data dictionary based on ISO 12006-3:2007.

The target audience of this document is software developers and not construction industry domain experts appointed to create data templates based on sources describing information needs.

It is not in the scope of this document to provide the content of any data templates. The data structure provided is intended to be used for developing specific data templates based on standards developed in ISO/IEC, CEN/CENELEC, national standardization organizations, or other sources describing information needs.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 10303-11, *Industrial automation systems and integration — Product data representation and exchange — Part 11: Description methods: The EXPRESS language reference manual*

ISO 12006-3:2007, *Building construction — Organization of information about construction works — Part 3: Framework for object-oriented*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**