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Symbols

Australian Standard 2342, Part 2—1980

**THE DESIGN AND USE OF GRAPHIC
SYMBOLS AND PUBLIC INFORMATION
SYMBOL SIGNS**

**Part 2—METHOD FOR
DETERMINING THE
NEED FOR A SYMBOL
AND FOR
ESTABLISHING THE
DESIGN CRITERIA**



STANDARDS ASSOCIATION OF AUSTRALIA
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THE FOLLOWING SCIENTIFIC, INDUSTRIAL, CONSUMER AND GOVERNMENTAL organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Council of Trade Unions
Australian Road Research Board
Australian Tourist Commission
Confederation of Australian Industry
Department of Immigration and Ethnic Affairs
Department of Productivity, Melbourne
Ethnic Affairs Commission, N.S.W.
Electricity Commission of New South Wales
Flinders University of South Australia
Industrial Design Institute of Australia, N.S.W. Chapter
Institute of Technology, Western Australia
Monash University
National Association of Australian State Road Authorities
Railways of Australia Committee
Royal Australian Institute of Architects
Sydney College of the Arts
University of New South Wales
University of Sydney
Victorian College of Optometry, University of Melbourne
Victorian Ministry of Immigration and Ethnic Affairs

In addition a Social Worker and a Safety Superintendent of two industrial organizations were coopted to the committee.

This standard, prepared by Committee MS/3, Public Information Symbols, was approved on behalf of the Council of the Standards Association of Australia on 4 February 1980 and was published on 1 April 1980.

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This standard was issued in draft form for public review as DR 78142.

AUSTRALIAN STANDARD

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Part 2

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AS 2342, Part 2—1980

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PREFACE

This standard was prepared by the Association's Committee on Public Information Symbols as the second in a comprehensive series of standards intended for use in the development and implementation of standard graphic symbols and graphic symbol signs for general information. This standard is intended as a guide in considering the need for graphic symbols.

It has become popular to use symbols in a wide variety of contexts. The tendency has been for decisions to be made intuitively, sometimes with unsatisfactory results. Occasionally they become a way in which the responsible authority will merely absolve itself of the task of tackling a more fundamental communication problem. Standards-drafting and other committees proposing the adoption of standard symbols should therefore be prepared to justify, if need be quantitatively, that any new symbol is dealing with a sufficiently general problem and not an anomalous situation which has causes of a more profound nature that are unlikely to be influenced by the use of a symbol.

The first step therefore in the procedures to be followed in developing standard symbols is the establishment of the need for such symbols.

Once the need has been determined for a new symbol, a systematic detailed study should be carried out to establish the necessary design criteria, i.e. the precise message to be conveyed, the field(s) of application and the diversity of the population required to interpret the message.

This standard recommends the procedures to be followed in undertaking these studies. Flowcharts and guidelines on how to proceed with each step are included.

The effectiveness of the design will be further established by testing in accordance with AS 2342, Part 3.

This standard requires reference to the following standards:

- AS 2342 The Design and Use of Graphic Symbols and Public Information Symbol Signs
 - Part 1—General Principles
 - Part 3—Test Procedures for Evaluating Graphic Symbols and Symbol Signs
 - Part 7—Index and Presentation of Standard Graphic Symbols and Symbol Signs in Single Sheet Form

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

for

THE DESIGN AND USE OF GRAPHIC SYMBOLS AND PUBLIC INFORMATION
SYMBOL SIGNSPART 2—METHOD FOR DETERMINING THE NEED FOR A SYMBOL AND FOR
ESTABLISHING THE DESIGN CRITERIA

1 SCOPE. This standard establishes guiding principles for determining the need for a graphic symbol(s) and for establishing the necessary design criteria.

2 DEFINITIONS. The terms used in this standard are defined in AS 2342, Part 1.

3 DETERMINATION OF NEED.

3.1 Flowchart. Flowchart A sets out the procedure for determining the need for a symbol, i.e. whether or not a symbol is the answer to a particular communication problem. Guidelines on how to undertake each of these steps are given in Clause 3.2.

3.2 Procedural Guidelines. The following guidelines expand on the procedures outlined in Flowchart A:

- (a) *Referent.* Give a precise verbal description of the meaning a symbol is intended to convey, whatever the context. This referent must be concise and unambiguous, e.g. drinking water. Responses to tests will be evaluated against this referent.
- (b) *Field of application and user population.* Ensure that all areas in which the message needs to be conveyed are determined and itemized. Research into the number, socio-economic and cultural background of the intended users is necessary to gain a clear picture of the population to be influenced. Such information is necessary before a decision (that a symbol would be more effective than the existing device) can be made.
- (c) *Function.* The development of a symbol must be justified by evidence that it will overcome a problem where other forms of communication have proved ineffective. This evidence should be based on fact rather than supposition.

Examples:

1. *X* number of people per annum are drowned or require assistance on beaches because there are no effective signs warning them against bathing in dangerous areas. An appropriate symbol would reduce this number.
2. *X* number of hospital outpatients have lost their way or complained about poor signposting. *Y* percent of these are tourists or new settlers who cannot speak the national language or who are illiterate in their own language. Symbols would greatly reduce the incidence of misdirection.

On the basis of this kind of information, committees should be able to judge whether or not the introduction of a new symbol is warranted in principle. However, committees

should never assume that symbols cause people to do things they should do but might otherwise not do. For example, a symbol meaning 'No vandalism here' is unlikely to influence the amount of vandalism in the community (it might even result in the sign's being vandalized!).

- (d) *Consideration of communicative devices in current use to fulfil this function.* Every attempt should be made to establish whether or not any other system is currently in use and whether or not it is effective. If it is effective, definite reasons should be available as to why a standard is needed. For example, 'this warning function is present in all factories but a different symbol or sign is used in each'. There is evidence that while new workers are relearning the existing symbols, they are at risk.

If the standard or non-standard method of communication in current use is ineffective, some attempt should be made to discover why. It may well be that a symbol will not change the behaviour of people in that context.

- (e) *Modification of existing means of communication.* If it is thought the existing means would prove effective with some modification or by standardization of the method used, this should be attempted.
- (f) *Need established.* If unsuccessful, justification for the request to SAA Committee MS/3 should be attached to the formal Request for a Standard Symbol (Form A). How this should be done is outlined in Clause 4.

4 DESIGN CRITERIA FOR A GRAPHIC SYMBOL.

4.1 Flowchart. Flowchart B sets out the procedure for establishing the design criteria for a particular symbol once its need has been established. Guidelines on how to undertake each of these steps are given in Clause 4.2.

4.2 Procedural Guideline. The following guidelines expand on the procedures outlined in Flowchart B:

- (a) *Accurate description of referent and function.* Once it has been established that a symbol will be more effective than any other means of communication, the graphic designer must be given a clear and unambiguous description of what the symbol is intended to convey. Careful thought must be given to the wording to be used