Building Information Modelling - Level of Information Need - Part 1: Concepts and principles



# EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

See Eesti standard EVS-EN 17412-1:2020 sisaldab Euroopa standardi EN 17412-1:2020 ingliskeelset teksti.	This Estonian standard EVS-EN 17412-1:2020 consists of the English text of the European standard EN 17412-1:2020.	
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Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 18.11.2020.	J 1	
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# EUROPEAN STANDARD

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**EUROPÄISCHE NORM** 

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### **English Version**

# Building Information Modelling - Level of Information Need - Part 1: Concepts and principles

Modélisation des informations de la construction -Niveau du besoin d'information - Partie 1 : Concepts et principes Building Information Modelling -Informationsbedarfstiefe - Konzepte und Definitionen

This European Standard was approved by CEN on 18 October 2020.

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

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# **European foreword**

This document (EN 17412-1:2020) has been prepared 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of an identical text or by endorsement, at the latest by May 2021, and conflicting national standards shall be withdrawn at the latest by May 2021.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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# Introduction

This document sets out the concepts and principles for defining the level of information need and information deliveries being part of the information exchange processes during the life cycle of built assets when using building information modelling (BIM). Those 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 right information to be delivered 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 European scale. The need has arisen by the fact that there are several conflicting terms, concepts and usages in place, both internationally and across Europe, that hinder the objective of having a common understanding and practise in describing the level of information need for a common European market. 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. This includes, but is 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 two related standards:

EN ISO 19650-1, Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) — Information management using building information modelling — Part 1: Concepts and principles; and

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

### 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 whilst 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.

The level of information need 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.

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.

EN ISO 29481-1:2017, Building information models—Information delivery manual— Part 1: Methodology and format (ISO 29481-1:2016)

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

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 29481-1:2017, ISO 6707-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

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