

Addressing - Part 4: International postal address components and template language (ISO 19160-4:2023)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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European foreword

This document (EN ISO 19160-4:2023) has been prepared by Technical Committee ISO/TC 211 "Geographic information/Geomatics" in collaboration with Technical Committee CEN/TC 331 "Postal services" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2023, and conflicting national standards shall be withdrawn at the latest by October 2023.

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Endorsement notice

The text of ISO 19160-4:2023 has been approved by CEN as EN ISO 19160-4:2023 without any modification.

INTERNATIONAL STANDARD

ISO 19160-4

Second edition 2023-04

Addressing —

Part 4:

International postal address components and template language

Adressage —

Partie 4: Composants et langages des modèles d'adresses postales internationales





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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).

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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 211, *Geographic information/Geomatics*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 331, *Postal services*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement), and in collaboration with the Universal Postal Union (UPU).

This second edition cancels and replaces the first edition (ISO 19160-4:2017), which has been technically revised.

The main changes are as follows:

"telephone number" has been added as an address element.

A list of all parts in the ISO 19160 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 postal service provides letter, package and parcel delivery on a global and universal basis, without the need for mailers and recipients to enter into explicit service contracts. Postal addresses, which combine private recipient information with publicly known delivery point data, provide the mechanism through which mailers specify the intended recipient and the means by which the postal operator can fulfil its delivery commitment.

Traditionally, postal operators have been highly flexible with regard to the manner in which postal items can be addressed; any form and content of address was acceptable as long as it permitted sufficiently unambiguous determination of the delivery point. Even today, many postal operators pride themselves on their ability, using staff intelligence and local knowledge, to deliver postal items carrying incomplete or unusual address representations.

However, increasing volumes and labour cost rates long ago reached the point at which automation became not only economic, but essential. As a result, it has become more and more vital to ensure that the vast majority of postal items are addressed in a way which can be processed automatically, without risk of misinterpretation.

When mail is sent with addresses that are incorrect or incomplete, there is the possibility of undeliverable as addressed mail (UAA mail) which results in the mail being sent back to a return address, being sent on to a forwarding address or discarded as waste. All this unnecessary work has negative economic consequences.

Today, the vast majority of postal items carry printed addresses which are extracted from computer databases. Such databases need to be maintained in the face of population mobility, creation and retirement of delivery points and changes in their specification, such as renaming of streets, renumbering of properties, etc. Moreover, there is a growing need for validation of addresses in e-commerce and the tendency for organizations to exchange or trade address data and for organizations in one country to hold address data of organizations and individuals in other countries, which might use different approaches to the rendering of postal addresses.

Addresses can be rendered according to rules that differ from country to country or from one mailing event (a batch of mail, e.g. letters or monthly statements, sent by a mailer at one time) to another. This document does not impose any obligation on countries or mailers on how addresses shall be rendered but provides a language to express rendering rules recommended by postal operators for mailing purposes.

Templates specified according to this document may be used to exchange information about address rendering rules on international cross-border mail and domestic mail. These templates are available from the Universal Postal Union (UPU) for all countries which have approved them. This facilitates automated processing of mail and international e-commerce deliveries. Rendition engines based on this document are expected to produce the same results for the same addresses. This is conditional upon using approved templates with the same parameters. Even if this were not the case, consistency remains an appropriate goal.

The intended readers of this document include designers and developers of computer systems that process global postal address data including postal address rendering, those who formulate and implement international addressing policies and anyone seeking to reduce UAA mail.

This document is based on UPU S42, Version 8,[3] and has been developed with UPU. It was adopted by CEN as a replacement for EN 14142-1.

This document extends the list of address components by adding the new address element:

telephone number.

NOTE 1 The preparatory work for this project is described in Reference [2].

NOTE 2 This document implements a recommendation made in Reference $[\underline{2}]$ and focuses solely on addresses for postal purposes. Addresses for other purposes are described in other parts of the ISO 19160 series.

Addressing —

Part 4:

International postal address components and template language

1 Scope

This document defines key terms for postal addressing, postal address components and constraints on their use.

Specifically, this document specifies postal address components organized into three hierarchical levels:

- elements, such as organization name or postcode, which have well-defined conceptual meaning and are not themselves made up of subordinate components, though they can be sub-divided for technical purposes;
- constructs, such as organization identification, which group elements into units form a logical portion of a postal address;
- segments, such as addressee specification, which group related postal address constructs and/or
 postal address elements into units with a specific defined function.

This document also specifies a mechanism for the creation of sub-elements, which correspond to either sub-divisions of element content, such as door type or door indicator or to multiple occurrences and locations of elements in an address, such as levels of administrative regions.

This document does not specify the length of any component nor the value range of any component.

Moreover, this document specifies the codes to identify elements and sub-elements.

Further, this document specifies postal address rendering rules. This includes:

- identification and ordering of output lines in a rendered address;
- conditions for the selection of candidate lines;
- the order and concatenation of postal address components;
- required and optional components;
- parameters to contextualize an address for rendering;
- the formatting of the components, subject to constraints on the space available for that task.

Postal address rendering rules are represented in this document as a postal address template.

Finally, this document specifies language suitable for computer processing to formally express postal address templates.

This document does not cover the topic of data protection. Users of the document are nevertheless reminded that the storage and exchange of personal data are subject to legislation in many countries.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 639-1, Codes for the representation of names of languages — Part 1: Alpha-2 code

ISO 3166-1, Codes for the representation of names of countries and their subdivisions — Part 1: Country code

ISO 15924, Information and documentation — Codes for the representation of names of scripts

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