Introducing the new international standard for BIM, ISO 19650

Embedding digital innovation and accelerating global adoption
ISO 19650 will help organizations globally adopt a simplified and common approach to BIM

What is the ISO 19650 series of international standards?

ISO 19650 is the series of international standards for Building Information Modelling (BIM). It defines the collaborative processes for the effective management of information throughout the delivery and operational phase of assets when BIM is being used.

ISO 19650 has been built on the principles and high-level requirements as BIM Level 2 and is closely aligned with the current UK 1192 standards. Initially introduced to encourage a common language of BIM in the UK and influence built environment professionals to adopt BIM, the benefits of these standards have now been recognized more widely, having been adopted internationally from the Middle East to Australia.

The publication of ISO 19650 creates an opportunity for international organizations collaborating on projects to minimize wasteful activities and increase predictability around cost and time, through a common approach to the management of information. For those working locally, it allows the opportunity to demonstrate alignment to industry recognized best practice whilst building resilience and differentiation.

BSI pioneering the evolution of BIM standards

The history of BIM dates back several decades, however the motivation behind BIM really began in the mid-2000’s as digitization started to transform construction.

To accelerate the adoption of BIM, the UK government has required construction suppliers tendering for centrally-procured government projects, including buildings and infrastructure, to be working at BIM Level 2 since April 2016. To facilitate this BSI developed, together with construction industry experts, the UK 1192 series of standards which define BIM Level 2.

The first of these standards, BS 1192 was published in 2007. PAS 1192-2 (Specification for information management for the capital/delivery phase of construction projects using building information modelling) was then published in 2013 which relied on BS 1192. BSI has subsequently published other standards in this suite as well as a comprehensive range of certification, verification and training solutions to help organizations embed and demonstrate best practice.

Today much of the international approach around BIM is centred around the 1192 standards. For example, Hong Kong’s Construction Industry Council (CIC) produced BIM standards in 2015, which cross-refer to 1192. Today, as digital transformation is taking place throughout global markets, the creation of the first ISO standard for BIM is logical and timely.
What does the ISO 19650 suite consist of?

BS 1192:2007+A2:2016 on principles, and PAS 1192-2 on the capital delivery phase are superseded by the following standards which are available on the BSI Shop:

- **BS EN ISO 19650-1**: Organization and digitization of information about buildings and civil engineering works, including building information modelling — Information management using building information modelling: Concepts and principles
- **BS EN ISO 19650-2**: Organization and digitization of information about buildings and civil engineering works, including building information modelling — Information management using building information modelling: Delivery phase of the assets

Also available on the BSI Shop the following document is published alongside these standards:

- **PD 19650-0** - UK Transition Guidance, which will along with the UK National Forewords and National Annex aid implementation of the ISO standards in the UK and within the ISO framework

It's anticipated that PAS 1192-3 and PAS 1192-5 (the information management of assets and security-minded standards for BIM) will be superseded by the following standards in 2020:

- **BS EN ISO 19650-3** Organization and digitization of information about buildings and civil engineering works, including building information modelling — Information management using building information modelling – Part 3: Operational phase of assets
- **BS EN ISO 19650-5** Organization and digitization of information about buildings and civil engineering works, including building information modelling — Information management using building information modelling – Part 5: Security-minded approach to information management

Moving from the UK 1192 series to the ISO 19650 series

The good news is that the differences between the ISO standards and the UK standards are not major as the approach to BIM is very similar with the main differences relating to the terms and definitions. This milestone publication creates a fantastic opportunity to achieve even greater improvements in collaboration and customer satisfaction using BIM.

BSI clients currently holding BIM certification or verification, including the BSI Kitemark, will have the opportunity to transition their system to reflect the new ISO. To help you upgrade we will be producing lots of supporting materials and services including webinars, training courses developed by experts, and informative whitepapers and articles.

If you are new to BIM, there’s no better time to take advantage of the benefits this can mean for your organization.
Why BSI?

BSI has been at the forefront of BIM since the start, developing a range of standards covering all the key elements from design, information management, facilities management and security. We continually work with industry to develop and evolve the suite of standards to cover all life cycle aspects – from design to final de-commissioning and our certification solutions are designed in collaboration with industry. We’ve also been working with clients across the supply chain and understand the specific application of the BIM standards to organizations large and small. That’s why we’re best placed to help you understand these standards.

About BSI

BSI (British Standards Institution) is the business standards company that equips organizations with the necessary solutions to turn standards of best practice into habits of excellence. For over a century BSI has championed what good looks like and driven best practice in organizations around the world. Working with over 86,000 clients across 193 countries, it is a truly international business with skills and experience across a number of sectors including aerospace, automotive, built environment, food, and healthcare. Through its expertise in Standards Development and Knowledge Solutions, Assurance and Professional Services, BSI improves business performance to help clients grow sustainably, manage risk and ultimately be more resilient.