# KUUPÄEV JA KELLAAEG
# Andmeesitus infovahetuses
# Osa 1: Põhireeglid

# Date and time
# Representations for information interchange
# Part 1: Basic rules
# (ISO 8601-1:2019, identical)

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

| EESTI STANDARDI EESSÕNA | NATIONAL FOREWORD |
|---|---|
| See Eesti standard EVS-ISO 8601-1:2019 „Kuupäev ja kellaaeg. Andmeesitus infovahetuses. Osa 1: Põhireeglid“ sisaldab rahvusvahelise standardi ISO 8601-1:2019 „Date and time. Representations for information interchange. Part 1: Basic rules“ identset ingliskeelset teksti. | This Estonian Standard EVS-ISO 8601-1:2019 consists of the identical English text of the International Standard ISO 8601-1:2019 „Date and time. Representations for information interchange. Part 1: Basic rules“. |
| Ettepaneku rahvusvahelise standardi ümbertrüki meetodil ülevõtuks on esitanud EVS/TK 22, standardi avaldamist on korraldanud Eesti Standardikeskus. | Proposal to adopt the International Standard by reprint method has been presented by EVS/TK 22, the Estonian Standard has been published by the Estonian Centre for Standardisation. |
| Standard EVS-ISO 8601-1:2019 on jõustunud sellekohase teate avaldamisega EVS Teataja 2019. aasta novembrikuu numbris. | Standard EVS-ISO 8601-1:2019 has been endorsed with a notification published in the November 2019 issue of the official bulletin of the Estonian Centre for Standardisation. |
| Standard on kättesaadav Eesti Standardikeskusest. | The standard is available from the Estonian Centre for Standardisation. |

## Käsitlusala

Seda dokumenti rakendatakse infovahetuses Gregoriuse kalendri kuupäevade ja 24 tunni süsteemi aegade ning nende elementide esitamiseks märgistringidena. Standardit saab rakendada ka koordineeritud maailmaajal (UTC) põhinevate aegade ja ajanihete esitamiseks.

See dokument ei käsitle teiste kalendrite kui Gregoriuse kalendri kuupäevaelementide ega teiste aegade kui 24 tunni süsteemi aegade esitamist. Selles dokumendis ei käsitleta selles määratletud esituste märgikodeerimist.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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

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

— conversion of the content as Part 1 with the Part title “Basic rules” due to the addition of another Part 2 “Extensions” of ISO 8601;

— replacement of the term “midnight” with “beginning of day”, disallowing the value “24” for hour;

— update of terms and definitions:

  — “time point” is now “time”;

  — “local time” is now “local time of day”;

  — added definition for “time of day” and “local time scale”;

  — updated definitions for “standard time of day”, “local time of day” and “UTC of day” to rely on “time of day”;

  — combined two “day” terms in different domains for consistency;

  — change of the representation of “leap seconds”;

— clarification of “calendar day” expressions intended to mean “calendar day of week” (etc.);

— amendment of the recurring time interval (3.1.1.11) to provide a link to ISO 8601-2:2019 which contains in Clause 5 the “repeat rules for recurring time intervals”.

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 standard set of date and time format representations for information interchange, in order to minimize the risk of misinterpretation, confusion and their consequences.

This document specifies a set of date and time format representations utilizing numbers, alphabets and symbols defined in ISO/IEC 646. These representations are meant to be both human recognizable and machine readable.

This document retains the most commonly used expressions for date and time of day and their representations from earlier International Standards in the field, including earlier editions of ISO 8601 and its predecessors.

# Date and time — Representations for information interchange —

# Part 1: Basic rules



## 1 Scope

This document specifies representations of dates of the Gregorian calendar and times based on the 24-hour clock, as well as composite elements of them, as character strings for use in information interchange. It is also applicable for representing times and time shifts based on Coordinated Universal Time (UTC).

This document excludes the representation of date elements from non-Gregorian calendars or times not from the 24-hour clock. This document does not address character encoding of representations specified in this document.

## 2 Normative references

There are no normative references in this document.

## 3 Terms, definitions and symbols

### 3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

#### 3.1.1 Basic concepts

**3.1.1.1**
**date**
*time* (3.1.1.2) on the *calendar* (3.1.1.18) *time scale* (3.1.1.5)

Note 1 to entry: Common forms of date include *calendar date* (3.1.2.7), *ordinal date* (3.1.2.8) or *week date* (3.1.2.9).

**3.1.1.2**
**time**
mark attributed to an *instant* (3.1.1.3) or a *time interval* (3.1.1.6) on a specified *time scale* (3.1.1.5)

Note 1 to entry: The term “time” is often used in common language. However, it should only be used if the meaning is clearly visible from the context.

Note 2 to entry: On a time scale consisting of successive time intervals, such as a *clock* (3.1.1.9) or *calendar* (3.1.1.18), distinct instants may be expressed by the same time.

Note 3 to entry: This definition corresponds with the definition of the term “date” in IEC 60050-113:2011, 113-01-12.