DIN EN ISO 19650-1:2019-08 (E)

Organization and digitization of i nformation about buildings and civil engineering works, including building information modelling (BIM) - Information management using building information modelling- Part 1: Concepts and principles (ISO 19650-1:2018)

Contents

Page

European foreword 4

Foreword 5

Introduction 6

1 Scope 8

2 Normative references 8

3 Terms and definitions 8
3.1 General terms 8
3.2 Terms related to assets and projects 8
3.3 Terms related to information management 10

4 Asset and project information, perspectives and collaborative working 13
4.1 Principles 13
4.2 Information management according to the ISO 19650 series 13
4.3 Information management perspectives 14

5 Definition of information requirements and resulting information models 15
5.1 Principles 15
5.2 Organizational information requirements (OIR) 17
5.3 Asset information requirements (AIR) 17
5.4 Project information requirements (PIR) 17
5.5 Exchange information requirements (EIR) 17
5.6 Asset information model (AIM) 18
5.7 Project information model (PIM) 18

6 The information delivery cycle 18
6.1 Principles 18
6.2 Alignment with the asset life cycle 18
6.3 Setting information requirements and planning for information delivery 20
6.3.1 General principles 20
6.3.2 Delivery team provides information for asset owner/operator or client decisions 22
6.3.3 Information verification and validation at start and end of project stages 22
6.3.4 Information is drawn from the whole delivery team 23
6.3.5 Summary of information delivery from project and asset delivery teams 24

7 Project and asset information management functions 25
7.1 Principles 25
7.2 Asset information management functions 26
7.3 Project information management functions 26
7.4 Task information management functions 26

8 Delivery team capability and capacity 27
8.1 Principles 27
8.2 Extent of capability and capacity review 27

9 Information container-based collaborative working 27

10 Information delivery planning 28
10.1 Principles 28
10.2 Timing of information delivery 28
10.3 Responsibility matrix 29
10.4 Defining the federation strategy and breakdown structure for information containers 29

11 Managing the collaborative production of information 30
11.1 Principles 30
11.2 Level of information need 30
11.3 Information quality 30

12 Common data environment (CDE) solution and workflow 31
12.1 Principles 31
12.2 The work in progress state 32
12.3 The check/review/approve transition 32
12.4 The shared state 32
12.5 The review/authorize transition 33
12.6 The published state 33
12.7 The archive state 33

13 Summary of "building information modelling (BIM) according to the ISO 19650 series" ... 33

Annex A (informative) Illustrations of federation strategies and information container breakdown structures 37

A.1 General 37
A.2 Simultaneous working 37
A.3 Information security 37
A.4 Information transmission 38

Bibliography 41