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Buildings and constructed assets — Service-life planning —

Part 9: Guidance on assessment of service-life data

Bâtiments et biens immobiliers construits — Prévision de la durée de vie —

Partie 9: Lignes directrices pour l'évaluation des données de durée de vie



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of document:

- an ISO Publicly Available Specification (ISO/PAS) represents an agreement between technical experts in an ISO working group and is accepted for publication if it is approved by more than 50 % of the members of the parent committee casting a vote;
- an ISO Technical Specification (ISO/TS) represents an agreement between the members of a technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/PAS or ISO/TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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.

ISO/TS 15686-9 was prepared by Technical Committee ISO/TC 59, *Building construction*, Subcommittee SC 14, *Design life*.

ISO 15686 consists of the following parts, under the general title *Buildings and constructed assets* — *Service-life planning*:

- Part 1: General principles
- Part 2: Service life prediction procedures
- Part 3: Performance audits and reviews
- Part 5: Life-cycle costing
- Part 6: Procedures for considering environmental impacts
- Part 7: Performance evaluation for feedback of service life data from practice
- Part 8: Reference service life and service-life estimation
- Part 9: Guidance on assessment of reference service-life data [Technical Specification]

Data requirements and procedures for considering functionality and serviceability are to form the subjects of a future Part 4 and Part 10.

Introduction

ISO 15686 addresses the issue of service-life planning. The objective of service-life planning is to ensure that the actual service life of a building or other constructed asset will equal or exceed its design life. Reference service-life data are required to enable the service life of a building or other construction works to be predicted. This part of ISO 15686 gives guidance on the provision of reference service-life data for use in service-life planning.

Service-life data are a prediction of future performance under stated in-use conditions and are not a guarantee. The procedure requires knowledge of the intended use of the components to be incorporated in the works and of the expected in-use conditions to which they will be subject. Service life is directly related to the use and the in-use conditions.

It is important to note that this is a voluntary procedure, in that it is not required for compliance with regulatory processes. However, with increasing use of performance specifications (rather than prescriptive specifications), there is an increasing global interest in whole-life or life-cycle issues and increasing client interest in obtaining service-life data.