

BS ISO 9186-1:2014



BSI Standards Publication

Graphical symbols — Test methods

Part 1: Method for testing comprehensibility

bsi.

...making excellence a habit.™

National foreword

This British Standard is the UK implementation of ISO 9186-1:2014. It supersedes BS ISO 9186-1:2007 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PH/8, Graphical symbols.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2014. Published by BSI Standards Limited 2014

ISBN 978 0 580 78007 3

ICS 01.080.10

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 March 2014.

Amendments issued since publication

Date	Text affected
------	---------------

INTERNATIONAL
STANDARD

ISO
9186-1

Second edition
2014-03-15

Graphical symbols — Test methods —
Part 1:
Method for testing comprehensibility

Symboles graphiques — Méthodes d'essai —

Partie 1: Méthode de vérification de la compréhensibilité



Reference number
ISO 9186-1:2014(E)

© ISO 2014



COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	2
5 Preliminary steps	2
6 Comprehension test	3
6.1 General.....	3
6.2 Preparation of test material.....	3
6.3 Respondents.....	6
6.4 Respondents' task in the comprehension test.....	6
6.5 Analysis of the results of the comprehension test.....	6
6.6 Categorizing the results.....	7
6.7 Analysing the categorization of responses.....	7
6.8 Presentation of results.....	8
6.9 Combination of the results from different countries.....	9
6.10 Determination of the most comprehensible variant.....	9
Annex A (normative) Comprehension test	10
Bibliography	18

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 145, *Graphical symbols*.

This second edition cancels and replaces the first edition (ISO 9186-1:2007), which has been technically revised. Annex B has been removed.

ISO 9186 consists of the following parts, under the general title *Graphical symbols — Test methods*:

- *Part 1: Method for testing comprehensibility*
- *Part 2: Method for testing perceptual quality*
- *Part 3: Method for testing referent association*

Introduction

The reason for the publication of this part of ISO 9186 is the increasing use of non-verbal presentation of information in buildings and other places, and for services to the public.

Continued growth of international travel, tourism, and trade requires graphical symbols to be understood. This part of ISO 9186 specifies methods for assessing the comprehensibility of graphical symbols.

This part of ISO 9186 is intended to be used by all Technical Committees within ISO charged with developing specific graphical symbols for their industry, to ensure that there is only one symbol for each meaning. It is also intended to be used by any other organization concerned with establishing the comprehensibility of graphical symbols.

This part of ISO 9186 specifies a method of testing what proportion of people can comprehend a graphical symbol correctly.

ISO 9186-2 specifies a method of testing how well people can identify the elements which make up a graphical symbol.

ISO 9186-3 specifies a method of testing what proportion of people who are familiar with a number of referents relevant to a graphical symbol can associate the graphical symbol with its referent.

Graphical symbols — Test methods —

Part 1: Method for testing comprehensibility

1 Scope

This part of ISO 9186 specifies a method for testing the comprehensibility of graphical symbols. It provides a measure of the extent to which a variant of a graphical symbol communicates its intended message. The purpose of this part of ISO 9186 is to ensure that graphical symbols and signs using graphical symbols are readily understood. The intention is to encourage the development of graphical symbols which are correctly understood by users when no supplementary (i.e. explanatory) text is presented. When such a graphical symbol cannot be developed, it might be necessary to present a graphical symbol together with supplementary text explaining its meaning in the language of the intended users.

NOTE 1 Alternatively, it could be necessary to inform people about the meaning of the graphical symbol by including its meaning in manuals, instructions, or training.

NOTE 2 ISO 9186-2 specifies a method for testing the perceptual quality of graphical symbols by measuring the extent to which the elements of the graphical symbol can be correctly identified. ISO 9186-3 is under development; it is intended to specify a method of testing the association of graphical symbols with their referents and be applicable to those situations where the viewer tested might initially be unfamiliar with the referents.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 9241-303, *Ergonomics of human-system interaction — Part 303: Requirements for electronic visual displays*

ISO 9241-400, *Ergonomics of human-system interaction — Part 400: Principles and requirements for physical input devices*

ISO 9241-5, *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 5: Workstation layout and postural requirements*

ISO 9241-12, *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 12: Presentation of information*

ISO 17724, *Graphical symbols — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions in ISO 17724 and the following apply.

3.1

comprehension test

procedure for quantifying the degree of understanding of a proposed graphical symbol

3.2

function

meaning of a referent which the symbol is intended to convey