

**SUPERSEDED BY: AS/NZS 3802:1997****AS 3802—1989**  
ISO 8601:1988**Australian Standard®**

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**Data elements and interchange  
formats—Information interchange—  
Representation of dates and times**

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This Australian Standard was prepared by Committee IT/11, Electronic Data Interchange. It was approved on behalf of the Council of Standards Australia on 19 May 1989 and published on 7 July 1989.

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## PREFACE

This Standard was prepared by Standards Australia's Committee on Electronic Data Interchange. It is identical with and has been reproduced from ISO Standard 8601:1988, *Data elements and interchange formats—Information interchange—Representation of dates and times*.

This Standard is one of a series of Standards necessary for the specification of electronic data interchanges using EDIFACT protocols. At the time of publication of this Standard, there are few implementations of EDIFACT protocols in use. It is anticipated that complementary Standards, necessary for the development of other implementations, will become available in the near future.

However, if it is necessary to implement EDI protocols immediately, it is suggested that the protocols covered by the ANSI X.12 Standards (issued by the American National Standards Institute) would probably be acceptable to most respondents. These are commonly used and the ANSI X.12 Committee is working toward the development of an upgrade path to the EDIFACT Standards which will ultimately replace them.

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) *References*. The references to International Standards should be replaced by references to Australian Standards as follows:

<i>Reference to International Standard</i>	<i>Australian Standard</i>
ISO	AS
31-0: General principles concerning quantities, units and symbols	2900.0 Quantities, units and symbols—General principles concerning quantities, units and symbols
31-1: Quantities and units of space and time	2900.1 Quantities units and symbols—Quantities and units of space and time
646: Information processing—ISO 7-bit coded character set for information interchange	1776 Information processing—ISO 7-bit coded character set for information exchange

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# Data elements and interchange formats—Information interchange—Representation of dates and times

## 0 Introduction

**0.1** Although ISO Recommendations and Standards in this field have been available since 1971, different forms of numeric representation of dates and times have been in common use in different countries. Where such representations are interchanged across national boundaries misinterpretation of the significance of the numerals can occur, resulting in confusion and other consequential errors or losses. The purpose of this International Standard is to eliminate the risk of misinterpretation and to avoid the confusion and its consequences.

**0.2** This International Standard includes specifications for the numeric representation of information regarding date and time of the day.

**0.3** In order to achieve similar formats for the representations of calendar dates, ordinal dates, dates identified by week number, periods of time, combined date and time of the day, and differences between local time and Coordinated Universal Time, and to avoid ambiguities between these representations, it has been necessary to use, apart from numeric characters, either single alphabetic characters or one or more other graphic characters or a combination of alphabetic and other characters in some of the representations.

**0.4** The above action has had the benefit of enhancing the versatility and general applicability of previous International Standards in this field, and provides for the unique representation of any date or time expression or combination of these. Each representation can be easily recognized, which is beneficial when human interpretation is required.

**0.5** This International Standard retains the most commonly used expressions for date and time of the day and their representations from the earlier International Standards and provides unique representations for some new expressions used in practice. Its application in information interchange, especially between data processing systems and associated equipment will eliminate errors arising from misinterpretation and the costs these generate. The promotion of this Inter-

national Standard will not only facilitate interchange across international boundaries, but will also improve the portability of software, and will ease problems of communication within an organization, as well as between organizations.

**0.6** Several of the alphabetic and graphic characters used in the text of this International Standard are common both to the representations specified and to normal typographical presentation.

**0.7** To avoid confusion between the representations and the actual text, its punctuation marks and associated graphic characters, all the representations are contained in brackets [ ]. The brackets are not part of the representation, and should be omitted when implementing the representations. All matter outside the brackets is normal text, and not part of the representation. In the associated examples, the brackets and typographical markings are omitted.

## 1 Scope and field of application

This International Standard specifies the representation of dates in the Gregorian calendar and times and representations of periods of time. It includes

- a) calendar dates expressed in terms of year, month and day of month;
- b) ordinal dates expressed in terms of year and day of year;
- c) dates identified by means of year, week numbers and day numbers;
- d) time of the day based upon the 24-hour timekeeping system;
- e) differences between local time and Coordinated Universal Time (UTC);
- f) combination of date and time;
- g) periods of time, with or without either a start or end date or both.