

# INTERNATIONAL STANDARD

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## **Basic principles for graphical symbols for use on equipment —**

Part 4:

### **Guidelines for the adaptation of graphical symbols for use on screens and displays (icons)**

*Principes de base pour les symboles graphiques utilisables sur le matériel —*

*Partie 4: Lignes directrices pour l'adaptation de symboles graphiques utilisables sur les écrans et les dispositifs de visualisation (icônes)*

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# Contents

Page

Foreword.....	iv
Introduction .....	v
<b>1 Scope .....</b>	<b>1</b>
<b>2 Normative references .....</b>	<b>1</b>
<b>3 Terms and definitions.....</b>	<b>1</b>
<b>4 Area of application.....</b>	<b>2</b>
<b>4.1 Screens and displays .....</b>	<b>2</b>
<b>4.2 Supporting documentation .....</b>	<b>2</b>
<b>4.3 International Standards.....</b>	<b>2</b>
<b>5 Principles of implementation.....</b>	<b>2</b>
<b>5.1 General usage .....</b>	<b>2</b>
<b>5.2 Types of icons .....</b>	<b>3</b>
<b>5.3 Relationship between graphical symbols and icons .....</b>	<b>3</b>
<b>5.4 Colour .....</b>	<b>3</b>
<b>6 Constructing icons .....</b>	<b>4</b>
<b>6.1 General.....</b>	<b>4</b>
<b>6.2 Cell sizes.....</b>	<b>4</b>
<b>6.3 Location of graphical image in cell.....</b>	<b>5</b>
<b>6.4 Line drawing.....</b>	<b>5</b>
<b>6.5 Creating alternative versions of resolution/implementation.....</b>	<b>6</b>
<b>6.6 Filled areas .....</b>	<b>7</b>
<b>6.7 Distinguishability.....</b>	<b>7</b>
<b>6.8 Representation of arrows .....</b>	<b>7</b>
<b>6.9 Composite icons .....</b>	<b>8</b>
<b>7 Icon behaviours .....</b>	<b>10</b>
<b>7.1 General.....</b>	<b>10</b>
<b>7.2 Status indication .....</b>	<b>10</b>
<b>7.3 Animated icons .....</b>	<b>10</b>
<b>7.4 Dynamic icons.....</b>	<b>10</b>
<b>8 Consistency.....</b>	<b>11</b>
<b>9 Orientation.....</b>	<b>11</b>
<b>Annex A (informative) Examples of graphical symbols adapted as icons.....</b>	<b>13</b>
<b>Annex B (informative) Design guidelines for new icons .....</b>	<b>16</b>
<b>Bibliography .....</b>	<b>19</b>

## 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.

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

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member 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 shall not be held responsible for identifying any or all such patent rights.

In order to collect all requirements concerning basic principles for graphical symbols for use on equipment, ISO/TC 145, *Graphical symbols*, and IEC/TC 3, *Documentation and graphical symbols*, agreed to prepare jointly all parts in this International Standard and to publish them under the general number 80416. For each of the individual parts of this series, only one of the two organizations is responsible. Meanwhile, the technical committees have agreed that no modification will be made to International Standard 80416 except by mutual agreement.

ISO 80416-4 was accordingly prepared jointly by Technical Committee ISO/TC 145, *Graphical symbols*, and Subcommittee 3C, *Graphical symbols for use on equipment*, of Technical Committee IEC/TC 3, *Information structures, documentation and graphical symbols*.

ISO 80416 consists of the following parts, under the general title *Basic principles for graphical symbols for use on equipment*:

- *Part 2: Form and use of arrows*
- *Part 4: Guidelines for the adaptation of graphical symbols for use on screens and displays (icons)*

IEC 80416-1, Creation of symbol originals, and IEC 80416-3, Guidelines for the application of graphical symbols are published by IEC.

## Introduction

A graphical symbol is a visually perceptible figure used to transmit information independently of language. Graphical symbols are used on equipment for a wide range of purposes. For such symbols, consistency in the design of families of symbols used in one location, or on similar equipment, helps users to understand the meaning of the symbols. Equally important is the legibility of symbols when they are reduced to small dimensions. Thus, there is a need to standardize the principles for creating graphical symbols for use on equipment to ensure visual clarity and consistency, and thereby to improve recognition.

This International Standard which is a multi-part standard, addresses the basic rules used to create graphical symbols for use on equipment, including line thicknesses, form and use of arrows, negation elements, and use of the basic pattern which serves as a guide for drawing symbols. These design principles are required to be used for all graphical symbols for use on equipment, which are standardized in ISO 7000 and IEC 60417.

Icons can reduce the apparent complexity of a software-user interface, making it easier to learn and use. This part of ISO 80416 provides guidelines for the adaptation of graphical symbols for use on screens and displays (icons).

This part of ISO 80416 is primarily concerned with the adaptation of graphical symbols for use as icons. However, the guidelines may also be used in the development of icons where suitable graphical symbols do not exist. Annex B contains additional guidelines for this purpose. Annex A provides examples of those symbols adapted as icons.

# Basic principles for graphical symbols for use on equipment —

## Part 4:

# Guidelines for the adaptation of graphical symbols for use on screens and displays (icons)

## 1 Scope

This part of ISO 80416 provides guidelines for the adaptation of graphical symbols for use on screens and displays (icons) on a wide range of equipment, such as electrotechnical equipment, photocopiers, vehicle dashboards and home appliances. It also provides principles for maintaining the fidelity of icons to the original graphical symbols.

## 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 7000, *Graphical symbols for use on equipment — Index and synopsis* [Database available at <http://www.graphical-symbols.info/>]

ISO/IEC 11581-2, *Information technology — User system interfaces and symbols — Icon symbols and functions — Part 2: Object icons*

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

ISO/IEC 11581-5, *Information technology — User system interfaces and symbols — Icon symbols and functions — Part 5: Tool icons*

ISO/IEC 11581-6, *Information technology — User system interfaces and symbols — Icon symbols and functions — Part 6: Action icons*

IEC 80416-1, *Basic principles for graphical symbols for use on equipment — Part 1: Creation of symbol originals*

ISO 80416-2, *Basic principles for graphical symbols for use on equipment — Part 2: Form and use of arrows*

IEC 60417, *Graphical symbols for use on equipment* [database available at <http://www.graphical-symbols.info/>]