

Australian Standard[®]

**DATA PROCESSING—
VOCABULARY**

Part 13—COMPUTER GRAPHICS

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**DATA PROCESSING—
VOCABULARY**

Part 13—COMPUTER GRAPHICS

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PREFACE

This standard was prepared by the Association's Committee on Information Processing Systems. It has been reproduced from International Standard ISO 2382/13-1984, drawn up by ISO/TC 97, Information Processing Systems, and is Part 13 in the AS 1189 series.

The purpose of the AS 1189 series is to facilitate international communication in data processing. This part presents terms and definitions of selected concepts relevant to the field of computer graphics and identifies relationships between the entries. It also deals with the representation and storage of images, the addressing techniques and concepts, the functional units, the processes and methods of operation.

The complete series comprises the following parts:

- 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 and handling 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: Distributed data processing†
- Part 19: Analog computing
- Part 20: System development†
- Part 21: Interfaces between process computer systems and technical processes
- Part 22: Calculators
- Part 23: Word processing†
- Part 24: Numerical control of machines
- Part 25: Local area networks

As this standard consists of several parts prepared over a long period there could be some inconsistencies introduced in the later parts 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 parts and permits an element of flexibility in the preparation of a comprehensive vocabulary in view of the dynamics of language.

* In course of revision.

† In course of preparation.

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Data processing — Vocabulary — Part 13 : Computer graphics

0 Introduction

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 or imprecision of the definitions of useful concepts.

To avoid misunderstandings and to facilitate such exchanges, it is essential to clarify the concepts, 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.

This International Standard was initially based mainly 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 *USA Standard Vocabulary for Information Processing* and its revised edition, established and published by the American National Standards Institute (formerly known as the American Standards Association) Published and draft International Standards relating to data processing and documentation from other international organizations (such as the International Telecommunication Union and the International Electrotechnical Commission) together with published and draft national standards have been considered.

The purpose of this International Standard is to provide definitions that are rigorous, uncomplicated and which can be understood by all concerned. The scope of each concept defined has been chosen to provide a definition that is suitable for general application. In those circumstances, where a restricted application is concerned, the definition may need to be more specific.

However, while it is possible to maintain the self-consistency of individual parts, the reader is warned that the dynamics of language and the problems associated with the standardization and maintenance of vocabularies may introduce duplications and inconsistencies between parts.

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 part of ISO 2382 which will comprise some twenty parts deals with the most currently used concepts on computer graphics.

This part of ISO 2382 also deals with the representation and storage of images, the addressing techniques and concepts, the functional units, the processes and methods of operations.

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.

Occasionally, the same term may be defined in different entries, or two or more concepts may be covered by one entry, as described in 2.5 and 2.8 respectively.

Other terms such as **vocabulary**, **concept**, **term** and **definition**, are used in this International Standard with the meaning defined in ISO/R 1087, *Vocabulary of terminology*.

2.2 Organization of an entry

Each entry contains the essential elements defined in 2.1 and, if necessary, additional elements. The entry may contain the following elements in the following order:

- a) an index number (common for all languages in which this International Standard is published);
- b) the term or the generally preferred term in the language. The absence of a generally accepted term for the concept in the language is indicated by a symbol consisting of five points (.....); a row of dots may be used to indicate, in a term, a word to be chosen in each particular case;