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BSI Standards Publication

**Sustainability in buildings
and civil engineering works —
Guidelines on the application
of the general principles in
ISO 15392**

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National foreword

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**Sustainability in buildings and civil
engineering works — Guidelines
on the application of the general
principles in ISO 15392**

*Durabilité des bâtiments et ouvrages de génie civil — Lignes
directrices sur l'application des principes généraux de l'ISO 15392*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 59, *Buildings and civil engineering works*, Subcommittee SC 17, *Sustainability in buildings and civil engineering works*.

Introduction

This Technical Specification is intended for use by stakeholders involved during the life cycle of a construction works. More and more decision makers involved in construction projects are establishing goals to improve the sustainability performance of a construction works.

Decision making typically relates to the planning, design, construction, use and operation, and end-of-life processes. The planning and design phases usually include the project inception/initiation, conception of need and feasibility, and initial and detailed design, all of which lead to the actual construction and occupancy of the building.

The objective of providing the guidance included in this Technical Specification is to demonstrate to each actor at each phase of the construction project a way to implement the nine general principles of sustainability in buildings and civil engineering works, as described in ISO 15392.

Although the following topics are currently outside the scope of this Technical Specification, these guidelines can also facilitate the different actors in

- identifying and setting performance targets,
- elaborating relevant practical tools (criteria, indicators, measurement methods) for assessing/measuring the actual performance levels, and
- formalizing a management system based on the general principles of sustainability, which can be monitored, assessed, and improved.

Application of the nine general principles to the life cycle of construction works introduces a multidimensional puzzle leading to a complex framework. [Clause 4](#) presents the different primary elements of the framework and the related facets to be considered regarding each element. [Clause 5](#) introduces the methodological approach for applying sustainability thinking to the development of the construction works and identifies six phases of the decision-making process and 10 sustainability objectives. [Clause 6](#) gives application guidance developed on the basis of these objectives and related issues of concern (see [Table 3](#)) and detailed recommendations attached to each issue (see [Table 4](#)).

Sustainability in buildings and civil engineering works — Guidelines on the application of the general principles in ISO 15392

1 Scope

This Technical Specification provides guidance for the application of the general principles of sustainability in buildings and civil engineering works elaborated in ISO 15392. It shows the different actors involved with the construction works how to take these principles into account in their decision-making processes in order to increase the contribution of the construction works to sustainability and sustainable development.

This Technical Specification provides a step-by-step approach for

- encouraging the application of the general principles by all stakeholders at each stage of the project and its use, from the decision to build and the initial development of the project brief until the end-of-life of the construction works,
- helping interested parties to consider and/or incorporate sustainability thinking in all phases of the building's or civil engineering works' life cycle, for all relevant issues of concern, by raising key questions in relation to the general principles,
- understanding the outcome (effect) of the application of the general principles, and
- building on acquired experience to develop best practices and engendering a continuous improvement process.

NOTE See [Annex A](#) for the list of the nine general principles.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6707-1, *Building and civil engineering — Vocabulary — Part 1: General terms*

ISO 14020, *Environmental labels and declarations — General principles*

ISO 14021, *Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling)*

ISO 14024, *Environmental labels and declarations — Type I environmental labelling — Principles and procedures*

ISO 14025, *Environmental labels and declarations — Type III environmental declarations — Principles and procedures*

ISO 14040, *Environmental management — Life cycle assessment — Principles and framework*

ISO 14044, *Environmental management — Life cycle assessment — Requirements and guidelines*

ISO 14050, *Environmental management — Vocabulary*

ISO 15392:2008, *Sustainability in building construction — General principles*