

STN	Informačné modelovanie stavieb Úroveň potreby informácií Časť 1: Pojmy a princípy (ISO 7817-1: 2024)	STN EN ISO 7817-1 73 9006
------------	---	---

Building Information Modelling - Level of Information Need - Part 1 Concepts and principles (ISO 7817-1:2024)

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. 09/24

Obsahuje: EN ISO 7817-1:2024, ISO 7817-1:2024

Oznámením tejto normy sa ruší
STN EN 17412-1 (73 9016) z júna 2021

139284

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 7817-1

July 2024

ICS 35.240.67; 91.010.01

Supersedes EN 17412-1:2020

English Version

**Building Information Modelling - Level of Information
Need - Part 1 Concepts and principles (ISO 7817-1:2024)**

Modélisation des informations de la construction (BIM)
- Niveau du besoin d'information - Concepts et
principes (ISO 7817-1:2024)

Bauwerksinformationsmodellierung -
Informationsbedarfstiefe - Konzepte und Grundsätze
(ISO 7817-1:2024)

This European Standard was approved by CEN on 18 June 2024.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 7817-1:2024 (E)

Contents	Page
European foreword.....	3

European foreword

This document (EN ISO 7817-1:2024) 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 2025, and conflicting national standards shall be withdrawn at the latest by January 2025.

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.

This document supersedes EN 17412-1:2020.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 7817-1:2024 has been approved by CEN as EN ISO 7817-1:2024 without any modification.



International Standard

ISO 7817-1

Building information modelling — Level of information need —

Part 1: Concepts and principles

*Modélisation des informations de la construction (BIM) — Niveau
du besoin d'information —*

Partie 1: Concepts et principes

**First edition
2024-06**

ISO 7817-1:2024(en)**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2024

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

ISO 7817-1:2024(en)

Contents		Page
Foreword.....		iv
Introduction.....		v
1	Scope.....	1
2	Normative references.....	1
3	Terms and definitions.....	1
4	General.....	3
5	Framework to specify the level of information need.....	3
5.1	General.....	3
5.2	Consider the purposes.....	4
5.3	Consider the information delivery milestones.....	4
5.4	Consider the actors.....	4
5.5	Consider the objects within a breakdown structure.....	5
6	Definition of level of information need and its subdivision.....	5
6.1	General.....	5
6.2	Geometrical information.....	6
6.2.1	General.....	6
6.2.2	Detail.....	6
6.2.3	Dimensionality.....	9
6.2.4	Location.....	10
6.2.5	Appearance.....	10
6.2.6	Parametric behaviour.....	11
6.2.7	Relationships of aspects of geometrical information and prerequisites.....	12
6.3	Alphanumerical information.....	12
6.3.1	General.....	12
6.3.2	Identification.....	13
6.3.3	Information content.....	13
6.4	Documentation.....	13
6.5	Relationship diagram on level of information need.....	14
7	Verification and validation.....	14
Annex A (informative) Overview of the main concepts related to information exchange.....		16
Annex B (informative) Examples of methods to specify level of information need.....		18
Bibliography.....		23

ISO 7817-1:2024(en)**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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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.

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).

A list of all parts in the ISO 7817 series can be found on the ISO website.

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.

ISO 7817-1:2024(en)**Introduction**

This document sets out the concepts and principles for defining the level of information need and information deliveries which form part of the information exchange processes during the life cycle of built assets when using building information modelling (BIM). These concepts and principles can deliver clear benefits to all participants in the various life cycle phases of built assets as they provide a common understanding on the right level of information needed at a certain time. One purpose of defining the level of information need is to prevent delivery of too much information. Information exchange should ensure the required information to be delivered at the agreed time for the agreed purpose to facilitate verification and validation processes.

This document provides methods for describing information to be exchanged according to exchange information requirements. The exchange information requirements specify the wanted information exchange. The result of this process is an information delivery.

There is a need that these concepts and principles are described in a common and comparable way to allow services related to building information modelling to be procured and offered on a global scale. The need has arisen by the fact that there are several conflicting terms, concepts and usages in place, internationally, that hinder the objective of having a common understanding and practise in describing the level of information need. It is therefore helpful not to use an acronym to refer to level of information need as this can oversimplify these concepts.

The concepts and principles contained in this document are aimed at all those involved in the asset life cycle. These include, but are not limited to, the asset owner/operator, the client, the asset manager, the design team, the construction team, an equipment manufacturer, a technical specialist, a regulatory authority, an investor, an insurer and an end-user.

The information exchange, as well as related topics such as the exchange information requirements and the information delivery are defined and explained in context of ISO 19650-1 and ISO 29481-1.

Building information modelling — Level of information need —

Part 1: Concepts and principles

1 Scope

This document specifies concepts and principles to establish a methodology for specifying level of information need and information deliveries in a consistent way when using building information modelling (BIM).

This document specifies the characteristics of different levels used for defining the detail and extent of information required to be exchanged and delivered throughout the life cycle of built assets. It gives guidelines for principles required to specify information needs.

The concepts and principles in this document can be applied for a general information exchange and while in progress, for a generally agreed way of information exchange between parties in a collaborative work process, as well as for an appointment with specified information delivery.

This document is applicable to the whole life cycle of any built asset, including strategic planning, initial design, engineering, development, documentation and construction, day-to-day operation, maintenance, refurbishment, repair and end-of-life.

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 29481-1, *Building information models — Information delivery manual — Part 1: Methodology and format*

ISO 6707-1, *Buildings and civil engineering works — Vocabulary — Part 1: General terms*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN