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Date and time — Representations for information interchange —

Part 2: Extensions

*Date et heure — Représentations pour l'échange d'information —
Partie 2: Extensions*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 154, *Processes, data elements and documents in commerce, industry and administration*.

This first edition of ISO 8601-2, together with ISO 8601-1, cancels and replaces ISO 8601:2004, which has been technically revised.

The main changes compared to ISO 8601:2004 are as follows:

- addition of standard representations for concepts not previously supported, such as negative values, qualification, sets, seasons, extended time intervals, selections, grouped units, repeating rules and profiles.

A list of all parts in the ISO 8601 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The purpose of this document is to provide a set of date and time format representations for information interchange beyond those supported by ISO 8601-1.

There are various concepts and representations that many applications find useful not supported by ISO 8601-1, including:

- negative values for time scale components;
- qualification of expressions and time scale components;
- set representation of date and time expressions;
- seasons;
- time intervals with open or unknown starts or ends;
- expression of movable days through date and time selection;
- date and time expressions without digit length limits; and
- profiles for specifying feature support amongst ISO 8601 (all parts) features.

Such concepts are often represented according to various ad-hoc conventions; this document aims to provide a standard syntax for their representation.

The extended representations allow unambiguous interpretation, enforce the confidence of interoperability and minimize the risk of misinterpretations and their consequences.