

# SLOVENSKI STANDARD SIST-TP CEN/TR 14142-2:2011

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Poštne storitve - Baze naslovov - 2. del: Konvencije o kartiranju elementov, obravnavanje načrtovanja predlog, predloge naslovov in navodila za izvajanje

Postal Services - Address databases - Part 2: Element mapping conventions, template design considerations, address templates and rendition instructions

Postalische Dienstleistungen - Adressdatenbanken - Part 2: Konventionen für die Abbildung von Elementen Hinweise für das Vorlagendesign, Vorschriften für Adressvorlagen und -wiedergabe

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Services postaux - Bases de données d'adresses 2 Partie 2: Conventions de disposition des éléments, considérations relatives à la conception des modèles, instructions relatives aux modèles d'adresse et à la présentation des adresses

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# **English Version**

# Postal Services - Address databases - Part 2: Element mapping conventions, template design considerations, address templates and rendition instructions

Services postaux - Bases de données d'adresses - Partie 2: Conventions de disposition des éléments, considérations relatives à la conception des modèles, instructions relatives aux modèles d'adresse et à la présentation des adresses Postalische Dienstleistungen - Adressdatenbanken - Part 2: Konventionen für die Abbildung von Elementen, Hinweise für das Vorlagendesign, Vorschriften für Adressvorlagen und -wiedergabe

This Technical Report was approved by CEN on 7 September 2010. It has been drawn up by the Technical Committee CEN/TC 331.

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# **Foreword**

This document (CEN/TR 14142-2:2011) has been prepared by Technical Committee CEN/TC 331 "Postal Services", the secretariat of which is held by NEN in collaboration with UPU.

NOTE This document has been prepared by experts coming from CEN/TC 331 and UPU, under the framework of the Memorandum of Understanding between the UPU and CEN.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document (CEN/TR 14142-2:2011), is the CEN equivalent of UPU<sup>1)</sup> standard S42-6 Part B. It may be amended only after prior consultation, between CEN/TC 331 and the UPU Standards Board, in accordance with the Memorandum of Understanding between CEN and the UPU.

The UPU's contribution to the document was made, by the UPU Standards Board<sup>2)</sup> and its sub-groups, in accordance with the rules given in Part V of the "General information on UPU standards".

This document is the equivalent to Part B of a two-part UPU Standard, S42: International postal address components and templates. S42 was originally published as a single part standard covering the definition of address components and postal address templates with examples, but has been split into two parts in order to separate the general aspects which apply to all countries and which can be expected to remain stable from the specific aspects which apply to each country considered in itself and conventions adopted by the working group which may be modified in the light of further experience.

EN 14142-1:2011 contains the conceptual hierarchy of segments, constructs, elements and element subtypes, code tables, and the definition of the template languages in order to account for addresses from countries around the world. CEN/TR 14142-2:2011; this part, contains the specific natural language and XML templates, rendition instructions, mapping conventions, and presentation guidelines for each country's addresses that have been provided to the UPU.

<sup>1)</sup> The Universal Postal Union (UPU) is the specialized institution of the United Nations that regulates the universal postal service. The postal services of its 189 member countries form the largest physical distribution network in the world. Some 5 million postal employees working in over 660 000 post offices all over the world handle an annual total of 425 billion letters-post items in the domestic service and almost 6,7 billion in the international service. Some 4,5 billion parcels are sent by post annually. Keeping pace with the changing communications market, posts are increasingly using new communication and information technologies to move beyond what is traditionally regarded as their core postal business. They are meeting higher customer expectations with an expanded range of products and value-added services.

<sup>2)</sup> The UPU's Standards Board develops and maintains a growing number of standards to improve the exchange of postal-related information between posts, and promotes the compatibility of UPU and international postal initiatives. It works closely with posts, customers, suppliers and other partners, including various international organizations. The Standards Board ensures that coherent standards are developed in areas such as electronic data interchange (EDI), mail encoding, postal forms and meters. UPU standards are published in accordance with the rules given in Part VII of the General information on UPU standards, which may be freely downloaded from the UPU world-wide web site (<a href="https://www.upu.int">www.upu.int</a>).

# Introduction

The postal service provides letter, package and parcel **delivery**<sup>3</sup> on a global and universal basis, without the need for 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 posts pride themselves on their ability, using staff intelligence and local demographic 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.

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 suppression of delivery points and changes in their specification such as renaming of streets, renumbering of properties, etc. Moreover, there is a growing tendency for companies to exchange or trade address data and, in the context of the European Single Market, for companies in one country to hold address data of organisations and individuals in other countries, which might use different approaches to the structuring of printed addresses.

In this context, the UPU Postal Operations Council's POST\*Code Project Team charged its sub-project team 2 to develop a standard, covering the definition of address components and **postal address templates**. This standard, International Postal Address Components and Templates, is the result of this development.

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# 1 Scope

This part of the standard describes the address templates for each country, i.e. the specific way an address is formatted in each country, indicating in particular the order in which the various elements appear. The address templates may include rendition instructions, specifying how elements are to be rendered for printing.<sup>4</sup>

EN14142-1:2011 contains material that is not country-specific and is expected to remain stable for a significant period of time. CEN/TR14142-2:2011 contains the country specific information as well as explaining mapping conventions and design considerations that are generic in scope but are still evolving and have a current status rather than a fixed resolution.

What then are the characteristics of the generic material in Part 2? As an example, the definition of (40.17 district) as a postal address element is stable and not country-specific, for example, and thus the definition is assigned to Part 1. At the same time, some of the uses of (40.17 district) to represent different levels and positions, while occurring in one or more specific country templates, reflect generic element mapping conventions and generic template design considerations. These generic conventions and considerations are explained in Part 2, along with generic rendition instructions used in country templates, together with the country templates, country-specific rendition instructions, and presentation rules defined by each country.

Terms in **bold** are defined either in clause 3, Terms and Definitions or clause 5, Postal Address Components.

<sup>&</sup>lt;sup>4</sup> The Brazilian postcode, for example, is saved in the format 99999999 in a database. However, in an address, the postcode should be printed in the format 99999–999. The rendition instructions must therefore state that the Brazilian postcode is printed with a dash between the 5th and 6th digits.

It is expected that Part 2 shall be modified from time to time to add new countries, modify country templates, and as appropriate, to elaborate upon the element mapping conventions and template design considerations and to amplify the roster of generic rendition instructions. Notwithstanding the potential for modifications, the stable content of Part 1, taken together with the current understanding of these generic conventions and parameters, including the NLT and PATDL templates for those countries represented, is intended when taken together to comprise a consistent international standard.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

See Part 1 of this standard, EN14142-1:2011.

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN14142-1:2011 apply.

# 4 Symbols and abbreviations

See Part 1 of this standard, EN14142-1/2011D A RD PREVIEW

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# 5 Element Mapping Conventions and Template Design Considerations

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# 5.1 About Element Mapping Conventions ards/sist/d2112d0f-2bdc-4cbd-8589-

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Element mapping conventions are procedures developed within the CEN/TC331 to use elements, element sub-types and their associated codes in agreed upon ways to handle various generic or specific situations that arise when using the standard to develop postal address templates for different countries.

- NOTE 1 Element mapping conventions determine how to deploy the roster of element and element sub-types, particularly in situations where more than one alternative mapping is feasible.
- NOTE 2 Element mapping conventions may help to determine how various address types, particularly those which are distinctive or unusual, can be mapped while using the standardized elements and element sub-types.
- NOTE 3 Element mapping conventions may help to determine how complex a branching structure within a template, and in turn the entire structure of the template, needs to be to represent a set of addresses, and when it can be simplified.

## **5.2 Element Mapping Conventions**

# 5.2.1 Basic Rule Regarding Addressee

By convention, each address as presented on a mail piece should have at most one logical addressee.

NOTE 1 If the mail piece is addressed to a person, the person is the addressee, and if to a company, the company is the addressee. If it is addressed to two or more persons, they are jointly the addressee. There are then two physical addressees but only one logical addressee. If it is addressed to a person at a company, the person is the addressee and the company is the mailee, implicitly if not explicitly. Through the concept of an implicit mailee the precision of the identification of the addressee is protected.

- NOTE 2 In some countries, such as the United States, it is not customary to think of a mailee being present in an address unless there is an explicit mailee role descriptor. There is an explicit mailee if the mail piece is addressed to one party "in care of" a second party. In that case the second party is the mailee. It may be that in some countries, such as developing countries with limited complexity in their address structure, even the explicit mailee is not recognized.
- NOTE 3 Mail without an addressee is possible in many countries. This case is supported in this standard and can be represented in address templates.

#### 5.2.2 No Mailee Without Addressee

By convention, there can be no mailee without an addressee.

- NOTE 1 The mailee has responsibility for assuring that the mail piece reaches the addressee, and in that sense the mailee requires an addressee.
- NOTE 2 Using this convention, and the basic rule regarding the addressee, it is possible to define which combinations of addressee and mailee are supported in this standard. See 5.4 under Template Design Considerations.

## 5.2.3 Mailee Not Both Preceding and Succeeding

By convention, mailee information may either precede or follow the addressee, but not both at the same time.

- NOTE 1 The preceding analysis implies that certain combinations of name and address elements are to be regarded as invalid, or at least unsupported within the standard. The convention has been discussed that the addressee can be an individual or an organisation but not both at the same time. Furthermore, there should not be a mailee without an addressee. It is also expected that a mailee organisation can either precede or follow an individual addressee, but not both at the same time. This simplifies template design for the addressee and mailee.
- NOTE 2 In the process of designing templates, the focus has been on specifying the valid alternatives, not on evaluating all possible combinations and then eliminating any that are not considered valid. However, the fact that some combinations are invalid or unsupported should be taken into account by implementers of the standard. They will need to decide on a case by case basis how best to handle the unsupported cases, either by discarding inputs that are considered superfluous, or by allowing them to pass through the templates, or by processing them through customized template extensions. In any event, a PATDL implementation should be capable of issuing warnings in such cases.

## 5.2.4 Indirect Identification of Addressee and Mailee

By convention, an addressee or mailee may be identified by name, or by title without a name, or by organisational component, or by organisation name, or by a form of address.

- NOTE 1 The title is located within the element hierarchy as part of the organisation information. However, as an alternate way of designating an individual whose name one may not know, it is a form of individual addressee. Therefore in the templates, and in the common initial section, title is associated in the same choice group with name elements rather than with organisation elements. Though there has been some dialogue about whether there can be a title without an organisation, there is no doubt that the title may be known and the associated organisational information not known.
- NOTE 2 An addressee can be identified indirectly by a form of address such as "Postal Customer" or where appropriate, not identified at all in the case of unaddressed mail.

#### 5.2.5 Granularity Constraints

By convention, within a template, if a particular element is deployed, element sub-types of that element are ineligible for use in that template, while if any of its element sub-types are deployed, an element is ineligible for use in that template. This is a template level granularity constraint. Suppose that for each address processed with the template, if an occurrence of a particular element is included in the rendition, its element sub-types are not included in that rendition, while if any of its element sub-types are included in the rendition, the corresponding occurrence of the element is not included in the rendition. This is an address level granularity constraint.

NOTE 1 All CEN/TR4142-2 country templates have a template level granularity constraint.

- NOTE 2 Under the template level granularity constraint, it is not correct to use (40.17) in one part of a template and then decide to add (40.17-1-0) in another part. After all, (40.17-1-0) may have a specific meaning, rather than just being a way to differentiate two placeholders for information items. The first instance may represent a preceding position, or a primary level, or a specific representation. The first part may represent a type as opposed to an indicator. It is necessary to take note of this in the context of implementation by matching levels of granularity when linking database cells to the template.
- NOTE 3 Situations may arise in implementation of this standard in which varying levels of granularity may be found within an address dataset. If for some reason this situation is not resolved by further parsing an element or by combining its element sub-types, it may be handled by a template modified to follow an address level granularity constraint. For example, the template could branch between using an element and using its sub-types based on testing the content of the element. In this situation, each address has its own granularity constraint, but at different levels of granularity for different addresses.
- NOTE 4 In implementation of this standard, if the element is treated as a programming object, there could be data available upon request that can be accessed at both the element and element sub-type levels. If this flexibility could be counted upon, so that requests can be handled flawlessly at the element or element sub-type level, then neither form of granularity constraint may be needed.
- NOTE 5 A postal service may have a limited amount of granularity in its database storage and identification of elements in tables and columns. This may be because of a design that is not element based. It may be present even when the design is element based, if the storing of constructs and complex combinations of elements saves on storage space or combines sparse elements with more frequently occurring elements. In this event, the implementer of this standard may define more granularity in deploying elements and element sub-types in a template then the underlying postal data recognizes. This capability should be employed with discretion, however, since there may be complex parsing required to fill the elements in the application database from the postal database. Notwithstanding this cautionary statement, this additional effort is generally appropriate when the increased granularity provides for using elements and element sub-types recognized in this standard.
- NOTE 6 In the US, Main and Street are stored in separate fields, but Calle and Ortega are stored in the same field, which generally stores the thoroughfare name. That is because Street is considered as a succeeding thoroughfare qualifier, while there is no field for a preceding thoroughfare qualifier. In general it is appropriate for an application to store the information the same way as it is stored in the postal database, although in this case that storage method is not completely consistent with respect to the CEN/TR14142-2 elements. It would be consistent to store both Main Street and Calle Ortega in (40.21 thoroughfare), though that would mean that two fields in the USPS database would have to be combined to cover the case of Main Street. It would be consistent and appropriate to use three element sub-types for this case and store Calle in (40.21-1-3 preceding thoroughfare qualifier) and Street in (40.21-2-3 succeeding thoroughfare qualifier) while Main or Ortega is found in (40.21-1-1 thoroughfare name). That is how the USPS template is written.
- NOTE 7 Some thoroughfare constructs have connecting words between the thoroughfare type and the root of the thoroughfare name. An example is Rue de la Paix. In different countries, these are stored in postal databases in at least three ways. In one case, "Rue" is stored as a thoroughfare type and "de la Paix" as the thoroughfare name. In a second case, "Rue de la" is the thoroughfare type, and "Paix" is the thoroughfare name. In a third case, "Rue" is the thoroughfare type, "Paix" is the thoroughfare name, and "de la" is stored in a separate field. The CEN/TR14142-2 element mapping conventions do not prescribe a common approach to these situations, and yet it is appropriate for an application to store the data in the way it is stored in postal databases, which would in this situation lead to different approaches for the different countries. Therefore CEN/TR14142-2 includes the element sub-type "thoroughfare name prefix", which in combination with the other element sub-types for thoroughfare allows support for all three of the above alternatives.

## 5.2.6 Cross Reference Addresses

Cross reference addresses identify a delivery point by the intersection of two or more axes in a manner that may not uniquely specify the delivery point.

By convention, cross reference addresses are mapped as supplementary delivery point data.

- NOTE 1 Consider the hypothetical addresses "Third and Main" or "Calle 4 y Avenida 7", which refer to the intersection of two or more streets. This type of address may be considered inexact because it typically does not reference a delivery point in a unique manner. There could be several delivery points at the intersection of Calle 4 and Avenida 7, and they may not necessarily all have the same postcode.
- NOTE 2 A more complex case including this feature can be found in Costa Rica, where there is a hybrid of a street address and a cross street address. In the case from Costa Rica, the address line is "Calle 1 Ave 3 y 4 Casa 23". This

contains a delivery point that may be uniquely specified, namely "Calle 1 Casa 23". However, the question remains as to how to map the additional information conveyed by "Ave 3 y 4", which may be either supplementary or perhaps essential if there are other streets nearby called "Calle 1".

NOTE 3 This convention implies that it is not required to carry this sort of information in a separate element with its own specific meaning, such as "cross reference information", as part of a definition of standardized postal addresses. Defining this data as supplementary is based on the belief that a standardized address structure should uniquely identify delivery points. Cross reference information is very useful from time to time as part of a postal address. It enables a carrier or other party to approach closer and closer to an address, and then see the delivery point. There may be several candidate points within the field of view of the carrier, but the situation is not necessarily ambiguous for even an inexperienced observer, and not at all for one who has been there before. But it lacks the unique description of the delivery point for the benefit of all those not approaching in person, and that makes it an anachronism for standardized addresses for global commerce.

NOTE 4 Cross reference information, however, is useful not only as a heuristic for finding addresses that are not precisely defined, but also as a way to locate a physical place that does have a postal delivery point uniquely defined. Consider an address in Manhattan on the Avenue of the Americas. Normally a specific number on that street is defined which in conjunction with secondary identifiers such as suite numbers will uniquely identify a postal delivery point. But in order to leave time to arrive by taxicab for a meeting, then it is useful to know the cross street, such as 67th Street, in addition to the identifiers defining uniqueness. If starting from 59th Street, this is not likely to be a problem, and walking may be an option. It was concluded that this information had value in the context of standardization, but not specifically postal value. Therefore the convention was defined to put the information in "supplementary delivery point data".

NOTE 5 In the event that no delivery point is identified, all the information that comprises the cross reference should be mapped to supplementary delivery point data. Therefore, in the first example above, "Third and Main" is mapped to element (40.34), and the second example, "Calle 4 y Avenida 7" is handled the same way. After all, it would be arbitrary which of the two alternatives is the correct thoroughfare. But in the third example, where a delivery point is specified, only "Ave 3 y 4" is mapped to element (40.34). In all these cases, the cross reference information can be retained even in the event that a unique delivery point description is acquired. DARD PREVIEW

#### 5.2.7 Path addresses

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Path addresses define a delivery point in terms of how it is reached from a salient point of origin.

By convention, path addresses are mapped as supplementary delivery point data. delivery point data.

NOTE 1 Path addresses are found in various countries and common in Latin America, In path addresses, an addressee is located by giving directions outward from a landmark point. One example of this is in Costa Rica: "200 norte/25 este del Banco Nacional". Another case is in Nicaragua: "Del Hotel Granada 1c. arriba 75 vrs. alsur". In English this would translate to "one street up and 75 rods to the south". These details help to fulfill the purpose of the path address, which is anachronistic in comparison with the intention in the standard. That intention is to document locally constructed natural addresses that are reached by postal services, stored in postal databases, and locally and globally unique to facilitate productive use. The need to stipulate how to navigate physical space to locate the addressee is peripheral in this context. This information is in that sense supplementary. It is identified in the element list as a generic category of supplementary delivery point data. Despite the generic description, that element has the same functionality as any other, and its use helps to determine how the templates are structured. The information stored in it is still recognized as valuable in another context, and it may still the best address available in some circumstances, and for those reasons path addresses are supported using the capabilities of this standard.

NOTE 2 Because the path address type is considered as anachronistic based on the criteria in use for this standard, there is not a requirement to parse out the concept of path and to define the element sub-types for this concept. Otherwise that would be a considerable task. It may be expected that as addressing systems improve in precision, this sort of traditional form should gradually become less frequent. In the meantime, there are several ways that this address type can be handled in CEN/TR14142-2. One is to put the entire string in (40.34 supplementary delivery point data), and another is to map the landmark as a building and put the rest of the information in (40.34). What is decisive here is that the landmark is definitely not the delivery point. Therefore at most it has to be considered supplementary data. As a result the convention is to consider the entire string as supplementary delivery point data.

NOTE 3 There is a potential need for address data that is based on a full coordinate system with an origin point rather than a physical landmark as the base. Systems such as latitude and longitude are widely used and are natural supplements to postal addresses. Various efforts have been made to make such coordinate based codes part of postal addresses. No recommendation has as yet been developed in this area.

#### 5.2.8 Dual Addresses

Dual addresses are addresses which contain more than one delivery point.

By convention, each country may specify whether dual addresses are to be considered as standardized addresses, and if so, those addresses can be mapped using orderings of the elements and element sub-types provided.

NOTE 1 This may typically result from a business having a physical location and also securing a post office box.

NOTE 2 Many countries specify that standardized addresses contain only one delivery point. In that event, additional addresses for one party can be mapped using segment replication, thus making it clear that a different delivery point is designated. For countries such as Switzerland which support dual addressing, both delivery points are mapped into the primary segments (10, 20, 30 and 40).

EXAMPLE 14 N Main St

#### 5.2.9 Sectoral Addresses

By convention, sectoral addresses are mapped using multiple levels of district as appropriate.

NOTE 1 Sectoral addresses are those which include a sector type and indicator, generally part of a urban addressing pattern which has multiple indicators for the same sector type. The sector indicator may be a commonly known name for an area, or it may be assigned for postal or administrative purposes. Sectors meet the criteria for districts, and in CEN/TR14142-2 sectors are mapped as districts, using element sub-types for type and indicator. In many cases, there are multiple levels of sector type and indicator that are mapped to multiple levels of district.

NOTE 2 Sectoral addresses may be found in pure or hybrid form. In pure form, the sectoral information replaces any thoroughfare information, though the element (40.24 street number of plot) may still be used. In hybrid form, sectoral addresses are found together with thoroughfare information.

EXAMPLE Countries that use sectoral addressing for some situations include Japan, Brazil, the Republic of Korea, Ethiopia, and Mali, among others. An example of a sectoral address from Brazil is as follows: "SQS 413 Bloco H Entrada A Ap 106".

## 5.2.10 Inverted Order of Address Lines

Names and addresses that are presented with the addressee and mailee first followed by narrow and then increasingly broad delivery point specification information are considered to be in normal order.

By convention, partial or full inverted order of address lines is supported in this standard at the template level.

NOTE The address type with inverted order of lines, starting from a wide geographic area and narrowing down to the person, was perfectly logical at the time when almost all mail was within a country. This practice was widespread in the former Soviet Union and nearby countries. Adding the country name at the bottom of the address block for cross border mail, admittedly an arbitrary convention since it could have been added at the top, has tipped the balance and made that no longer a logical sequence. The apparent trend is toward starting with the addressee and building the address outward to broader delivery point information. The prevalence of inverted order has changed in countries such as the Russian Federation and the Ukraine. This may be an opportunity to encourage further standardization on the basis of placing the addressee at the top of the block. But there are still cases of fully and partially inverted order of address lines in Asia and Eastern Europe shown in the UPU address samples. In this situation the template is built according to recommendations of the relevant postal service, and the inversion is documented. In the event of a change in local practice, a revised template can be provided. The NLT and PATDL template languages are designed in such a way as to handle the inverted order, the normal order, or other orderings, and can also support multiple different orderings within the same template as long as trigger conditions can be defined.

#### 5.2.11 Logical vs. Sequential Assignment

In a group of elements or element sub-types that have a similar function, logical assignment is based on the definitions of the elements and element sub-types, while sequential assignment is based on the order in which the items are encountered.

By convention, CEN/TR14142-2 supports both logical and sequential assignment of instances of an element to the element sub-types, but at the template level, consistency is required.

NOTE For elements such as given name with element sub-types based on parts, it is typical in many countries to map the first of several given names to Part 1, the second to Part 2, and so on. But for secondary identifiers, this standard defines wing, stairwell, floor and door, and the distinctive semantics of these elements calls for an apartment number to be mapped to the door element. Had these been defined as sequential instances of a secondary identifier, the mapping convention may have been different. For surnames with two parts, the user might decide to specify a logical assignment or to default to a sequential assignment. What is common to all these cases is that the template should reflect the mapping conventions actually used.

## 5.2.12 Extension vs. Multiple Secondary Identifiers

By convention, the element (40.28 extension designation) provides an alternate way to map one or more undifferentiated types of secondary identifier such as wing, stairwell, floor and door.

NOTE This convention should be applied at the template level and in database design. Different postal services have different practices with respect to the identification of distinct types of secondary identifier. There are cases where the element (40.24 street number or plot) includes the extension designation, cases in which (40.28) holds one or more types of secondary identifier, and cases in which (40.28) is not used at all.

# 5.2.13 Postcode vs. Sorting Code

By convention, in mapping postal data to CEN/TR14142-2 elements, not all codes issued by postal services are postcodes.

NOTE 1 Consider the example of Liberia with "1000 MONROVIA 10". If the 1000 is a post code and the 10 is a sorting code, then those are distinct codes. On the other hand, they are both postal codes, in the sense that they are used for postal sorting and distribution. If they are both postal codes, and especially if assigned by the same authority, they could be mapped as parts of a postcode, and the template could handle the positional variations with respect to the city name. Instead Part A of this standard supports reserving the postcode element for the information that is long term and of national scope. The sorting code is mapped to (40.35 delivery service qualifier). This fits with the definition for that element. Several other countries have similar situations.

NOTE 2 A somewhat different situation occurs in Benin and Burkina Faso. In Benin can be found "03 BP 1000", where "BP 1000" is a post office box. But "03" is not a postcode in the full sense, since apparently Benin at this time lacks a national postcode system. Instead "03" represents the delivery post office, and functions as a sorting code. Here also the element (40.35) may be used for the sorting code information.

# 5.2.14 Country Name Position

By convention, and in accordance with UPU recommendations for cross border mail, the country name and country level information should be presented below any other more specific delivery point information, including postcodes.

NOTE A departure from standardization that is sometimes observed is to have the postcode on the last line, either alone or with the country name, rather than having the country name on the last line. This may make sense locally if the postcode is defined broadly enough to include cross border mail. But it is still a local postcode and therefore it will have the potential for confusion when outgoing mail is processed outside the local area, and also for incoming mail when it has not yet reached the local area.

## 5.3 About Template Design Considerations

Template design considerations include design patterns for parts of postal address templates that may be reused or modified to fit the needs of multiple countries, design constraints that reflect the structure of the template languages NLT and PATDL, and design features that may be deployed to increase the information content and scope of coverage of postal address templates. In a more general sense, template design considerations include element mapping conventions, which have been separately presented.

NOTE 1 Template design considerations may include generic re-usable template sections for different parts of the template that reflect different segments in the element hierarchy.

NOTE 2 Template design considerations provide ways to work within the constraints that are implicit in the design of NLT and PATDL with regard to such matters as modality and cardinality.

NOTE 3 Template design considerations may help to determine which name and address inputs can be valid instances of a particular template, how they may be modified in a rendition process, and what constitutes the resulting address presentation.

# 5.4 Template Design Considerations

## 5.4.1 Supported Cases of Addressee and Mailee

Among cases in a decision table for addressee and mailee, where each of these can be individual or organisational, all cases are supported except those which conflict with the conventions 5.2.1 and 5.2.2.

NOTE There are sixteen possible combinations of data that might be present in four address constructs, namely, the individual addressee, addressee organisation, individual mailee, and mailee organisation. Based on this analysis, most of the cases can be supported within this standard, while others are not supported because they conflict with the element mapping conventions. Following is the decision table showing the supported cases:

CASE	IND ADDR	ORG ADDR	IND MAILEE	ORG MAILEE	SUPPORTED
1	Y	N	N	N	Yes
2	N	Y	N	N N	Yes
3	Then 5	LANNAKI	PREVIE	W N	No <sup>5</sup>
4	N (s	tandards		Y	No <sup>5</sup>
5	Y	Y	N /	N	No <sup>6</sup>
6	Y	SIST-TP OFN/TR 14	142-2·201¥	N	Yes
7	https://standards.itel	.ai/catalog/standards/s	st/d2112d0f-2bdc-4cl	<sub>od-8589-</sub> Y	Yes
8	N 10ad	bba9ca3f/s/st-tp-cen-t		N	Yes
9	N	Y	N	Y	Yes
10	N	N	Y	Y	No <sup>5</sup>
11	Y	Y	Y	N	No <sup>6</sup>
12	Y	Y	N	Y	No <sup>6</sup>
13	Y	N	Y	Y	Yes
14	N	Y	Y	Y	Yes
15	Y	Y	Y	Y	No <sup>δ</sup>
16	N	N	N	N	Yes

The supported cases include the following:

CASE 1 Individual addressee

CASE 2 Organisation as addressee

CASE 6 Individual addressee with individual mailee

CASE 7 Individual addressee with organisation as mailee

<sup>&</sup>lt;sup>5</sup> As a convention, there can be no mailee without an addressee.

<sup>&</sup>lt;sup>6</sup> As a convention, there is at most one logical addressee.