

# Contents

	Page
<b>Foreword</b>	<b>ii</b>
<b>Executive summary</b>	<b>1</b>
<b>Introduction</b>	<b>3</b>
1 Scope	3
2 Normative references	4
3 Terms and definitions	4
4 The role, structure, value proposition and status of BS EN ISO 19650-1 and -2	4
<i>Figure 1 — Structure of ISO 19650</i>	5
5 BIM Level 2 and the ISO 19650 presentation of information management maturity	6
<i>Figure 2 — UK BIM maturity wedge and ISO information management maturity diagram</i>	7
<i>Table 1 — BIM suites of standards</i>	8
<i>Figure 3 — UK and international standards before and after 2019 Q1</i>	9
6 Mapping the ISO 19650 standards against BS 1192 and PAS 1192-2	10
7 Explanation of ISO 19650 language	10
<i>Table 2 — UK versus ISO documents</i>	10
8 Transition guidance for BS 1192:2007+A2:2016	12
<i>Figure 4 — Project archive in relation to CDE states and transactional information</i>	13
<i>Table 3 — BS 1192:2007+A2:2016 vs BS EN ISO 19650-2 identification field lengths</i>	14
9 Transitional guidance for PAS 1192-2:2013	14
<i>Figure 5 — PAS 1192-2:2013 and BS EN ISO 19650-1 information delivery cycle diagrams</i>	15
<i>Figure 6 — PAS 1192-2:2013 and BS EN ISO 19650-1 supply chain diagrams</i>	17
<i>Figure 7 — Relationships between the contract and BIM Level 2 documents (PAS 1192 and BS EN ISO 19650-2)</i>	20
<i>Figure 8 — Sequence and compilation of BIM Level 2 documents (PAS 1192 and BS EN ISO 19650-2)</i>	21
<i>Figure 9 — PAS 1192-2 and BS EN ISO 19650-2 team arrangement diagrams</i>	23
<i>Figure 10 — Comparison of hierarchical terms in PAS 1192-2 and BS EN ISO 19650</i>	26
<b>Annex A Document mapping</b>	<b>29</b>
<i>Table A.1 — Map of BS 1192:2007+A2:2016</i>	29
<i>Table A.2 — Map of PAS 1192-2:2013</i>	30
<b>Bibliography</b>	<b>35</b>

## Summary of pages

This document comprises a front cover, and inside front cover, pages i to ii, pages 1 to 35, an inside back cover and a back cover.

---

# Foreword

## **Publishing information**

This Published Document is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 January 2019. It was prepared by Technical Committee B/555, *Construction design, modelling and data exchange*. A list of organizations represented on this committee can be obtained on request to its secretary.

## **Use of this document**

As a guide, this Published Document takes the form of guidance and recommendations. It should not be quoted as if it were a specification or a code of practice.

## **Presentational conventions**

The guidance in this Published Document is presented in roman (i.e. upright) type. Any recommendations are expressed in sentences in which the principal auxiliary verb is “should”.

*Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.*

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

## **Contractual and legal considerations**

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

**Compliance with a British Standard cannot confer immunity from legal obligations.**

---

## Executive summary

The publication of BS EN ISO 19650-1 and BS EN ISO 19650-2 represents a significant step forward in standardizing information management requirements on projects using BIM (building information modelling) within an internationally agreed set of concepts and principles.

These principles and requirements are clearly recognizable from the UK's existing standards BS 1192:2007+A2:2016 and PAS 1192-2:2013, especially when one looks past the necessary changes in terminology and language that were necessary to turn UK documents into international documents.

This transition guidance has been prepared specifically to help the existing users of BS 1192 and PAS 1192-2 understand any changes made between the UK's existing standards, and the ISO documents which are to replace them. More comprehensive guidance is being prepared to facilitate understanding of how to implement BS EN ISO 19650 as a whole rather than simply highlighting the changes. This transition guidance should therefore be regarded as a stepping stone and, in the meantime, existing users of BIM Level 2 will still find it useful to refer to previous guidance for BS 1192:2007+A2:2016 and PAS 1192-2:2013.

The key highlights in transitioning from BS 1192 and PAS 1192-2 to BS EN ISO 19650-1 and BS EN ISO 19650-2 are as listed below. These are not in any particular order.

- a) The presentation of a holistic set of information management concepts and principles in BS EN ISO 19650-1, to cover both project delivery and asset operation parts of an asset lifecycle. These concepts and principles are supported by detailed requirements for project delivery in BS EN ISO 19650-2, which itself includes further recommendations in the UK National Annex.
- b) The introduction of clearer information management processes and workflows, including how information is created by delivery teams across the full spectrum of project scale and complexity.
- c) Changes in how parties are referenced (i.e. from “employer” and “supplier” to “appointing party” and “appointed party”). This allows for a more flexible implementation across both project delivery and asset operation scenarios. The client-side information requirements have been adjusted and are now referred to as exchange information requirements (EIR) and project information requirements (PIR) instead of plain language questions (PLQ).
- d) The documents to be developed by lead appointed parties and appointed parties (suppliers) are broken down into more detail in BS EN ISO 19650-2. This is to support clearer scalability to different types of project and appointment.
- e) Reference to common data environment (CDE) states instead of CDE areas, and to information container status instead of suitability. Also, a more developed concept around the archiving of information.
- f) The requirement to consider risks associated with the timely delivery of information.
- g) Greater clarification around the two types of responsibility matrix – one to assign information management activities, the other to allocate responsibility for information delivery. Collectively these provide for a much clearer information delivery planning process.
- h) The connected concepts of a federation strategy and a container breakdown structure instead of a volume strategy.
- i) The broad concept of the level of information need. This can be defined in terms of any metrics that are appropriate to the project, including level of model definition which was referenced in PAS 1192-2 and further broken down into level of model information and level of model detail.

- j) The identification of information containers (naming convention) in the UK National Annex to BS EN ISO 19650-2 has been adjusted in response to industry feedback since the publication of BS 1192 and PAS 1192-2.
- k) BIM maturity is described in BS EN ISO 19650-1 in terms of “stages” rather than “levels”, as were used in PAS 1192-2.

---

# Introduction

This Published Document has been produced to help all those who have been using BS 1192:2007+A2:2016 and PAS 1192-2:2013, as part of their implementation of BIM Level 2, to transition to the new ISO standards BS EN ISO 19650-1 and BS EN ISO 19650-2. As a result of the publication of these new ISO standards, BS 1192 and PAS 1192-2 have been withdrawn. Any ongoing projects that contractually reference BS 1192:2007+A2:2016 or PAS 1192-2:2013 should continue as such until completion. There might be circumstances where retrofit of BS EN ISO 19650-1 and -2 to an ongoing project is appropriate. This would, however, need careful consideration.

The concepts and principles that underpin the information management aspects of BIM Level 2 and the specific requirements for managing information during a project have been captured in the new ISO standards. However, during the process of reaching international consensus, the way that these concepts, principles and requirements have been expressed and explained has moved away from the language and layout of the pre-existing UK standards.

The purpose of this transition guidance is to help the readers and users of the UK standards familiarize themselves with the ISO standards as quickly and as easily as possible, and to move away from the UK standards that have now been superseded. As such, this transition guidance is not aimed at those who are brand new to these standards of information management

The main body of this Published Document uses BS EN ISO 19650-1 and BS EN ISO 19650-2 terminology wherever possible with existing BS 1192:2007+A2:2016 and PAS 1192-2:2013 terms in parentheses where appropriate. This is to help readers become accustomed to the new terms.

A more comprehensive guidance framework is being developed to provide more breadth and, where necessary, more specific guidance for particular readers. At the time of writing it is hoped that this will be published in late Spring 2019.

The principal sections of this Published Document are structured as follows:

- a) [Clause 4](#) gives an overview of BS EN ISO 19650-1 and -2, including their status in the UK and the relationship between the parts now published and those in development;
- b) [Clause 5](#) explains how the suite of standards defining BIM Level 2 is now evolving to include BS EN ISO 19650-1 and -2, and future additions to BS EN ISO 19650;
- c) [Clause 6](#) refers to two clause-by-clause mappings from the UK standards BS 1192:2007+A2:2016 and PAS 1192-2:2013 to BS EN ISO 19650-1 and -2 (the mapping tables are in [Annex A](#));
- d) [Clause 7](#) focuses on the important changes in terminology that have been introduced in BS EN ISO 19650-1 and -2;
- e) [Clause 8](#) provides specific transition guidance relating to BS 1192:2007+A2:2016; and
- f) [Clause 9](#) provides specific transition guidance relating to PAS 1192-2:2013.

---

## 1 Scope

This guide is to help those familiar with and implementing the UK standards BS 1192:2007+A2:2016 and PAS 1192-2:2013 to transition to the new international standards BS EN ISO 19650-1 and BS EN ISO 19650-2.

It is aimed at all organizations and individuals responsible for the procurement, design, construction, delivery, operation and maintenance of buildings and infrastructure assets.