AS 2645—1987

Australian Standard®

INFORMATION PROCESSING—DOCUMENTATION SYMBOLS AND CONVENTIONS FOR DATA, PROGRAM AND SYSTEM FLOWCHARTS, PROGRAM NETWORK CHARTS AND SYSTEM RESOURCES CHARTS

This Australian Standard was prepared by Committee IS/1, Information Processing Systems. It was approved on behalf of the Council of the Standards Association of Australia on 10 August 1987 and published on 5 October 1987.

The following interests are represented on Committee IS/1:

Australian Association of Permanent Building Societies

Australian Bankers' Association

Australian Bureau of Statistics

Australian Computer Equipment Manufacturers Association

Australian Computer Services Association

Australian Computer Society

Australian Computer Users Association

Australian Information Industry Association

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PREFACE

This Standard was prepared by the Association's Committee on Information Processing Systems. It is identical with, and has been reproduced from, International Standard ISO 5807-1985; drawn up by ISO TC 97, Information Processing Systems. It supersedes AS 2645-1983* which was based on ISO 1028-1973 and ISO 2636-1973, both now superseded, by ISO 5807-1985.

The purpose of this Standard is to specify symbols to be used in information processing documentation and gives guidance on the conventions for their use in data flowcharts, program flowcharts, system flowcharts, program network charts and system resources charts.

For the purpose of this Australian Standard, the text of the ISO Standard given herein should be modified as follows:

(a) *Terminology.* The words 'Australian Standard' should replace the words 'International Standard' wherever they appear.

(b) *Cross-references.* The references to International Standards should be replaced by references to Australian Standards as follows:

Reference to International Standard	*Appropriate Australian Standard*
ISO 2382/1, Data processing—Vocabulary—Part 01: Fundamental terms.	AS 1189.1, Data processing—Vocabulary—Part 1: Fundamental terms.

* AS 2645 Information Processing—Flowchart Symbols and Conventions

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Information processing—Documentation symbols and conventions for data, program and system flowcharts, program network charts and system resources charts

0 Introduction

This International Standard consolidates the information given in ISO 1028 and ISO 2636, and in so doing, supersedes them.

Charts are widely used to depict various types of information processing problems and their means of solution. This International Standard does not restrict their use to the particular applications exemplified herein.

In-house rules may have to be devised to suit the process or data specification being considered. However, there are guiding principles which, if followed, will enhance readability and expedite cross-reference to the text.

Charts consist of symbols having a given signification, brief explanatory text, and connecting lines. This International Standard does not deal with the wording of the text. Nevertheless, each symbol relates to an unambiguous and meaningful name (unabbreviated if possible) which is consistent throughout the documentation.

Charts may be used at various levels of detail; the number of levels depending on the size and complexity of the information processing problem. The level of detail should be such that the various parts and the interrelationship between the parts are comprehensible as a whole.

Typically there will be a chart of the whole system showing the main constituent parts and this will form the top of a hierarchy of charts; each lower level providing a more detailed description of one or more parts shown on the next higher level chart.

1 Scope and field of application

This International Standard specifies symbols to be used in information processing documentation and gives guidance on the conventions for their use in

a) data flowcharts;

b) program flowcharts;

c) system flowcharts;

d) program network charts;

e) system resources charts.

2 Reference

ISO 2382/1, Data processing—Vocabulary—Part 01: Fundamental terms. [1)]

3 Definitions

For the purpose of this International Standard the definitions in ISO 2382/1 and the following apply.

3.1 basic symbol: Symbol used when the precise nature or form of, for example, the process or data media is not known or when it is not necessary to depict the actual medium.

3.2 specific symbol: Symbol used when the precise nature or form of, for example, the process or data media is known and when it is necessary to depict the actual medium.

3.3 flowchart: Graphical representation of the definition, analysis, or method of solution of a problem in which symbols are used to represent operations, data, flow, equipment, etc.

4 Data flowchart

Data flowcharts represent the path of data in the solving of a problem and define processing steps as well as the various data media used.

A data flowchart consists of

a) data symbols to indicate the existence of data; they may also indicate the medium used for this data;

b) process symbols to indicate the process to be executed on data; they may also indicate the machine function which is used for this process;

c) line symbols to indicate the data flow between processes and/or data media;

d) special symbols to facilitate the reading and the writing of the flowchart.

[1)] At present at the stage of draft. (Revision of ISO 2382/1-1974.)