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# Information technology for learning, education and training — AccessForAll framework for individualized accessibility —

## Part 1:
## Framework and registry

*Titre manque —*

ICS: 03.100.30; 35.240.90

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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. www.iso.org/directives

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The committee responsible for this document is ISO/IEC JTC 1/SC 36/WG 7.

ADD INFORMATION ABOUT REPLACED STANDARDS AND OTHER PARTS AS NECESSARY

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# Introduction

This multi-part standard is intended to support the matching of personally unique requirements (referred to as "personal preferences" within this standard) with ways to address these requirements.

Conventional markets address the largest customer base, and conventional designs address a conception of an average person (e.g., designs of resources, products, services or environments). All people deviate from this conception of average in some way. Often people are able to compromise and adapt to the options available to them. However, even if they are able to adapt to the available choices, the mismatch may compromise their goal. For many people the mismatch is too great or they are constrained in the ways they can adapt. This standard recognizes that anyone can experience an untenable mismatch if the mismatch is too extreme, or if internal or external conditions constrain their ability to adapt. All users benefit from resources that match their personal preferences.

A promising response to diverse and variable requirements is to move from mass design of products and services to personalization, or from one-size-fits-all to one-size-fits-one designs. Depending on the reach or range of the adaptation to the individual, this can address the marginalization of people that frequently experience an untenable mismatch. Moving from one-size-fits-all to one-size-fits-one requires a diverse and expanding pool of choices and adaptations.

Networks (of all kinds) can help to match requirements with means of satisfying the requirements, thus increasing choices and the likelihood of establishing a match. Networks can also address the challenges of fragmented demand, fragmented supply and redundancies in efforts to address demands. A networked system can achieve a match by finding, transforming, or augmenting available resources. This multi-part standard supports network systems by facilitating a common understanding of a given requirement: between the individual with the requirement and the networked systems that may satisfy the requirement through a broad diversity of approaches.

The multi-part standard also aims to support the expression of conventionally ignored requirements or requirements that are unanticipated by services and markets. This necessitates a mechanism that is open to the identification of undocumented requirements, including by individuals not conventionally participating in identifying requirements.

This part of the multi-part standard:

- establishes the framework principles for AccessForAll services that address personally unique requirements ("personal preferences"),
- describes a mechanism for open registries that serve the dual purpose of facilitating a common understanding of requirements; and facilitating the identification of undocumented requirements by a full diversity of individuals or entities. These registries will support a broad diversity of services that deliver a match for individual requirements.

The series of parts of this multi-part standard will provide guidance and minimally necessary interoperability standards for a broad diversity of services that:

- support the discovery, exploration, refinement and declaration of individual preferences


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- support the delivery of services, products, environments or resources that match the preferences
- support the continuous improvement of the match and or the individual understanding of personal needs and preferences.

In so far as matching personal needs and preferences enables equitable access for persons with disabilities, this standard supports the spirit and goals of the Convention on the Rights of Persons with Disabilities (CRPD). The intent of this standard is to make it possible for anyone to express their individual preferences. With such an individual preference statement it is then within the power of other authorities to reference and require adherence to the preferences declared in the statement. While it is noted that persons with disabilities are among the most in need of a way to express individual preference, the standard is not intended only for individuals protected through the CRPD.

Also, compliance with the CRPD does not require the use of the AccessForAll standard. It would be misleading to point to the CRPD in the normative text. References to this standard for the purposes of complying to the CRPD are the responsibility and the purview of CRPD supportive regulations and legislations which are developed through broad stakeholder consultation in each jurisdiction.

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# ITLET — AccessForAll Framework for Individualized Accessibility — Part 1: Framework and Registry

## 1 Scope

### 1.1.1 Scope of 24751

ISO/IEC 24751 is a multi-part standard that defines an AccessForAll framework to enable:

- Individuals to discover, explore, refine, prioritize and request their personally unique preferences, for a given context, and
- AccessForAll services to satisfy the individual preferences by delivering a match (e.g, by finding, assembling, developing, recruiting or using other strategies to deliver products, services, configurations or environments that match the preferences [herein referred to as AfA resources])

AccessForAll is in large part motivated by the goal of addressing currently unmet or poorly met preferences (where the term 'preferences' encompasses the range from critical needs to preferences). This goal is in part satisfied by registries, which are open to any individual or organization, to register possible preference concepts (as AccessForAll Preference Concepts), including concepts associated with unanticipated, emerging or new preferences. These registered AccessForAll Preference Concepts might then be used to express individual preferences within a broad diversity of AccessForAll implementing services. An AccessForAll Concept Registry is intended to register possible preference concepts; it is not used for individuals to declare or store personal preferences or personal preference sets (AfA Preference Statement), this is achieved through AccessForAll services that support discovery, exploration, refinement, prioritization and matching of Individual Preference Statements. (An AccessForAll Preference Concept might itself be able to represent a preference or it may require qualification and/or combination with other preference concepts to form a preference through an AfA Preference Statement).

### 1.1.2 Future Parts

This International Standard is designed to accommodate developments in technology and implementations and supports the addition of more parts in the future.

## 1.2 Scope of Part 1 of 24751

Part 1 specifies the basic principles of an AccessForAll approach and the specifications for AccessForAll (AfA) registries.

This part defines:

- a framework and basic principles to support matching of individually unique preferences (that may vary according to the context, including the user goal) to resources that satisfy the preferences.

- specifications for AccessForAll (AfA) registries to register AfA Preference Concepts

In order to make it easier for users and developers to understand and use AfA Preference Concepts, this part supports registration of multiple names and descriptions for a given AfA Preference Concept. It aims to enable users, developers, and others to use their chosen names and descriptions, in their chosen natural language, and yet have them interoperate within many systems.


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AccessForAll Preference Concepts will be used by AccessForAll services to:

- enable individuals to create AfA Preference Statements (3.5) or requests, (this includes discovering, exploring, evaluating and refining an understanding of the preferences that work best for them in a given context to achieve a given goal),
- identify resources that match AfA preference concepts (including, but not limited to, through the application of resource metadata)
- match resources to personally declared AfA Preference Statements

## 1.2 Exclusions

### 1.2.1 Implementation

This International Standard is implementation-neutral, to enable innovation and advances in technology.

### 1.2.2 Accessible content

This International Standard does not describe how to create accessible content or provide a definition of accessible resources or services, other than the effective matching of resources to users' individual preferences. Other work and standards describe how content and interfaces can be made more accessible[1].

### 1.2.3 Accessibility evaluation

This International Standard is not intended to be used to determine the accessibility of a resource for a given individual or group.

### 1.2.4 Functional Needs and Preferences not personal characteristics

This International Standard does not support the description of a person or their disabilities based on preference statements.

## 1.3 Conformance

An AccessForAll Preference Concept registry is in conformance with this part of ISO/IEC 24751 if it conforms to Clause 6.

# 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.

[1] See, for example, W3C/WAI Web Content Accessibility Guidelines, ISO 15836, ISO 15706, other standards of ISO/TC 46 and ISO/IEC JTC 1/SC 29, as well as standards being developed by ISO/IEC JTC 1/SC 36.

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IETF BCP 47. Tags for Identifying Languages. Sep. 2009. https://tools.ietf.org/html/bcp47

IETF RFC 3986, Uniform Resource Identifier (URI): Generic Syntax, January 2005, http://www.ietf.org/rfc/rfc3986.txt

# 3 Terms and definitions

**3.1**

**access for all**
**AccessForAll**
**AfA**

an inclusive approach to accessibility that achieves accessibility by matching resources to individually declared access preferences for a given context.

Note: The AccessForAll approach is applicable to all users, as all users differ and experience variable preferences. *Resource*s include any product, service, event, location, environment, interface or other strategy, digital or physical.

**3.2**

**AfA Preference Concept**

a language-independent notion of a functional preference that may be chosen by an individual user.

Note 1 to entry: The collection of AfA Preference Concepts provide the potential choices of preferences that can be declared by an individual in an AfA Preference Statement [3.7])

Note 2 to entry: An AfA Preference Concept registration includes an AfA Preference Concept name, AfA Preference Concept label(s), AfA Preference Concept definition(s), AfA Preference Concept domain(s), and an AfA Preference Concept value space.

**3.2.1**

**AfA Preference Concept name**

a unique human-understandable word or phrase associated with an AfA Preference Concept (3.4) (Each AfA Preference Concept has one unique name as well as an IRI)

**3.2.2**

**AfA Preference Concept label**

alternative ways to refer to AfA Preference Concepts. (An AfA Preference Concept may have many labels including in different languages, symbol sets and sensory modalities.)

**3.2.3**

**AfA Preference Concept definition**

a human understandable description of the AfA Preference Concept (3.2)


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