
**Information technology — Interoperability
with assistive technology (AT) —**

**Part 1:
Requirements and recommendations for
interoperability**

*Technologies de l'information — Interopérabilité avec les technologies
d'assistance —*

Partie 1: Exigences et recommandations pour l'interopérabilité

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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.

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ISO/IEC 13066 consists of the following parts, under the general title *Information technology — Interoperability with assistive technology (AT)*:

— *Part 1: Requirements and recommendations for interoperability*

The following parts are under preparation:

— *Part 2: Windows accessibility API* [Technical Report]

— *Part 3: I-Accessible-2 accessibility API* [Technical Report]

Introduction

Interoperability involves the ability to use assistive technology (AT) to add to or augment existing components of information technology (IT) systems. Interoperability between AT and IT is best facilitated via the use of standardized, public interfaces for all IT components.

This part of ISO/IEC 13066 provides a basis for designing and evaluating interoperability between IT and AT. It formalizes the layered architecture of hardware-to-hardware, hardware-to-software, and software-to-software connections that have long been implicit in the IT definitions of ISO/IEC JTC 1. It also recognizes the central role that accessibility application programming interfaces (accessibility APIs) play in aiding this interoperability.

This part of ISO/IEC 13066 identifies a variety of APIs that are described further in other parts of ISO/IEC 13066. These APIs can be used as frameworks to support IT–AT interoperability.

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Information technology — Interoperability with assistive technology (AT) —

Part 1: Requirements and recommendations for interoperability

1 Scope

This part of ISO/IEC 13066 defines the responsibilities of different information technology (IT) and assistive technology (AT) functional units in supporting interoperability. It recognizes that AT can be provided both as functional units that are installed or otherwise connected to a system or can be utilized by being provided as a service which is accessed via communications connections. It bases these responsibilities on fundamental IT definitions of major types of functional units. It focuses on the utilization of standard, public interfaces for functional units and on the provision of accessible documentation of their capabilities.

This part of ISO/IEC 13066 recognizes that it is implemented both in conventional computer systems and as a major component of other systems within the wider scope of information and communications technology (ICT). This part of ISO/IEC 13066 recognizes the fundamental role of operating systems and application programming interfaces (APIs), in managing interoperability, and in providing guidance to developers of other functional units. It also recognizes that different operating systems will have their own standardized methods of supporting interoperability.

This part of ISO/IEC 13066 does not define or require specific technology, commands, APIs, or hardware interfaces. It defers to other existing standards and supports the development of new standards in these areas.

It identifies a variety of common accessibility APIs that are further described in other parts of ISO/IEC 13066.

2 Terms and definitions

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

2.1

accessibility API

set of programming interfaces designed specifically to provide accessibility services

NOTE An accessibility API is a special instance of an API.

2.2

accessibility services

services provided by an operating system or other platform software, commonly in the form of APIs (application programming interfaces) that are used by software to expose information about the user interface and events to assistive technologies and that provide two-way communication with assistive technologies, including exposing information about objects and events

NOTE Accessibility services might provide additional information used by assistive technologies, e.g. about operating system status.