# Built environment – Value-based decision making – Specification

March 2023 Version 2



BSI Flex 390 v2.0:2023-03





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#### **Release history**

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# **Foreword**

This BSI Flex was sponsored by the Construction Innovation Hub. Its development was facilitated by BSI Standards Limited and it was released under licence from The British Standards Institution. It came into effect on 31 March 2023.

Acknowledgement is given to Flavie Lowres of Green Thinking Ltd. as the technical author, and the following organizations that were involved in the development of this BSI Flex as members of the Advisory Group:

- Akerlof
- Arup
- Building Research Establishment (BRE)
- Costain
- Crown Commercial Service
- Defence Infrastructure Organisation
- Institute of Value Management
- Mace Consult
- Rider Levett Bucknell
- Royal Institution of Chartered Surveyors
- Stantec
- UK Green Building Council

Acknowledgement is also given to the identified broader stakeholders who were consulted in the development of this version of the BSI Flex.

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The content in this version is part of an iterative process. It is likely to change from time to time with subsequent iterations.

### Supersession

This version of BSI Flex 390 supersedes BSI Flex 390 v1.0:2022-06, which is withdrawn.

# Relationship with other publications

BSI Flex 390 v2.0:2023-03 focuses on the value-based decision-making process; it may be used alongside the many existing standards in the built environment, construction, procurement, project management and related fields and industries.

#### Information about this document

The Construction Innovation Hub (CIH) brings together expertise from Building Research Establishment (BRE), the Manufacturing Technology Centre (MTC) and the Centre for Digital Built Britain (CDBB) to transform the UK construction industry. In close collaboration with government, academia, industry and partners across the Transforming Construction Challenge, CIH is guiding a collaborative programme to create a market with the capability and capacity needed to deliver the UK's construction and infrastructure needs. The Value Toolkit [1], which is one of CIH's primary projects, provides a structured approach for value-based decision making across the investment lifecycle of a project, programme or portfolio, leading to better outcomes, a more sustainable built environment and a more sustainable model for industry. Developed in partnership with more than 200 experts from across government, industry and academia, the Value Toolkit is a government-backed initiative designed to change the way the construction industry thinks about and measures value.

This BSI Flex builds on the extensive collaboration that has supported the development of the Value Toolkit [1], which supports *The Green Book* [2] process and delivers on the objectives of *The Construction Playbook* [3].

This is Version 2 of BSI Flex 390, which is the last planned version of the document. All comments received will be reviewed to inform the future direction of this standard. Interested parties are encouraged to check the BSI website for any updates regarding any future plans.

This is a full update of the document and introduces the following principal changes.

- The text in 0.1 has been amended to emphasize the focus on the need to embed sustainability in the value-based decision-making process.
- Figure 1 has been amended to align with definitions in the Value Toolkit handbook [1].
- This version makes clear links with the Value Toolkit (see **0.1** and Clause **1**).
- Standards mentioned in 0.2 of version 1 have been reviewed and links made to appropriate ones within this version.
- The Scope has been amended to clarify the targeted audience.
- The figures in version 1, Annex B have been integrated in the appropriate sections of this version, and Annex B deleted.
- Clause 4 in version 1 has been incorporated into Clause 7 of this version.
- Definitions in Clause 3 have been revised to align with the Value Toolkit definitions.
- Clause 9 has been revised to reduce the number of notes.

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#### Presentational conventions

The provisions in this BSI Flex are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

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").

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<sup>&</sup>lt;sup>1)</sup> Table A.1 is a simplified reproduction of the Value Definition Framework. Users are encouraged to make use of the full version available at www.value-toolkit.com, which contains a live version.

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# 0 Introduction

## 0.1 Background

The principle of value-based decision making is already used in both government and private sector investment policy. In particular, H.M. Treasury's *The Green Book* [2] and private sector environmental, social and governance investment criteria encourage this approach.

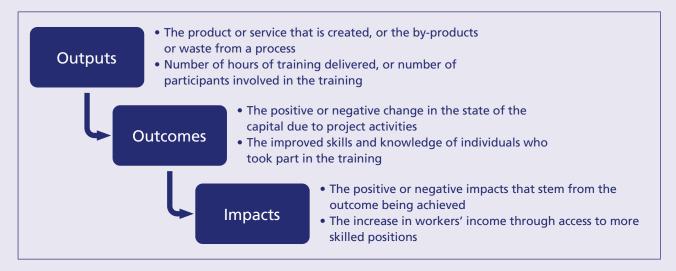
The value-based decision-making process described in this BSI Flex shows how to make and implement value-based decisions and close the gap between strategy, policy and outcomes. This BSI Flex enables clients and policymakers to work with their supply chains and stakeholders to make informed, value-based decisions based on the four capitals approach (*The Capitals Approach* [4]) or similar to drive better natural, social, human and produced outcomes to define value and to move away from purely cost-driven decisions. The process supports users of this BSI Flex in making meaningful value choices and trade-offs using the 17 value categories (see Annex A) referred to in the Value Definition Framework [5] developed by the CIH based on the four capitals approach.

For value-based decision making to be achieved within the built environment, the principles of the four capitals approach should be adopted within wider management processes.

This BSI Flex recognizes that value-based decision making should be collaborative; encourages the development of a transparent approach; and enables the identification of benefits through measurable improvements resulting from an outcome (see Figure 1).

This BSI Flex defines key roles essential to delivering maximum value and outlines a mechanism to demonstrate that a robust, value-based, decision-making process has been developed and applied throughout the whole life of the programme or project.

Figure 1 – Identification of benefits



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# 1 Scope

This BSI Flex specifies the requirements for implementing a consistent approach to value-based decision making (throughout the lifecycle of an asset) within the inter-related processes undertaken in the management of a built environment project. There is a particular focus on the definition of value that integrates sustainability and moves away from purely cost-based decisions.

**NOTE 1** The Value Toolkit [1] provides a suite of tools and guidance to align with the requirements set out in this BSI Flex.

#### This BSI Flex is intended to:

- be applied to and implemented in project investment, procurement planning, optioneering and design decisions relating to all types of assets, regardless of size, complexity or chosen procurement strategy;
- enable objectives to be developed and validated to establish a clear, sustainability-based, performancerelated brief for any programme or project;
- enable policy objectives to be identified, validated and delivered more effectively, to enable the delivery of sustainable outcomes;
- operate in the context of wider management processes, including project, value and change management and whole lifecycle intervention decisions; and
- supplement competencies in many existing roles within organizations, their supply chains and teams.

**NOTE 2** It is for the client to decide how the process is implemented on a project or in a programme.

This standard specifies an approach to how value can be defined, created, delivered and measured. It specifies a framework within which clients can explore their required outcomes, but does not specify what value means on any particular programme or project.

This BSI Flex does not specify all elements required in the delivery of a project.

This BSI Flex is complementary to existing processes that assist with the wider management process of a programme or project, such as outlined in BS EN 12973.

**NOTE 3** For example, BS EN 12973 details the value core method/tools involved in function analysis, which is key to identifying stakeholders' needs and in prioritizing them to realize outputs, outcomes and benefits.

This BSI Flex is intended for use by those with responsibility for making or implementing interventions in relation to built environment assets. While everyone has a role in value-based decision making, this BSI Flex is primarily intended for client organizations and their advisers.