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TNI	**Usmernenie ako porozumieť a používať EN ISO 29481-1 Informačné modely stavieb (BIM) Príručka na odovzdávanie informácií Časť 1: Metodika a formát**	**TNI CEN/TR 17741** 73 9018

Guidance for understanding and utilize EN/ISO 29481-1 Building information models - Information delivery manual - Part 1: Methodology and format

Táto technická normalizačná informácia obsahuje anglickú verziu CEN/TR 17741:2021.
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English Version

Guidance for understanding and utilize EN/ISO 29481-1 Building information models - Information delivery manual - Part 1: Methodology and format

Document d'orientation pour comprendre et utiliser l'EN/ISO 29481-1 Modèles des informations de la construction - Protocole d'échange d'informations - Méthodologie et format

Anleitung zum Verständnis und zur Umsetzung der EN/ISO 29481-1 Bauwerksinformationsmodelle - Handbuch der Informationslieferungen - Teil 1: Methodik und Format

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European foreword

This document (CEN/TR 17741:2021) has been prepared by Technical Committee CEN/TC 442 “Building Information Modeling”, the secretariat of which is held by SN.

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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1 Scope

1.1 General

This document provides guidance on how to develop an information delivery manual (IDM) in compliance with EN ISO 29481-1 hereafter referred to as the "IDM standard". This document explains the core components and development process of the IDM methodology in non-technical terms. This document aims to help users and software vendors understand and utilize the IDM standard in defining information requirements and deliverables.

The technical implementation of IDM in a data model, model view definition[1] (MVD), is excluded from this document's scope. IDM standard introduces the MVD concept but does not specify it in detail.

This document also utilizes some transaction framework concepts introduced in EN ISO 29481-2. The technical XML- and XSD-schema definitions supporting the software solutions are excluded from this document.

1.2 Background

This document primary reference is the IDM standard part 1 (EN ISO 29481-1:2017) (hereafter referred to as IDM standard). This document helps in understanding and using the IDM standard to describe information delivery. This document also uses some concepts described in part 2 of the IDM standard series (EN ISO 29481-2:2016). Considerable efforts have been made to align this document with the terminology and concepts introduced in EN ISO 19650-1 and EN ISO 19650-2.

Information delivery manual specification (hereafter referred to as the IDM specification) provides help in getting the full benefit from building information modelling (BIM). When the required information is available using BIM to support a construction process or use case, and the quality of information is satisfactory, the process itself is much improved. The IDM standard provides a method to create the specification.

A complete IDM specification should support two perspectives: user requirements and technical solutions. User requirements describe the needed information delivery and the overall process in which information exchange occurs. The technical solution defines an exchange requirement model using a harmonized data schema.

EN ISO 29481-1 provides a methodology and a harmonized format to specify information requirements. It offers a framework and method to determine the needed information delivery with process maps and exchange requirements.

EN ISO 29481-2 specifies an interaction framework and format to describe "coordination acts" between actors or parties within an appointment. It facilitates interoperability between software applications used in the construction process to promote digital collaboration between actors in the building construction process. Also, it provides a basis for accurate, reliable, repeatable, and high-quality information exchange.

[1] An MVD defines a data model or a subset of an existing data model that is necessary to support one or many specific data exchange requirements. MVDs are used in software development and should have a machine-readable representation. An MVD that is dedicated to a single IDM can be used to filter information in software tools to a specific exchange requirement. [SOURCE: EN ISO 29481-1:2017, 5.6.4].

1.3 Users of this guidance document

This document is intended for clients, architects, engineers, contractors, surveyors, authorities, and other parties who need to specify or implement information delivery. Originally, the IDM standard was focused on defining model-based deliverables, but the possible application of the standard is much broader. It can be used to specify any requirement for information delivery.

Although software developers and technology adapters are not the primary audiences of this document, it may help them better understand existing IDMs and develop their own IDMs.

1.4 Relation to EN ISO 19650

The IDM standard is a process-oriented methodology used to describe the information exchange requirements for a particular purpose which may complement the information-management approach outlined in the EN ISO 19650 series. Simultaneously, the IDM standard pre-dates EN ISO 19650 and has a broader scope of application beyond model-based information exchanges.

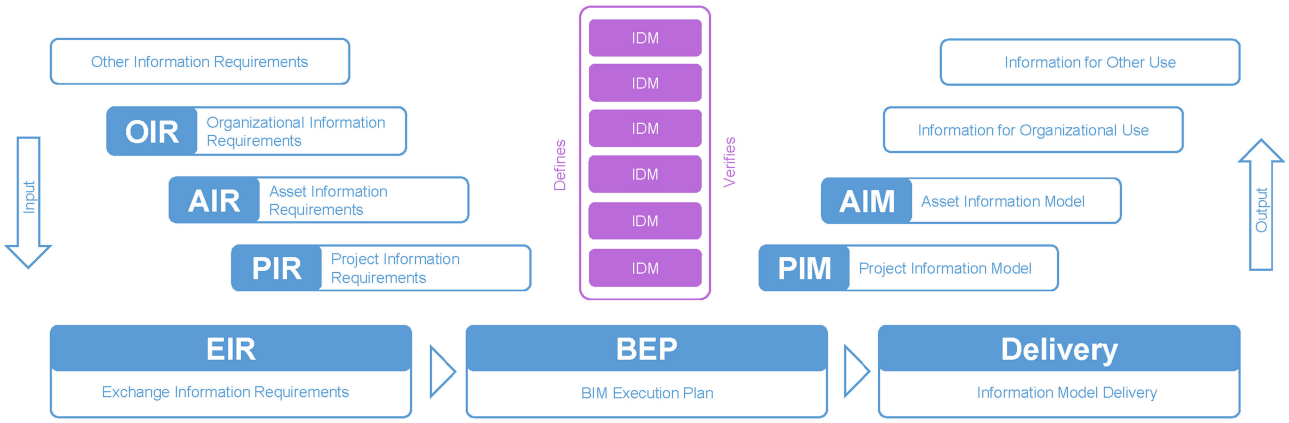

Figure 1 — IDM specifications can support the definition of the information requirements and to verify the information deliverables

The scope of EN ISO 19650-1 stipulates that information deliverables "should be described clearly within the OIR, PIR, AIR or EIR". Figure 1 depicts how IDMs can support the definition of information deliverables for these requirements. The figure also shows how the IDM standard can be applied to use cases outside of the EN ISO 19650 series scope. These use cases may include information requirements for regulatory processes or other common demands such as national information standards. In addition, Figure 1 presents how the IDM that is used to specify the exchange requirement can be used to verify the information delivery.

1.5 How to use this guidance document

This document is split into two sections:

— The first section explains the IDM components and can be used to get a better understanding of the IDM structure.

— The second section gives and overview of the IDM methodology and steps through how to create an IDM.

In both sections the IDM standard can be used in parallel to this document.

Several similar terms are used in this document, the following list helps clarify these terms:

— IDM standard: this is the EN ISO 29481-1 standard itself (as indicated in 1.2 above);

— IDM specification: this is information delivery manual specification (as indicated in 1.2 above); and

— IDM method: This is the general method of developing an IDM.

As noted above, this document has references to part 2 of the IDM standard series (EN ISO 29481-2). To avoid confusion, in these cases the standard code is mentioned in its full length i.e. EN ISO 29481-2.

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.

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

EN ISO 29481-2, *Building information models — Information delivery manual — Part 2: Interaction framework (ISO 29481)*