TECHNICAL REPORT

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Information technology — Guidelines for the design of icons and symbols accessible to all users, including the elderly and persons with disabilities

Technologies de l'information — Lignes directrices pour la conception d'icônes et de symboles accessibles à tous les utilisateurs, y compris les personnes âgées et les personnes handicapées

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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.

In exceptional circumstances, the joint technical committee may propose the publication of a Technical Report of one of the following types:

— type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;

— type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;

— type 3, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

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Introduction

Computer icons are typically graphical objects that are interacted upon via direct manipulation means to achieve some specific functionality. The specialized abilities required to perform such interactions may limit the possible range of users and environments in which icons are used and thus may limit access to the underlying functionality provided by icons. This Technical Report identifies various attributes and operations that can be implemented as part of an icon or graphical user interface symbol to provide greater accessibility to its underlying functionalities.

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Information technology — Guidelines for the design of icons and symbols to be accessible to all users, including the elderly and people with disabilities

1 Scope

This Technical Report provides recommendations relating to the design of icons to support accessibility by the elderly and people with disabilities. These recommendations assist accessible implementation of all icons for users. While these recommendations were developed to meet the needs of the elderly and people with disabilities, they can also provide greater accessibility to a wider range of users in a variety of different contexts.

This Technical Report introduces a set of attributes and operations that can be implemented as features of graphic icons to make the functionality of these icons accessible to the widest possible range of users. Textual attributes are emphasized in this Technical Report because they can be rendered in various alternate modalities. ISO/IEC 11581-1 provides guidance on the graphic aspects of icons. Specific renderings of these attributes (or of icons in general) are not dealt with as part of this Technical Report.

2 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 9241-3, *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 3: Visual display requirements*

ISO 9241-14, *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 14: Menu dialogues*

ISO/IEC 10646, *Information technology — Universal Multiple-Octet Coded Character Set (UCS)*

ISO/IEC TR 11580, *Information technology — Framework for describing user interface objects, actions and attributes*

ISO/IEC 11581-1, *Information technology — User system interfaces and symbols — Icon symbols and functions — Part 1: Icons — General*

ISO/IEC 11581-3, *Information technology — User system interfaces and symbols — Icon symbols and functions — Part 3: Pointer icons*

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