

Built environment – Value-based decision making – Specification

June 2022 Version 1



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Foreword

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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:

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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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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, the H.M. Treasury’s *Green Book* [1] 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 policy and outcomes. This BSI Flex enables clients and policymakers to work with their supply chains and stakeholders to make informed, value-based decisions that drive better natural, social, human and produced outcomes using the Four Capitals approach (*The Capitals Approach* [2]) or similar to define value.

It supports users of this BSI Flex in making meaningful value choices and trade-offs referring to the 17 value categories (see Annex A) referred to in the Value Definition Framework [3] developed by the Construction Innovation Hub.

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

0.2 Relationship to other standards

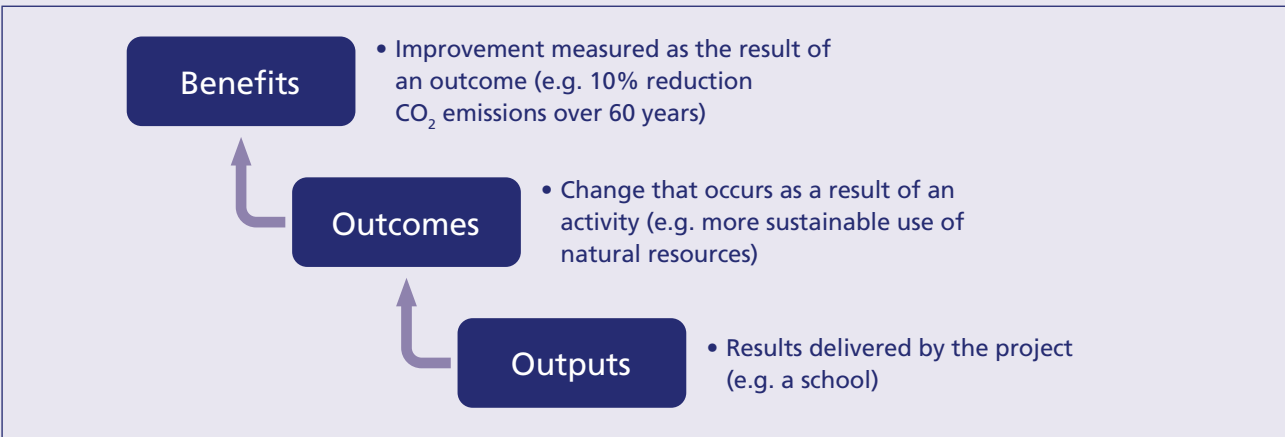
This standard is a BSI Flex. The BSI Flex approach allows for iterative modification of the standard as processes develop, lessons are learned and practical experience is gained across domain and geographies. It also provides the opportunity to realign with associated standard work.

This BSI Flex acknowledges the existence of related standards. While BSI Flex 390: v1.0 2022-06 focuses on the value-based decision making process, and its breadth and technical detail, Version 2 will resolve connections to existing standards, in part based on feedback derived at public comment phase.

NOTE Related standards include but are not limited to:

- *BS 8534: 2011, Construction procurement policies, strategies and procedures – Code of practice.*
- *BS EN 12973:2020, Value management.*
- *BS EN 15643:2021, Sustainability of construction works – Framework for assessment of buildings and civil engineering works.*
- *BS ISO 10845:2020, Construction procurement.*

Figure 1 – Identification of benefits



1 Scope

This BSI Flex specifies the requirements for implementing a consistent approach to value-based decision making (throughout the project lifecycle of an asset) within the inter-related processes undertaken in the management of a built environment project.

This BSI Flex is intended to:

- be applied and implemented to 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 performance related brief for any project or programme;
- enable policy objectives to be delivered more effectively, as well as the delivery of better outcomes;
- operate in the context of wider management processes, including project management, value and change management and whole lifecycle intervention decisions; and
- supplement competencies in many existing roles within organizations, their supply chain and teams.

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

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

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 project or programme, such as outlined in BS 12973.

This BSI Flex is intended for use by those with responsibility for making/implementing interventions in built environment assets. This includes but is not limited to client organizations and their advisors, including asset managers, project managers, investment managers and analysts, commercial managers, such as cost managers or quantity surveyors, and asset managers.

The BSI Flex is relevant to specialist advisers (e.g. value, risk, economic, environmental and social value) and organizations within all tiers of the supply chain.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 8534, *Construction procurement policies, strategies and procedures*

BS ISO 31000, *Risk management – Guidelines*

3 Terms and definitions

For the purposes of this BSI Flex Standard, the following terms and definitions apply.

3.1 built environment

building, structure, external works, infrastructure or assets

[SOURCE: BS EN 15643:2021, modified]

NOTE includes all interventions, including construction, maintenance, operation, refurbishment and end of life.

3.2 core outcomes

core functionality of the delivered solution to meet the mission

NOTE For example, for a prison, reducing reoffending or for a school, improving educational attainment.

3.3 delivery organization(s)

organizations contracted by the client to deliver the solution

3.4 delivery model

model that defines how a contracting authority structures the delivery of a project or programme

NOTE According to the Construction Playbook [4], there are five delivery models:

- *conventional: transactional or hands-on leadership.*
- *transformational: product mindset; hands-off design or trusted helper.*

[SOURCE: HM Government, *The Construction Playbook* [4]]

3.5 design team

team responsible for using their expertise in the value categories and the project context to develop the solution to the stage where there is sufficient information available to commence procurement of the delivery organization(s)

3.6 facilitator

named individual within the strategic team responsible for the value-based decision making process

3.7 four capitals approach

approach that empowers organizations to make decisions that offset the greatest value across natural, social, human and produced capitals

NOTE 1 A capitals approach enables organizations to understand how their success is directly or indirectly underpinned by the four capitals.

NOTE 2 Natural capital is defined as the stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people.

NOTE 3 Human capital is defined as the knowledge, skills, competencies and attributes embodied in individuals that contribute to improved performance and wellbeing.

NOTE 4 Social capital is defined as the networks together with the shared norms, values and understanding that facilitate cooperation within and among groups.

NOTE 5 Produced capital is defined as the man-made goods as well as all financial assets that are used to produce goods and services consumed by society.

[SOURCE: Capitals Coalition, *The Capitals Approach* [2]]

3.8 mission

overall aim of a project or programme to meet a need for an intervention in the built environment, often but not always by building something

NOTE For example, the need to meet the rising demand for primary school places as forecast by current birth rates.

3.9 outcome drivers

series of statements that define what is valued in the project or programme in the context of the strategic objectives

NOTE Outcome drivers translate the strategic objectives into context specific and meaningful objectives. Outcome drivers should be within the sphere of influence of the client, and measurable.

3.10 project or programme

process of delivering and/or operating individual or series of built environment assets

NOTE *This includes all interventions in the built environment, including construction, maintenance, operation, refurbishment and end of life.*

[SOURCE: Designing Buildings, modified^{A)}]

3.11 stakeholder engagement

activity undertaken to create opportunities for dialogue between an organization and one or more of its stakeholders, with the aim of providing an informed basis for the organization's decisions

[SOURCE: BS EN ISO 26000]

3.12 strategic objectives

objectives that combine the mission and the core and value outcomes that the project or programme must deliver

NOTE *Strategic objectives help build a strong evidence base that will inform the value-based priorities underpinning the project or programme.*

3.13 strategic value drivers

document that describes a policy, strategy or corporate values and aims that shape the strategic objectives of the project or programme

NOTE *These drivers could describe national, regional and organizational influences as well as feedback from stakeholder engagement.*

3.14 strategic team

team that implements the value-based decision making process and oversees the delivery of outcomes to satisfy the business case

3.15 value

quantifiable financial and non-financial outcomes which are important to clients and their stakeholders in the context of a project or programme against the Four Capitals approach

[SOURCE: BS ISO 37500:2014, modified]

3.16 value outcomes

outcomes that are critical to the short, medium and long-term strategic priorities of the client

NOTE *Value outcomes relate to value beyond costs and refers to the Four Capitals approach. For example, net zero by 2030 or creating long-term employment.*

^{A)} www.designingbuildings.co.uk

4 Documentation

All stages of the process and outcomes shall be documented and reported through appropriate mechanisms.

All data sources shall be recorded throughout the process and justifications for any variations in the data sources from one phase to another shall be provided. This shall be recorded in the value scorecards (see Clause 7).