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**Information technology — Framework for
describing user interface objects, actions
and attributes**

*Technologies de l'information — Modèle pour décrire des objets, des
actions et des attributs pour l'interface utilisateur*

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Contents

Page

Foreword	v
Introduction.....	vi
1 Scope	1
2 Terms and definitions	1
3 Modelling objects, actions, and attributes.....	3
4 Common properties of objects, actions, and attributes.....	5
4.1 Software identification of objects, actions, and attributes	5
4.1.1 Internal properties of objects, actions, and attributes	5
4.1.2 Internal properties of implemented objects, actions, and attributes	5
4.1.3 Standard internal identifiers.....	5
4.1.4 Standard of internal states of objects, actions, and attributes	5
4.1.5 Specification of internal identifiers	6
4.1.6 Implementation of internal identifier	6
4.2 Information properties of objects, actions, and attributes	6
4.2.1 Labels	6
4.2.2 Uniqueness of labels.....	6
4.2.3 Understandability of labels	6
4.2.4 Descriptions	6
4.2.5 States	7
4.2.6 Standard information properties of objects, actions, and attributes.....	7
4.2.7 Clear and unambiguous purpose	7
4.2.8 Standardized English version of labels, descriptions, and state information.....	7
4.2.9 Use of information properties of objects, actions, and attributes	7
4.2.10 Result of selection of a label.....	7
4.2.11 User control of labels.....	7
4.2.12 User control of descriptions	7
4.2.13 Standardized translations of labels and descriptions.....	8
4.2.14 Language of labels, descriptions, and state information.....	8
4.2.15 Developer based translations of labels and descriptions.....	8
4.2.16 Implementation of alternate languages.....	8
4.3 Representation properties of objects, actions, and attributes	8
4.3.1 Use of representation properties of objects, actions, and attributes	8
4.3.2 Textual properties	8
4.3.3 Iconic representation	8
4.3.4 Tonal representation.....	8
4.3.5 Tactile and Haptic representation.....	9
4.3.6 Standard representation properties of objects, actions, and attributes	9
4.3.7 Variations of representations.....	9
4.3.8 Cultural and linguistic sensitivity of representations	9
4.4 Operational properties of objects, actions, and attributes	9
4.4.1 Separation of operations	9
4.4.2 Selection of an object, action, or attribute.....	9
4.4.3 Obtaining information.....	10
4.4.4 Modifying values	10
4.4.5 Removing and restoring items.....	10
4.4.6 Activation of function.....	10
4.5 Technical specifications.....	10
5 Optional properties	10
5.1 Attribute specific optional properties	10

5.1.1	Inclusion of attribute specific optional properties	10
5.1.2	Values	11
5.1.3	Constraints	11
5.1.4	Permitted values	11
5.1.5	Default values.....	11
5.1.6	Higher structure	11
5.1.7	Peer structure.....	11
5.1.8	Lower structure.....	11
5.1.9	Physical structure.....	11
5.2	Operation specific optional properties.....	11
5.2.1	Inclusion of operational specific optional properties	11
5.2.2	Pre-conditions.....	12
5.2.3	Post-conditions.....	12
5.2.4	Error conditions	12
Annex A (informative) Developers of this Technical Report		13

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.

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 TR 11580, which is a Technical Report of type 2, was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

Introduction

As end users are involved with more and more different applications, they use similar or equivalent objects, actions and attributes that have been implemented in very different ways from one another. This leads to an increasing need for developing usable standards for user interface objects, actions and attributes. However, as each new standard is proposed, it can choose which aspects to emphasize and which to omit regarding the user interface objects, actions and attributes that it describes.

- a) The lack of a format for describing user interface objects, actions and attributes has led to a number of different standards being developed that only partially describe their names and/or properties. This provides developers with incomplete guidance and leads to the development of similar but incompatible user interface objects, actions and attributes.
- b) There is an increasing need to provide consistent standards for user interface objects, actions and attributes. This Technical Report will support this activity.

This Technical Report provides a format and guidance for describing and implementing user interface objects, actions and attributes.

Information technology — Framework for describing user interface objects, actions and attributes

1 Scope

This Technical Report defines a format for describing user interface objects, actions and attributes. It provides a basis for standardizing the names and properties of user interface objects, actions and attributes across multiple applications and platforms.

NOTE User interface objects as defined and discussed in this Technical Report are not necessarily equivalent to objects in the software engineering sense. All elements of the user interface which are separately identifiable by the user can be considered to be user interface objects, regardless of how they are technically implemented. This Technical Report focuses on their functionalities without specifying a particular method of implementation.

This Technical Report contains guidance both on the standardization of user interface objects, actions and attributes and on the implementation of these objects, actions and attributes in any or all modalities. This Technical Report is primarily intended for developers of standards, style guides, and architectures involving user interface objects, actions and attributes.

EXAMPLE It is used as the basis for icon-specific accessibility guidance in ISO/IEC 19766.

This Technical Report also provides software developers with a range of functionalities to be considered in the design of objects, actions and attributes within user interfaces.