

BeSt Address

Product specifications

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1. General overview

1.1 Information on the drafting of the product specifications

Product specifications title BeSt Address

Reference date: 01/06/2024

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Languages of product specifications: Dutch, French and German

Distribution format: PDF

Drafting standard: the product specifications are written in accordance with the ISO 19131 standard.

1.2 Terminology and definitions

In the context of these specifications, the following definitions apply.

Object and object type

An **object** is an abstraction of real-world phenomena represented in the dataset.

An **object type** is a set of **objects** characterised by identical **attributes**.

Dataset

A **dataset** is an identifiable set of data, corresponding to **objects** of one or more **types**, in accordance with clearly established specifications.

Object catalogue

An **object catalogue** is the set formed by the definition of **object types** included in a dataset and the definition of their respective **attributes**.

Abstract object types

An **object type** is known as abstract if it is not present as such in the dataset but is referenced in the catalogue and has been constructed so as to include all the properties common to the object types making up the dataset.

Attribute

An **attribute** is a property of an object or object type. In the object catalogue, the **attribute** of an **object type** is determined by its name, its definition, and possibly, the values that this attribute may take (i.e. the domain) and their units. In a dataset, the **attribute** of an **object** is determined by its name and its value.

1.3 Useful abbreviations

EPSG: European Petroleum Survey

WFS: Web Feature Service

IANA: Internet Assigned Numbers Authority

GAPD: General Administration of Patrimonial Documentation

1.4 Informal description of the product

The product BeSt Address is the authentic source of addresses in Belgium, under the cooperation agreement between BeSt Address and the Federal State, as well as the Flemish Region, the Walloon Region and the Brussels-Capital Region.

This dataset is produced by integrating the address data provided by the municipalities and is produced directly by the Regions. It takes into account proven errors reported by individual and institutional users.

2. Scope of the specifications

These product specifications apply consistently to the full product described, regardless of spatial scale.

3. Product identification

3.1 Title

BeSt Address

3.2 Version

Version identifier: 1.0

3.3 Description

The product BeSt Address is the authentic source of addresses in Belgium, under the cooperation agreement between BeSt Address and the Federal State, as well as the Flemish Region, the Walloon Region and the Brussels-Capital Region.

3.4 Themes

The data included in this set belong to the following thematic category: location.

3.5 Spatial coverage

The data included in this set cover the entirety of the Belgian national territory.

3.6 Temporal coverage

The data included in this set reflect the situation at the time of export.

3.7 Type of spatial representation coverage

The data included in this set are a geometric vector table.

4. Data content and structure

The content of the dataset described in this document is specified using an object catalogue.

4.1 Main classes

The dataset contains five object types:

- Address;
- Streetname;
- Municipality;
- PostalInfo;
- PartOfMunicipality.

These five object types correspond to the following elements, respectively:

- Addresses;
- Street names;
- Municipalities;
- Postal codes;
- The parts of the municipalities.

4.1.1 Address

Type identifier	Address
Type name	Address
Type definition	Address located on Belgian territory.

4.1.1.1 Address identifier

Attribute identifier	code
Attribute name	Address identifier
Attribute definition	Identifier of the particular, stable and unique address, set and maintained by the Region where the particular address is located.
Domain	Identifier

4.1.1.2 Position

Attribute identifier	position
Attribute name	Position
Attribute definition	XY coordinates of the particular address.
Domain	GeographicalPosition

4.1.1.3 Status

Attribute identifier	addressStatus
Attribute name	Status
Attribute definition	Status of the particular address.
Domain	AddressStatus

4.1.1.4 Policy number

Attribute identifier	houseNumber
Attribute name	Policy number
Attribute definition	Policy number of the particular address.
Domain	Numeric

4.1.1.5 Box number

Attribute identifier	boxNumber
Attribute name	Box number
Attribute definition	Postal box number of the particular address.
Domain	Numeric

4.1.1.6 Address numbers

Attribute identifier	sortField
Attribute name	Address numbers
Attribute definition	Concatenation of the policy number and the box number for which leading zeros have been added to allow for sorting.
Domain	Text

4.1.1.7 Official assignment

Attribute identifier	officiallyAssigned
Attribute name	Official assignment
Attribute definition	Boolean identifying whether the particular address is official or not.
Domain	Boolean

4.1.1.8 Street name identifier

Attribute identifier	HasStreetName
Attribute name	Street name
Attribute definition	Identifier of the street name in the particular address.
Domain	Identifier

4.1.1.9 Municipality identifier

Attribute identifier	HasMunicipality
Attribute name	Municipality
Attribute definition	Identifier of the municipality in the particular address.
Domain	Identifier

4.1.1.10 Postal code identifier

Attribute identifier	hasPostalInfo
Attribute name	Postal code
Attribute definition	Identifier of the postal code in the particular address.
Domain	Identifier

4.1.1.11 Part of municipality identifier

Attribute identifier	HasPartOfMunicipality
Attribute name	Part of municipality

Attribute definition	Identifier of the part of the municipality in the particular address.
Domain	Identifier

4.1.2 Street name

Type identifier	StreetName
Type name	Street name
Type definition	Street name officially assigned by the competent authority to a defined area of the public space.

4.1.2.1 Street name identifier

Attribute identifier	code
Attribute name	Street name identifier
Attribute definition	Identifier of the particular street name, set and maintained by the Region in question.
Domain	Identifier

4.1.2.2 Name

Attribute identifier	name
Attribute name	Name in French
Attribute definition	Name of the particular street.
Domain	GeographicalName

4.1.2.3 Status

Attribute identifier	streetNameStatus
Attribute name	Street name status
Attribute definition	Status of the particular street name.
Domain	StreetNameStatus

4.1.2.4 Street name type

Attribute identifier	type
Attribute name	Street name type
Attribute definition	Type of the particular street name.
Domain	
hamlet	Hamlet
streetname	Street name

4.1.2.5 Homonym

Attribute identifier	homonymAddition
Attribute name	Homonym
Attribute definition	Any homonym for the particular street name.
Domain	Text

4.1.2.6 Municipality identifier

Attribute identifier	isAssignedByMunicipality
Attribute name	Municipality identifier
Attribute definition	Identifier of the municipality that assigned the particular street name.
Domain	Identifier

4.1.3 Municipality

Type identifier	Municipality
Type name	Municipality
Type definition	Municipality located on Belgian territory, as defined and maintained by the GAPD.

4.1.3.1 Municipality identifier

Attribute identifier	code
Attribute name	Unique municipality identifier
Attribute definition	Identifier of the particular, unique and stable municipality, set and maintained by the Region in question.
Domain	Identifier

4.1.3.2 Municipality name

Attribute identifier	name
Attribute name	Municipality name
Attribute definition	Name of the particular municipality
Domain	GeographicalName

4.1.3.3 Municipality status

Attribute identifier	municipalityStatus
Attribute name	Municipality status
Attribute definition	Status of the particular municipality

Domain	MunicipalityStatus
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4.1.4 Postal code

Type identifier	PostallInfo
Type name	Postal code
Type definition	Postal code, as defined and maintained by bPost.

4.1.4.1 Postal code identifier

Attribute identifier	code
Attribute name	Postal code identifier
Attribute definition	Identifier of the particular, unique and stable postal code, set and maintained by bPost.
Domain	Identifier

4.1.4.2 Postal code name

Attribute identifier	name
Attribute name	Postal code name
Attribute definition	Name of the particular postal code.
Domain	GeographicalName

4.1.4.3 Postal code status

Attribute identifier	postallInfoStatus
Attribute name	Postal code status
Attribute definition	Status of the particular postal code.
Domain	PostallInfoStatus

4.1.5 Part of municipality

Type identifier	PartOfMunicipality
Type name	Part of municipality
Type definition	Internal, non-official division of a municipality located on Belgian territory.

4.1.5.1 Part of municipality identifier

Attribute identifier	Code
Attribute name	Part of municipality identifier

Attribute definition	Identifier of the particular part of the municipality, set and maintained by the Region in question.
Domain	Identifier

4.1.5.2 Part of municipality name

Attribute identifier	Name
Attribute name	Name of the part of the municipality
Attribute definition	Name of the particular part of the municipality.
Domain	GeographicalName

4.1.5.3 Status

Attribute identifier	partOfMunicipalityStatus
Attribute name	Status
Attribute definition	Status of the particular part of the municipality.
Domain	PartOfMunicipalityStatus

4.2 Support classes

The dataset contains five support classes:

- Identifier;
- GeographicalName;
- GeographicalPosition;
- Point ;
- Status.

These five object types correspond to the following elements, respectively:

- The identifier;
- The geographical name;
- The geographical position;
- The geographical coordinates ;
- Status.

4.2.1 Identifier

Type identifier	Identifier
Type name	Identifier
Type definition	Identifier of the particular element of the address.

Comment	The concatenation of the namespace and the identifier should form a URI unambiguously identifying the object. The URI should be resolvable.
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4.2.1.1 Namespace

Attribute identifier	namespace
Attribute name	Namespace
Attribute definition	The namespace of the particular element of the address, set and maintained by the Region in question, and used to identify the region and the type of element.

4.2.1.2 Object identifier

Attribute identifier	objectIdentifier
Attribute name	Object identifier
Attribute definition	Identifier of the particular, unique and stable element of the address, set and maintained by the Region in question.

4.2.1.3 Version identifier

Attribute identifier	versionIdentifier
Attribute name	Version identifier
Attribute definition	Identifier of the version of the particular element of the address, set and maintained by the Region in question.

4.2.2 Geographical name

Type identifier	GeographicalName
Type name	Geographical name
Type definition	Name of the particular element of the address.

4.2.2.1 Language

Attribute identifier	language
Attribute name	Language
Attribute definition	Language of the particular name.
Domain	
nl	Dutch

fr	French
de	German

4.1.2.2 Spelling

Attribute identifier	spelling
Attribute name	Spelling
Attribute definition	Spelling of the particular name.
Domain	Text

4.2.3 Geographical position

Type identifier	GeographicalPosition
Type name	Geographical position
Type definition	Geographical position of the particular element of the address.

4.2.3.1 Location

Attribute identifier	pointGeometry
Attribute name	Location
Attribute definition	Location of the particular element of the address.
Domain	Point

4.2.3.1 Assignment method

Attribute identifier	positionGeometryMethod
Attribute name	Assignment method
Attribute definition	Assignment method for the geographical position of the particular element of the address.
Domain	
assignedByAdministrator	The position as been assigned by the municipality.
derivedFromObject	The position has been derived from another object.

4.2.3.3 Position specification

Attribute identifier	positionSpecification
Attribute name	Position specification
Attribute definition	Specification of the geographical position of the particular element of the address.
Domain	
building	Building

buildingUnit	Building unit
entrance	Entrance
mooringPlace	Mooring place
municipality	Municipality
parcel	Parcel
plot	Plot
stand	Stand
street	Street

4.2.4 Geographical coordinates

Type identifier	Point
Type name	Geographical coordinates
Type definition	Geographical coordinates of the particular address.

4.2.4.1 Geographical coordinates

Attribute identifier	pos
Attribute name	Geographical coordinates
Attribute definition	Geographical coordinates of the particular address in one of the Belgian Lambert projection systems.
Unit	Metre

4.2.5 Status

Type identifier	Status
Type name	Status
Type definition	Status of the particular component of the address.

4.2.5.1 Status

Attribute identifier	status
Attribute name	Status
Attribute definition	Status of the particular component of the address.
Domain	
Reserved	The particular component of the address must still be validated by the competent authority.

Proposed	The particular component of the address has been validated by the competent authority.
Rejected	The particular component of the address has been rejected by the competent authority.
Current	The particular component of the address is used to locate an addressable object.
Retired	The particular component of the address is not longer used to locate and addressable object or is used to locate an addressable object that itself no longer exists.

4.2.5.2 Creation date

Attribute identifier	validFrom
Attribute name	Creation date
Attribute definition	Creation date of the version of the particular component of the address.
Domain	Date

4.2.5.3 Deactivation date

Attribute identifier	validTo
Attribute name	Deactivation date
Attribute definition	Deactivation date of the version of the particular component of the address.
Domain	Date

5. Reference systems

5.1 Spatial reference systems

The objects are either referenced in the Belgian Lambert 1972 coordinates system (EPSG: 31370) or in the Belgian Lambert 2008 coordinates system (EPSG: 3812).

5.2 Temporal reference system

All the dates are given in the Gregorian calendar.

6. Data quality

6.1 Quality control

The quality of the dataset is continuously verified through dedicated procedures.

6.2 Genealogy

This dataset is produced by integrating the address data provided by the municipalities and is produced directly by the Regions. It takes into account proven errors reported by individual and institutional users. It is compliant with the joint specifications drawn up by the FPS BOSA on behalf of the address committee.

7. Product distribution

7.1 Dataset format

The product is available in XML format.

7.2 Format version

The most recent versions of the above-mentioned formats apply.

7.3 Format specifications

The specifications of the formats are available at the following URL:

<https://www.iana.org/assignments/media-types/text/xml>.

7.4 Product languages

The dataset is multilingual and contains text fields in Dutch, French and German.

7.5 Product encoding

The characters are encoded in UTF-8.

8. Metadata

The metadata of the product BeSt Address, consolidating the data from the three Belgian Regions, are available to view in full at the following address: <https://www.geo.be/catalog/details/ca0fd5c0-8146-11e9-9012-482ae30f98d9?l=en>.

9. Product updates

The product is updated weekly.