

STN	Informačné modely stavieb (BIM) Príručka odovzdania informácií Časť 1: Metodika a formát (ISO 29481-1: 2016)	STN EN ISO 29481-1 73 9010
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Building information models - Information delivery manual - Part 1: Methodology and format (ISO 29481-1:2016)

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. 12/17

Obsahuje: EN ISO 29481-1:2017, ISO 29481-1:2016

125908

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2018
Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

EUROPEAN STANDARD

EN ISO 29481-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2017

ICS 91.010.01

English Version

**Building information models - Information delivery
manual - Part 1: Methodology and format (ISO 29481-
1:2016)**

Modèles des informations de la construction -
Protocole d'échange d'informations - Partie 1:
Méthodologie et format (ISO 29481-1:2016)

Bauwerks-Informationen-Modelle - Informations-
Lieferungs-Handbuch - Teil 1: Methodik und Format
(ISO 29481-1:2016)

This European Standard was approved by CEN on 24 February 2017.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
European foreword.....	3

European foreword

The text of ISO 29481-1:2016 has been prepared by Technical Committee ISO/TC 59 “Buildings and civil engineering works” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 29481-1:2017 by 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of an identical text or by endorsement, at the latest by April 2018, and conflicting national standards shall be withdrawn at the latest by April 2018.

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 29481-1:2016 has been approved by CEN as EN ISO 29481-1:2017 without any modification.

**Building information models —
Information delivery manual —**

**Part 1:
Methodology and format**

*Modèles des informations de la construction — Contrat
d'interchange —*

Partie 1: Méthodologie et format





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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Information delivery manual	3
4.1 General.....	3
4.2 Users of this part of ISO 29481.....	3
4.3 Business context.....	4
4.4 Complete schema.....	5
4.5 Breaking a complete schema to support requirements.....	5
4.6 Supporting the building information modelling process.....	5
4.7 Supporting the business process.....	5
4.8 Supporting the software solution.....	6
4.9 Content in the specific IDM.....	6
5 IDM Framework	6
5.1 General.....	6
5.2 Basic framework.....	8
5.2.1 General.....	8
5.2.2 IDM component header information.....	8
5.2.3 IDM component overview.....	9
5.3 Interaction map/transaction map.....	9
5.4 Process maps.....	9
5.5 Exchange requirements.....	10
5.5.1 General.....	10
5.5.2 Information units.....	10
5.5.3 Information constraints.....	10
5.6 Technical implementation.....	11
5.6.1 General.....	11
5.6.2 Implementation of metadata.....	11
5.6.3 Interaction framework.....	11
5.6.4 Model view definition (MVD).....	11
Annex A (informative) IDM development process	13
Annex B (informative) Examples of simplified IDM components	17
Annex C (informative) Reference life cycle stages	22
Annex D (informative) IDM use of BPMN methods	24
Bibliography	29

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 59, *Buildings and civil engineering works*, Subcommittee SC 13, *Organization of information about construction works*.

This second edition cancels and replaces the first edition (ISO 29481-1:2010), which has been technically revised.

ISO 29481 consists of the following parts, under the general title *Building information models — Information delivery manual*:

- *Part 1: Methodology and format*
- *Part 2: Interaction framework*

Introduction

This International Standard has undergone a major review in the light of refined approaches to the development of information delivery manuals and their technical implementation in software readable forms. It is important to note that these changes do not render existing information delivery manuals (IDM) invalid.

Building information modelling provides a digital technology for describing and displaying information required in the planning, design, construction and operation of constructed facilities. Increasingly, this modelling approach is expanding to encompass all aspects of the built environment, including civil infrastructure, utilities and public space. These are collectively referred to as construction processes. This approach to managing information brings together the diverse sets of information used during the life cycle of the built environment into a common information environment, reducing, and often eliminating the need for the many types of paper documentation currently in use.

This approach is commonly referred to as building information modelling (BIM; reflecting its initial application in the architectural domain), while the same acronym is used to refer to the product of the process, the information model itself, or building information model (BIM).

Though the focus of construction processes described above is on the physical fabric of the built environment, BIM technology can also benefit the processes associated with managing the use of space within buildings, urban neighbourhoods and cities at the broader scale, as well as infrastructure networks and facilities. These are referred to here as use cases.

An IDM provides help in getting the full benefit from a BIM. If the required information is available in the BIM to support a construction process or use case, and the quality of information is satisfactory, then the process itself will be greatly improved.

For this to happen, there needs to be a common understanding of the processes involved across the entire life cycle development of a built environment project, including the information that is required for and results from the execution of that process. This applies to any activity that results in an exchange of information and may not relate directly to a BIM, e.g. the process to arrive at a work plan or contractual agreement.

This part of ISO 29481 sets out a methodology for the provision of an integrated reference document that describes the processes and data required in the development or management of a constructed facility. It describes how to identify and describe the processes undertaken within that context, the information required for their execution and the results. This part of ISO 29481 also describes in general terms how this information can be further detailed to support solutions provided by software developers, enabling its reuse, and configured to meet national, local and project needs.

In summary, this part of ISO 29481 provides a basis for reliable information exchange/sharing for users so that they can be confident that the information they are receiving is accurate and sufficient for the activities they need to perform. The development of this part of ISO 29481 has been driven by the need of users for reliability in information exchange.

Building information models — Information delivery manual —

Part 1: Methodology and format

1 Scope

This part of ISO 29481 specifies

- a methodology that links the business processes undertaken during the construction of built facilities with the specification of information that is required by these processes, and
- a way to map and describe the information processes across the life cycle of construction works.

This part of ISO 29481 is intended to facilitate interoperability between software applications used during all stages of the life cycle of construction works, including briefing, design, documentation, construction, operation and maintenance, and demolition. It promotes digital collaboration between actors in the construction process and provides a basis for accurate, reliable, repeatable and high-quality information exchange.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

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