



**International
Standard**

ISO 5727

**Accessibility and usability of the
built environment — Accessibility
of immovable cultural heritage —
Principles and methodology for
interventions**

*Accessibilité et usage de l'environnement bâti — Accessibilité
du patrimoine culturel immobilier — Principes et méthodologie
pour les interventions*

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Foreword

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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 document 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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This document was prepared by Technical Committee ISO/TC 59, *Buildings and civil engineering works*, Subcommittee SC 16, *Accessibility and usability of the built environment*.

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.

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Introduction

This document establishes principles for achieving accessibility and usability of immovable cultural heritage in accordance with a universal design approach^[1] and sets out a methodology for the application of these principles.

The objective of accessibility to immovable cultural heritage is particularly relevant in today's society. Many immovable cultural heritage objects continue to be used in daily life, for example, religious buildings, transportation buildings, buildings for education and administration, social and medical facilities and institutions for museum use, events, sport and leisure and much more. Other cultural objects, whose uses were initially private, are now open to the public, like ancient residential palaces that are now used for administrative or museum purposes. These cultural objects provide examples where accessibility for people with disabilities is now required although it was not implemented originally when the objects were built.

The demand for accessibility of immovable cultural heritage has increased with the public's increasing participatory aspirations and the upward trend for cultural tourism among retired and older persons who more frequently experience different types of restrictions due to the built environment.

Cultural heritage is a significant part of the collective history and cultural identity to which full participation and enjoyment of all people should be ensured. Furthermore, in many cases, cultural heritage is part of citizens' daily life. According to the United Nations Convention on the Rights of Persons with Disabilities,^[1] accessibility contributes to the full and effective participation of all people in immovable cultural heritage. This document not only emphasizes the importance of access but also the use of immovable cultural heritage by persons with the widest range of abilities and characteristics. Through improvement of accessibility of cultural objects and their settings, the appreciation of immovable cultural heritage by society is enhanced, highlighting its significance and visibility. At the same time, appreciation of the immovable cultural heritage leads to more engagement of local communities taking an active role in the conservation of cultural objects, according to the Strategic Objectives of the World Heritage Convention^[2].

Actions for improving accessibility to immovable cultural heritage can foster the achievement of these specific social goals with the conservation of heritage values. The Venice Charter^[3] emphasizes that the conservation of cultural objects is enhanced by its use. Added to this approach, in 2005, the Faro Convention^[4] emphasized the social dimension of heritage and its consideration as a right of all people. By means of accessibility measures the usage as well as cultural and functional potential of cultural objects are improved.

This document has been developed to support the planning of accessibility interventions to cultural heritage in different scenarios. The principles and the methodology presented in this document are at a strategic level. Other technical standards concerning accessibility in building and urban planning contain provisions potentially applicable to the immovable cultural heritage. Requirements and recommendations related to the design and constructional aspects of an accessible built environment are covered by ISO 21542.

Both the principles and the methodology presented are based on international precedents, studies and accessibility interventions to immovable cultural heritage^[5].

Not all scenarios showing functional or cultural obstacles to accessibility can be solved by means of physical changes to cultural objects alone. Accessibility also requires the implementation of other measures such as management, maintenance, or service provision. It is important to note that these measures are not the subject of this document.

Accessibility and usability of the built environment — Accessibility of immovable cultural heritage — Principles and methodology for interventions

1 Scope

This document establishes principles and a methodology for providing accessibility to immovable cultural heritage through interventions arising from conservation, restoration or specific accessibility needs.

It is applicable to immovable cultural heritage and its setting.

This document is intended to be used by heritage owners and managers (both private or public), curators, accessibility professionals, conservation and restoration professionals, architects, engineers, designers, builders and user representatives.

This document does not specify requirements regarding management, maintenance or service provision.

2 Normative references

There are no normative references in this document

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

access concept

outcome of the consolidated analyses to identify the *accessibility* (3.4) conditions and heritage *values* (3.24) of a *cultural object* (3.10), including the general and specific accessibility *objectives* (3.14)

Note 1 to entry: The documentation can have the form of a plan, diagram, report, etc.

3.2

access guide

accessibility guide

publicly available document describing the objective *accessibility* (3.4) characteristics of the *cultural object* (3.14), regarding access and provided services, for visitors with disabilities and/or other specific access requirements

3.3

access study

document that provides a comprehensive analysis of the *accessibility* (3.4) features and barriers present in a *cultural object* (3.14) in order to identify areas where improvements in accessibility are needed to ensure equal access and use

3.4

accessibility

provision of buildings or parts of buildings for people, regardless of their age, size, ability or disability, to be able to gain access to them, into them, to use them and exit from them

Note 1 to entry: Accessibility includes ease of independent approach, entry, evacuation and/or use of a building and its services and facilities, by all of the building's potential *users* (3.22) with an assurance of individual health, safety and welfare during the course of those activities.

[SOURCE: ISO 21542:2021, 3.1]

3.5

accessibility chain

chain of accessibility

access chain

set of elements, accessible individually and in combination with each other, that constitute links in a journey in a specific environment

Note 1 to entry: The accessibility chain reflects the idea that if one link of the chain fails, then, the *accessibility* (3.4) of the system fails as a whole.

3.6

accessibility maintenance

scheduled monitoring protocol that includes inspection tasks, control of risks of deterioration and measures to be taken, if necessary, in order to preserve the achieved *accessibility* (3.4) conditions of a *cultural object* (3.10)

3.7

assistive product

product that optimizes a person's functioning and reduces disability

Note 1 to entry: Assistive products include devices, instruments, equipment, and software.

Note 2 to entry: Assistive products can be specially produced or generally available items.

[SOURCE: ISO 9999:2022, 3.3, modified — The original note 1 to entry has been removed.]

3.8

conservation

measures and actions aimed at safeguarding *cultural heritage* (3.9) while respecting its *significance* (3.20)

[SOURCE: EN 15898:2019, 3.3.1, modified — The notes have been removed.]

3.9

cultural heritage

assets passed down from the past, reflecting society's constantly evolving *values* (3.24), beliefs, knowledge, and traditions, resulting from interactions between people and places over time

Note 1 to entry: A cultural heritage can be tangible or intangible.

Note 2 to entry: The classification as a cultural heritage is often stated by notification based on international conventions as part of a World Heritage Site (UNESCO) or according to different national legal requirements.

3.10

cultural object

immovable cultural object

single manifestation of *immovable cultural heritage* (3.11)

Note 1 to entry: In this document the term "object" is used to address a specific immovable cultural heritage. Other terms like "asset" are used as well.

[SOURCE: EN 15898:2019, 3.1.3; modified — "cultural" has been added to the term "object"; the admitted term has been added; and the definition has been adapted to immovable cultural heritage.]

3.11

immovable cultural heritage

material expression of *cultural heritage* (3.9) that is built

Note 1 to entry: For the purpose of this document, immovable cultural heritage consists of monuments, buildings, groups of buildings and sites.

Note 2 to entry: The material expression of cultural heritage, i.e. tangible cultural heritage, can be immovable or movable. The distinction of tangible cultural heritage with reference to its movability is only approximate since there are, for example, buildings or parts thereof that have been moved to places different to where they had been constructed.

Note 3 to entry: According to the World Heritage Convention,^[2] monuments can be architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features. Groups of buildings can be groups of separate or connected buildings. Sites can be works of man or the combined works of nature and man, and areas including archaeological sites and cultural landscapes.

3.12

intervention plan

coordinated set of actions to improve the *accessibility* (3.4) conditions of a cultural object

3.13

methodology

set of means or *procedures* (3.16) used for a specific purpose

[SOURCE: ISO 14050:2020, 3.2.13]

3.14

objective

result to be achieved

Note 1 to entry: An objective can be strategic, tactical, or operational.

[SOURCE: ISO 9000:2015, 3.7.1]

3.15

principle

fundamental basis for decision making or behaviour

[SOURCE: ISO 26000:2010, 2.14]

3.16

procedure

specified way to carry out an activity or a *process* (3.17)

[SOURCE: ISO 14050:2020, 3.3.6]

3.17

process

set of interrelated or interacting activities that use inputs to deliver an intended result

[SOURCE: ISO 9000:2015, 3.4.1]

3.18

reference group

representative group of *users* (3.22) of a *cultural object* (3.10) regarding a specific set of needs, *user experience* (3.23) or knowledge

Note 1 to entry: In this document, reference group refers to *accessibility* (3.4) conditions.

3.19

reversible

characteristic of the outcome of an intervention that can be made undone without damage to the object

3.20

significance

combination of all the *values* (3.24) assigned to an object, ensemble or collection

[SOURCE: EN 15898:2019, 3.1.7]

3.21

strategy

plan to achieve *objectives* (3.14)

Note 1 to entry: A strategy generally includes a coordinated set of activities and the allocation of resources necessary to achieve the objectives.

Note 2 to entry: A strategy can be applied at different levels and functions in or across organizations. An overall strategy can be supported by a set of more detailed lower-level and functional strategies.

Note 3 to entry: A strategy is generally planned but can evolve or emerge over time as a result of continual adaptations and adjustments.

[SOURCE: ISO 56000:2020, 3.3.4]

3.22

user

person who interacts with a system, product or service

[SOURCE: ISO 27500:2016, 2.12]

3.23

user experience

experience that a *user* (3.22) has when interacting with a product, service, or system

Note 1 to entry: It encompasses all aspects of the user's interaction, including their perceptions, emotions, understanding and responses to the product, service or system.

Note 2 to entry: In the context of this document, the user experience refers to the *accessibility* (3.4) conditions of the *cultural object* (3.10).

Note 3 to entry: The user experience can be investigated via, for example, observation, interviews, questionnaires, *reference group* (3.18).

3.24

value

aspect of importance that individuals, communities or a society assign(s) to an object, ensemble or collection in a particular context

Note 1 to entry: Values can be of different types, for example, artistic, symbolic, historical, social, economic, scientific, educational, technological, functional.

Note 2 to entry: The assigned value can change according to circumstance, for example, how the judgement is made, the context and the moment in time. Value should always be indicated by its qualifying type.

[SOURCE: EN 15898:2019, 3.1.6]

4 Principles

4.1 General

In an inclusive society, the recognition, valuing, and understanding of immovable cultural heritage and its significance implies the accessibility measures should be implemented. This is because accessibility to cultural objects contributes to their conservation and importance for the local community and society in general.

Accessible immovable cultural heritage enables all people to access, use and enjoy it effectively, along with its values.

When establishing accessibility to immovable cultural heritage, a balance shall be ensured between the conservation of its values and the achievement of specific social goals.

The principles outlined in [4.2](#) to [4.4](#) shall be applied to improve accessibility conditions of immovable cultural heritage and its surroundings.

4.2 Strategic principles

The following strategic principles shall be considered.

- a) Equal importance shall be given to heritage and accessibility.
- b) Accessibility shall enable access, use and understanding of the cultural object(s) and their setting.
- c) Functional requirements of general accessibility standards for the built environment shall be applied where possible.
- d) A multidisciplinary approach shall be applied for each intervention.
- e) An evaluation on the needs and possibility of participation of different reference groups shall be applied.
- f) Any intervention (e.g. change of use, maintenance, conservation or other enhancement) shall be evaluated to determine potential opportunities to improve accessibility.
- g) Accessibility levels shall be reviewed and improved where required.

4.3 Technical principles

The technical principles that complement the strategic principles are as follows.

- a) Any new architectural element or space added to a cultural object shall adhere to accessibility requirements.
- b) Actions to enhance accessibility shall be proportionate to the scope of the intervention, i.e. the extent of the changes being made.
- c) Interventions on immovable cultural heritage shall not compromise existing safety and accessibility conditions.
- d) Reversible solutions should be chosen as long as they provide equal accessibility and safety compared to non-reversible ones.
- e) Individual interventions should be considered as part of a site wide plan based on the accessibility chain.
- f) In circumstances where full accessibility cannot be achieved through physical changes, alternative access methods should be implemented.

4.4 Operational principles

When deciding to intervene to improve accessibility, the following shall be considered:

- a) all relevant legal obligations, constraints and rights;
- b) type and extent of intervention;
- c) diversity of users;
- d) physical, sensory, cognitive accessibility;
- e) significance of the object;

- f) technical and economic feasibility;
- g) assessment by experts and reference groups.

5 Methodology

5.1 General

Accessibility-related actions to be planned and developed, whether arising from conservation, restoration or specific accessibility needs ([Annex A](#)), shall consider the significance of the immovable cultural heritage and systematically apply an inclusive approach referring to and involving user groups throughout the whole process.

To implement such an approach, the methodology described in this document is shown in [Figure 1](#) and further detailed in [5.2](#) to [5.6](#). It describes different aspects and procedures to be considered when carrying out actions to improve accessibility. Even though the methodology is depicted as a series of clearly and sharply separated steps, it is an iterative process, and different parts may not always be carried out sequentially.

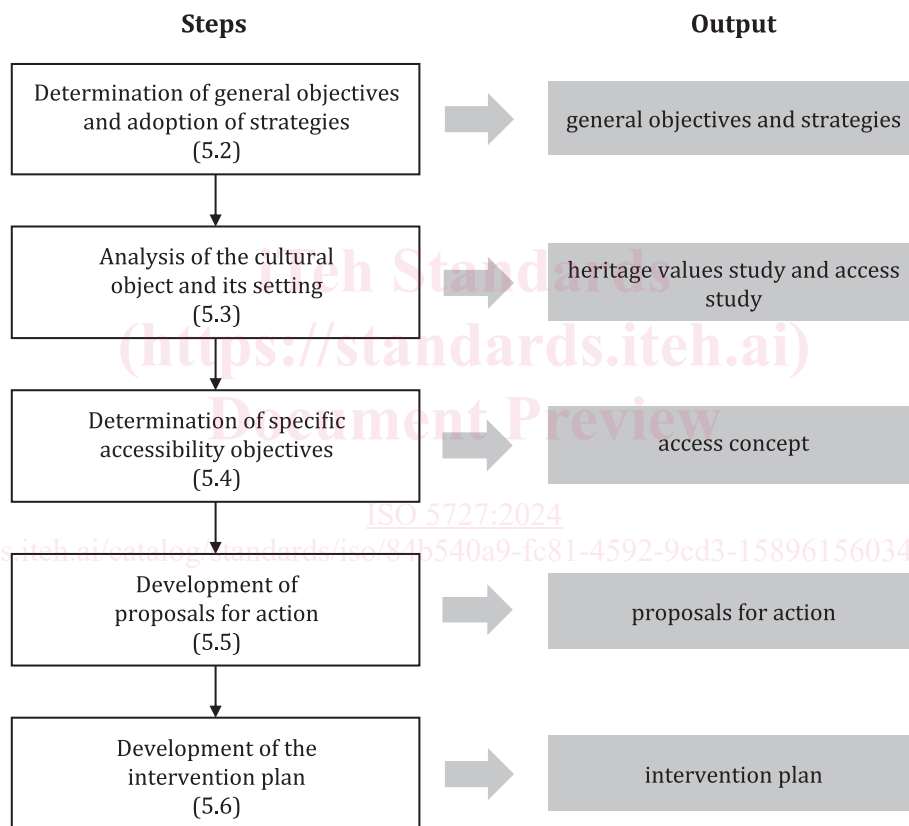


Figure 1 — Steps and outputs of the methodology

5.2 General accessibility objectives

5.2.1 General

Starting from the principles set out in [Clause 4](#) and the goal to provide optimum accessibility to the immovable cultural heritage under the given constraints, general objectives and corresponding strategies shall be defined.

Reference groups consisting of users with physical, sensory or cognitive impairments shall be established.

5.2.2 Determination of general objectives

The determination of the general objectives should be based on the following considerations (see [Annex B](#) for further details) regarding the cultural object and its setting:

- the scope of the accessibility intervention;
- the typology and characteristics;
- the uses and functions;
- potential users and their accessibility needs;
- facilities and service provision;
- information on the accessibility characteristics of the cultural object;
- management, conservation and maintenance.
- cultural and functional accessibility needs of the society (evident and latent) with regard to the cultural object.

Alternative or further categories may be defined depending on the specific intervention.

The categories should not be regarded as being independent; there can be links between them, or general objectives can be assigned to more than one category.

5.2.3 Adoption of strategies

For an intervention, strategies to achieve the general objectives shall be adopted in accordance with the principles set out in [Clause 4](#).

The following aspects should be considered for the determination of the strategies:

- reasons for the intervention, such as legal requirements, change of use or requirements;
- cultural and functional accessibility needs of the society (evident and latent), including user experience;
- conservation requirements applicable to the cultural object (materials, constructive systems, etc.);
- the legal framework for implementing the changes;
- other planned interventions on the cultural object or its setting, which can be relevant to the objective of accessibility;
- available resources to enable improvement of accessibility;
- the project brief (project description) summarizing relevant possible uses, costs, benefits and timing;
- examples of good practices from other cultural objects (see [Annex E](#)).

The analysis of the heritage values and accessibility conditions (see [5.3](#)) can require a revision of the strategies in order to reach the general objectives.

5.3 Analysis of the cultural object and its setting

5.3.1 General

The analysis of the heritage values of the cultural object is essential so that any action to improve its accessibility can be taken in the context of these values and in order to enhance its cultural appreciation and enjoyment.

The analysis of the existing accessibility conditions of a cultural object is the starting point for the definition of the accessibility conditions to be achieved by the means of the intervention (see 5.4, access concept).

The processes of analysing the heritage values as well as the accessibility conditions may be carried out independently but shall always be done in a coordinated manner.

5.3.2 Analysis of the heritage values

An analysis of the heritage values of the cultural object and its setting shall be done.

The analysis shall consist at least of the identification of heritage values, their location and, if possible, the ranking of the heritage values. The analysis of the heritage values shall be done for the entire cultural object as well as for its parts, single elements or associated intangible heritage, as appropriate.

For the purpose of the intervention, the heritage values of different parts or elements of the cultural object shall be ranked relative to other parts, if possible. This allows the degree of exceptionality, integrity, authenticity and representativeness to be evaluated.

[Annex C](#) provides further information on heritage values.

The results of the analysis of the heritage values shall be documented in the heritage values study.

NOTE The document is sometimes called also "statement of significance", "heritage values report" or "heritage values appraisal".

5.3.3 Analysis of accessibility conditions

The procedures of the analysis are derived from the general objectives on accessibility. The steps listed below shall be adapted to the characteristics of the planned intervention.

a) Determination of the bases for the analysis

The bases for the analysis shall include statutory requirements on accessibility, recommendations from technical standards on accessibility of the built environment or landscapes as well as assessment of existing accessibility and usability conditions through consideration of users' experience.

b) Identification and determination of the accessibility chain to carry out the analysis for all its elements

The accessibility chain requires knowledge of the entire cultural object and its details as well as of the user's access requirements. To achieve the accessibility objectives, every element of the accessibility chain must satisfy the required level of accessibility.

c) Definition of the applicable design criteria for the accessibility chain

Considering the bases of the analysis, the applicable design criteria for the accessibility chain and its elements shall be defined.

NOTE Design criteria refer to the specific requirements, standards, or guidelines that are established to guide and evaluate the design and development of a project. Such criteria are typically based on a set of objectives, performance expectations, and constraints that need to be met to achieve the successful realisation of the design.

d) Analysis of the accessibility conditions for each element of the accessibility chain

e) Assessment of the overall accessibility of the cultural object

Applying the design criteria to the existing accessibility conditions allows an evaluation of to what extent the accessibility objectives are already met.

The analysis of the accessibility conditions, i.e. the results of the above-listed steps, shall be documented in the access study.