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**Information technology — Framework  
for specifying a common access profile  
(CAP) of needs and capabilities of users,  
systems, and their environments**

*Technologies de l'information — Cadre de définition d'un profil d'accès  
commun (CAP) des besoins et capacités des utilisateurs, des systèmes  
et de leurs environnements*

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Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
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Published in Switzerland

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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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

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

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 24756 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

## Introduction

Users of various systems in various environments can experience temporary or permanent accessibility difficulties. Potential users of systems need to evaluate whether the systems will be accessible to them in the intended environments in which they will be used. Where accessibility can be insufficient, either due to environmental barriers or poor design, these users can wish to resort to assistive technologies (ATs) to provide the required level of accessibility. Currently, there is no common framework for describing accessibility needs or abilities. This requires each potential user to develop their own evaluation method, and then to investigate and evaluate various systems and ATs using this method. However, due to the lack of an existing method, there might also be a lack of suitable information on the abilities of different systems and ATs, leading to inefficiency, confusion, frustration and a general lack of satisfaction by the user.

A variety of difficulties can be encountered when trying to identify suitable ATs to improve accessibility. Accessibility issues being encountered by potential users can inhibit them from obtaining the required information to identify possible ATs that could help improve their accessibility. Lack of experience with ATs can also affect information technology support staff who attempt to assist these potential users.

The need for accessibility extends to all systems that a proposed user can access. The ability for information gathered regarding accessibility issues and solutions for individual users to be portable across systems and environments is essential. This International Standard introduces a model of accessibility as a basis for understanding access issues with the interactions between users and systems in various environments.

Accessibility is multi-dimensional; existing at multiple levels. The model shows that users and systems must share capabilities of communicating. This International Standard provides a framework to specify a profile of common access capabilities (the CAP) of interactive systems, users, and their environment that are necessary for accessibility to be possible.

The CAP is specified in a top-down manner that provides extensibility to be able to include capabilities at increasingly detailed levels.

# Information technology — Framework for specifying a common access profile (CAP) of needs and capabilities of users, systems, and their environments

## 1 Scope

This International Standard defines a framework for specifying a common access profile (CAP) of needs and capabilities of users, computing systems, and their environments, including access that is supported by assistive technologies. It provides a basis for identifying and dealing with accessibility issues in a standardised manner across multiple platforms. It can be used to evaluate the accessibility of existing systems in particular environments for particular users.

## 2 Conformance

Specifications for systems and/or system components, including assistive technologies, conform to ISO/IEC 24756 if they conform to Clauses 6 and 7 of this International Standard.

## 3 Normative references

The following referenced documents are indispensable for the application 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 639-3, *Codes for the representation of names of languages — Part 3: Alpha-3 code for comprehensive coverage of languages*

ISO 15924, *Information and documentation — Codes for the representation of names of scripts*

ISO 80000 (all parts), *Quantities and units*