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Briefing for design and construction

Part 2: Code of practice for asset management (Linear and geographical infrastructure)

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Foreword

Publishing information

This Part of BS 8536 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 October 2016. It was prepared by Technical Committee FMW/1, *Facilities management*. A list of organizations represented on this committee can be obtained on request to its secretary.

Relationship with other publications

BS 8536, *Briefing for design and construction*, comprises two parts:

- *Part 1: Code of practice for facilities management (Buildings infrastructure);* and
- *Part 2: Code of practice for asset management (Linear and geographical infrastructure).*

Information about this document

The initial drafting of this part of BS 8536 was produced in association with the Department for Business, Energy and Industrial Strategy (BEIS) as part of their ongoing programme of support for standardization.

Briefing for design and construction focuses on those aspects of design, construction, testing and commissioning, handover and start-up of operations that are concerned with achieving the required operational performance of a new or upgraded asset. These aspects can include: energy use and greenhouse gas emissions; water abstraction and consumption; waste prevention, reclamation, recycling, treatment and disposal; noise and vibrations; and asset availability, access, inclusiveness, utilization, safety, security, capability, capacity, resilience, serviceability/maintainability, adaptability, quality, cost, value and comfort.

The aim is fourfold: to improve the focus of the supply chain on the performance of the asset in use; to extend supply chain involvement through to operations and defined periods of aftercare; to involve the operator, operations team or asset manager, as appropriate, from the outset of the project; and to take account of the need to maximize the value of the asset.

This standard broadly aligns with the principles of *The soft landings framework* published by UBT and BSRIA [1] and the principles identified in *Government Soft Landings* [2]. Soft landings (**2.1.61**) is concerned with the smooth transition from design and construction into operation and use of an asset. It advocates close collaboration during briefing, design, construction and handover between the delivery team and the operator, operations team or asset manager, as appropriate, in matters affecting operations and end-users, in order to maintain focus on the required outcomes.

This standard forms part of an existing set of standards connected with asset/facilities management and building information modelling. Whilst this standard assumes the use of "BIM Level 2" for projects, the adoption of soft landings is not precluded where "BIM Level 2" cannot be achieved across the project.

Use of this document

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its 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.

The word "should" is used to express recommendations of this standard. The word "may" is used in the text to express permissibility, e.g. as an alternative to the primary recommendation of the clause. The word "can" is used to express possibility, e.g. a consequence of an action or an event.

Notes and commentaries are provided throughout the text of this standard. Notes give references and additional information that are important but do not form part of the recommendations. Commentaries give background information.

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.

0 Introduction

This British Standard considers matters relating to projects for the delivery of built assets according to defined operational requirements, including maintenance, and performance outcomes. For the purpose of this British Standard, the term "delivery team" covers the collective efforts of designers, constructors and other specialists, representing the disciplines and skill-sets engaged in the delivery of a new asset or the upgrading of one existing. An integrated delivery team offers benefits in terms of coordinated design and problem solving, as well as consideration of constructability and operational impacts. This British Standard emphasizes the importance of adopting a whole-life view of an asset and the need to realize value from it; not solely its design and construction or upgrading. In this regard, it is important to recognize that a vast amount of information and data about an asset is generated and exchanged during its lifetime and that a security-minded approach to the handling of such information and data will need to be adopted.

The principle of constructability is widely applied in design. However, the principle of operability has not historically been considered to the same extent. Design decisions have to be based upon accurate and relevant information and data, and their impact on operational needs has to be understood before they are committed to construction. The most effective time to comment on the suitability or effectiveness of design is before it is finalized. Testing assumptions during design is necessary to understand how the asset will perform in operation. Whilst it is too late to comment on the design of the asset once it is operational, systematic measurement, analysis, comparison and feedback can be useful in informing the design of future assets.

This British Standard is intended to complement and strengthen briefing practices and procedures by:

a) promoting the early involvement of the operator, operations team or asset manager, as appropriate; and

b) extending the commitment on the part of the delivery team to aftercare post-handover of the asset and its safe, secure, efficient and cost-effective operation in line with environmental, social, security and economic performance outcomes and targets.

The requirements of inclusive design and of managing design in construction have been incorporated to anticipate the implications for managing assets and their environments inclusively and effectively when they become operational. This British Standard outlines the primary activities, information, questions and deliverables to be addressed by the designers, constructors and other specialists to support their work and so ensure that the asset owner and the operator, operations team and asset manager, as appropriate, are provided with as much certainty as possible in regard to the required operational performance of the asset.

This British Standard broadly aligns with the principles of *The soft landings framework* published by UBT and BSRIA [1] and the principles identified in *Government Soft Landings* [2].

1 Scope

This Part of BS 8536 gives recommendations for briefing for design and construction in relation to energy, telecommunication, transport, water and other infrastructure to ensure that design takes account of the expected performance of the asset in use over its planned operational life. It is applicable to the provision of documentation supporting this purpose during design, construction, testing and commissioning, handover, start-up of operations and defined periods of aftercare.