

Australian Standard[®]

**DATA PROCESSING—
VOCABULARY**

Part 9—DATA COMMUNICATION

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 6 November 1984 and published on 31 January 1985.

The following interests are represented on Committee IS/1:

Australian Bankers' Association
Australian Bureau of Statistics
Australian Computer Equipment Suppliers Association
Australian Computer Users Association
Australian Computer Society
Australian Electrical and Electronic Manufacturers Association
CSIRO, Division of Computing Research
Department of Defence
Department of Science and Technology
Life Insurance Federation of Australia
Office Equipment Industry Association of Australia
Public Service Board, N.S.W.
Qantas Airways Limited
Telecom Australia
Universities and Colleges

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

Australian Standard[®]

**DATA PROCESSING—
VOCABULARY**

Part 9—DATA COMMUNICATION

First published 1985

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 3626 8

PREFACE

This standard was prepared by the Association's Committee on Information Processing Systems.

It is one of a series of standards on data processing vocabularies and is identical with and has been reproduced from International Standard ISO 2382/9—1984, drawn up by ISO/TC 97, Information Processing Systems.

The series comprises the following standards:

- Part 0—Consolidated Index
- Part 1—Fundamental Terms
- Part 2—Arithmetic and logic operations
- Part 3—Equipment technology
- Part 4—Organization of data
- Part 5—Representation of data
- Part 6—Preparation of data
- Part 7—Digital computer programming
- Part 8—Control, integrity and security*
- Part 9—Data communication
- Part 10—Operating techniques and facilities
- Part 11—Control, input-output and arithmetic equipment
- Part 12—Data media, storage and related equipment
- Part 13—Computer graphics and computer micrographics*
- Part 14—Reliability, maintenance and availability
- Part 15—Programming languages*
- Part 16—Information theory
- Part 17—Data base management*
- Part 18—Remote access data and data processing system*
- Part 19—Analog computing
- Part 20—System development*
- Part 21—Interfaces*
- Part 22—(Not allocated)
- Part 23—(Not allocated)
- Part 24—Numerical control of machines

In addition to the alphabetical index in this standard, AS 1189, Part 0, provides a consolidated alphabetical index to the terms defined in AS 1189, Parts 1 to 7, 10 to 12, 14, 16, 19 and 24.

The standards in this series have been prepared over a long period and, in consequence, some inconsistencies could have been introduced in the later standards when compared with the earlier ones. These inconsistencies will be eliminated as far as possible in later editions. This procedure allows for immediate publication of needed standards in this series and permits an element of flexibility in the preparation of a comprehensive vocabulary in view of the dynamics of language.

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

- (a) *Language*. Whereas ISO 2382/9 is printed in a bilingual edition (English and French), only the English text is reproduced herein.
- (b) *Terminology*. The words 'Australian standard' should replace the words 'International Standard' wherever they appear.
- (c) *Clause 0*. The text of Clause 0, Introduction, of ISO 2382/9, is not reproduced herein. In its place there is a Foreword and the text of this Foreword is common to all the standards in this series of Australian standards.
- (d) *Clause 1*. The text of Clause 1, Scope and Field of Application, should be amended to read as follows:
 - (i) First paragraph, second sentence. The words 'in two languages' should be ignored.
 - (ii) Fourth paragraph. The words 'This standard' should replace the words 'This part of ISO 2382 (which will comprise some twenty parts)'.

NOTE: There are now twenty-four standards in this series of Australian standards.

- (e) *Clause 2.10*. In Clause 2.10, Spelling the words 'In this Australian standard' should replace the words in the first line 'In the English language version of this International Standard'.

*In course of preparation.

- (f) *Clause 2.11.* In Clause 2.11, Organization of the alphabetical index, the first two sentences should be replaced by the following two sentences: 'An alphabetical index is provided at the end of this standard. The index includes all the terms defined in this standard.'
- (g) *Cross-references.* The references to International Standards should be replaced by references to Australian standards as follows:

<i>Reference to International Standard</i>	<i>Appropriate Australian Standard</i>
ISO 646, Information processing—7-bit coded character for information interchange	AS 1776, Information processing—7-bit coded character set for information interchange
ISO 1745, Information processing—Basic code control procedures for data communication systems	AS 2749, Information processing—Basic mode control procedures for data communication systems

NOTE: There are no appropriate Australian standards for ISO/R 1087, Vocabulary of Terminology, and ISO/R 639, Symbols for Languages, Countries and Authorities. Copies of these may be purchased from any SAA office.

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

Contents	Page
Foreword	5
Section one: General	
1 Scope and field of application	6
2 Principles and rules followed	
2.1 Definition of an entry	6
2.2 Organization of an entry	7
2.3 Classification of entries	7
2.4 Selection of terms and wording of definitions	7
2.5 Multiple meanings	7
2.6 Abbreviations	7
2.7 Use of parentheses	7
2.8 Use of brackets	7
2.9 Use of terms printed in italic typeface in definition, and use of asterisk	7
2.10 Spelling	8
2.11 Organization of the alphabetical index	8
Section two: Terms and definitions	
09 Data communication	
09.01 General	8
09.02 Network	8
09.03 Transmission	8
09.04 Connections	9
09.05 Communication	10
09.06 Procedures	11
09.07 Equipment	12
Alphabetical index	16

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

for

DATA PROCESSING—VOCABULARY

PART 9—DATA COMMUNICATION

FOREWORD

Data processing gives rise to numerous international exchanges of both intellectual and material nature. These exchanges often become difficult, either because of the great variety of terms used in various fields or languages to express the same concept, or because of the absence of or the imprecision of useful concepts.

To avoid misunderstandings due to this situation and to facilitate such exchanges, it is advisable to select terms to be used in various languages or in various countries to express the same concept and to establish definitions providing satisfactory equivalents for the various terms in different languages.

In accordance with the directions given to the ISO subcommittee in charge of the Vocabulary, the work on it has been mainly based on the usage to be found in the Vocabulary of information processing* established and published by the International Federation for Information Processing and the International Computation Centre, and in the U.S.A. Standard vocabulary for information processing established, published and revised by the American National Standards Institute. (AS 1189—1972 was based on this revised edition.) The subcommittee also considered various international documents or drafts issued by ISO Technical Committee 97 and its subcommittees and other international organizations (such as the International Telecommunication Union) and national drafts or standards.

The definitions have been drawn up with the objective of achieving a proper balance between precision and simplicity. The main objective of this Vocabulary is to provide definitions that can be understood to have the same meaning by all concerned. It may thus be felt that some definitions are not sufficiently precise, do not include all cases, do not take into account certain exceptions, or are in conflict with established uses in particular fields of application.

*North Holland Publishing Company—AMSTERDAM 1966.

Data processing— Vocabulary— Part 09: Data communication

Section one: General

1 Scope and field of application

This International Standard is intended to facilitate international communication in data processing. It presents, in two languages, terms and definitions of selected concepts relevant to the field of data processing and identifies relationships between the entries.

In order to facilitate their translation into other languages, the definitions are drafted so as to avoid, as far as possible, any peculiarity attached to a language.

This International Standard deals with the main areas of data processing, including the principal processes and types of equipment used, the representation, organization and presentation of data, the programming and operation of computers, peripheral equipment and data communication as well as particular applications.

This part of ISO 2382 (which will comprise some twenty parts) deals with the data communication terms that are most commonly used in the data processing community.

2 Principles and rules followed

2.1 Definition of an entry

Section two comprises a number of entries. Each entry consists of a set of essential elements that includes an index number, one term or several synonymous terms, and a phrase defining one concept. In addition, an entry may include examples, notes or illustrations to facilitate understanding of the concept.