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Interested committees:

Title: Draft BS ISO 15686-2 Buildings and constructed assets — Service life planning. Part 2: Process considerations.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

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Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT International Standard

ISO/DIS 15686-2

Buildings and constructed assets — Service life planning —

Part 2: Process considerations

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ISO/TC 59/SC 14

Secretariat: **BSI**

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2025-04-25

This document is circulated as received from the committee secretariat.

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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).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC59, *Buildings and Constructed Assets*, Subcommittee SC 14, *Service Life Planning*.

This third edition cancels and replaces the second edition (ISO 15686-2:2012), which has been technically revised.

The main changes are as follows:

- The relationship to the revised text in Part 1 (Concepts and Principles) and Part 3 (Methods, data and communication) as well as former parts and retained parts of ISO 15686 is indicated. Processes to do with performance audits and reviews, Reference Service Life and estimation, as well as some processes to do with Service Life Prediction are described, although the details of the methodology of these are dealt with in the revised Part 3. It covers who is involved in the processes, what is involved in the processes, and when they take place over the lifespan of the building or other constructed assets.

ISO 15686 consists of the following parts,:

- *Part 1: General principles, concepts and framework for Service life planning*
- *Part 2: Processes for Service life planning*
- *Part 3: Methods of SLP, SL data and communication of SLP results*
- *Part 5: Life-cycle costing*
- *Part 7: Performance evaluation for feedback of service life data from practice*

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Service life planning is a process that seeks to ensure that the service life of a building or other constructed asset will equal or exceed its design life. This Part deals with who is involved in the processes of service life planning, what those processes are, and when they are carried out. It should be read in conjunction with the guidance on general principles in Part 1 and on methods and communication in Part 3. Note that there are also processes described in Part 5 (Life cycle costing) and Part 7 (Performance Evaluation for feedback from service life data from practice).

This part of ISO 15686 is intended primarily, but not exclusively, for the following user groups, who are also the primary actors in the processes described:

1. owners and users;
2. design, construction and facilities or asset management teams;
3. manufacturers who provide data on long-term performance of products (and those who provide test data or technical approvals);
4. maintainers;
5. value appraisers;
6. insurers;
7. technical auditors;
8. developers of construction product standards;
9. clients, funders, and sponsors;
10. users of reference service life data as inputs to assessments of sustainability such as Environmental Product Declarations (EPD's) or Life Cycle Assessment (LCA) or Life Cycle Costing (LCC).
11. Regulators of any group included in the listing above.

Service Life Planning is a group of processes designed to generate an estimate or prediction of how long buildings or other constructed assets and the various parts which comprise them will continue to function satisfactorily, which may include consideration of management interventions to replace or repair some parts to ensure continued functionality and serviceability. Service Life Planning is generic, i.e. applicable to all types of components of buildings or constructed works, and is meant to serve as a guide to all kinds of prediction processes. The processes can be used to assess innovative components, or may be used in the assessment of existing data in order to appraise their value for service life planning and reveal where complementary studies are necessary.

These processes can be undertaken at any stage from early design right through the lifespan. Where they take place during the planning phase of the life cycle of the asset they comprise an estimate or prediction of projected performance. Where the processes take place during the service life of the asset they concern the residual service life estimate or prediction of future performance. Depending on the scope of the estimate or prediction they may include projected performance beyond the life cycle of the works in which the parts are currently embedded.

Because service life planning is concerned with future performance there are inevitably assumptions made about a future operating conditions, future policies and practice. It is therefore important that it is clear that predictions and estimates are not guarantees or warranties of future performance. Equally it is important that the level of reliance to be placed on the estimate or prediction is clear. Examination of assumptions and the evidence used to form the prediction or estimate may be needed.

Depending on the priorities of the client for the service life planning the focus may be on appropriate design, maintenance, or refurbishment of the building or other constructed assets. The processes may need to take account of changing strategic, operational or policy requirements, risk, reliability or value management

aspects, but these are not the primary focus of this Part. However, where these considerations affect the estimate or prediction they should be included in any service life planning reporting.

Buildings and constructed assets — Service life planning —

Part 2: Process considerations

1 Scope

This part of ISO 15686 provides guidance on use of service life predictions or reference service-life data and on the application of these data for the purposes of calculating estimated service life using the factor method. It does not give guidance on how to estimate the modification part or the values of factors A to G, using given reference in-use conditions and the object-specific in-use conditions. The reliability of the predicted or estimated service life will depend on the evidence it was based upon (see note 1 below).

This part of ISO 15686 establishes when to specify or verify functional performance requirements during the service life of buildings and constructed assets and when to check their capability to meet identified requirements.

This part is applicable to any scope of holdings, whether a set (or portfolio), a single building (large or small) or a facility which is part of a building (such as one group of spaces, one floor or several floors) or part of a network of constructed assets.

It is applicable to the range of roles of stakeholders, from the owners and managers to the occupants, tenants or other users.

This Part does not describe specific test methods. It does not cover limitation of service life due to obsolescence caused by changing performance requirements or other non-measurable or unpredictable performance states.

Note 1 Service Life Predictions can be based on evidence from previous use, on comparisons with the known service life of similar components, on tests of degradation in specific conditions or on a combination of these. These predictions form the basis of Reference Service Lives, and therefore of estimates of service life also.

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.

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

ISO 15686-1, *Buildings and constructed assets– Service Life Planning – Part 1 Concepts and Principles*

ISO 15686-3, *Buildings and constructed assets – Service Life Planning – Part 3 Methods, data and communication*

ISO 15686-5, *Buildings and constructed assets — Service life planning — Part 5: Life-cycle costing*

ISO 15686-5, *Buildings and constructed assets — Service life planning — Part 8 Performance Evaluation for feedback of service life data from practice*

[Any others to be agreed].