



WEB SERVICE AND OPERATION / SERVICE MESSAGE DESCRIPTION

GETPERSON V4.0

Content

| | |
|---|-----------|
| 1. Introduction | 6 |
| 2. Request and response messages | 8 |
| 2.1. General structure | 8 |
| 2.1.1. Request message | 8 |
| 2.1.2. Response message | 9 |
| 2.1.3. Basic natural person | 9 |
| 2.1.4. Used code lists and enumerations | 14 |
| 2.2. getperson | 14 |
| 2.2.1. Request | 14 |
| 2.2.2. Response | 14 |
| 3. Detailed Capability Scenario's | 16 |
| 3.1. OPERATION GETPERSON | 16 |
| 3.1.1. STANDARD SCENARIO | 16 |
| 3.1.2. ALTERNATIVE SCENARIO SCRATCHED PERSON | 16 |
| 3.1.3. ALTERNATIVE SCENARIO NEW NATIONAL IDENTIFICATION NUMBER PERSON | 16 |
| 3.1.4. ALTERNATIVE SCENARIO BIS NUMBER | 16 |
| 3.1.5. ALTERNATIVE SCENARIO INVALID IDENTIFICATION NUMBER | 16 |
| 4. Basic concepts | 17 |
| 4.1. AUTHENTIC SOURCES | 17 |
| 4.1.1. THE NATIONAL REGISTRY | 17 |
| 4.1.2. Crossroads Bank for Social Security | 18 |

| | | |
|---------------------------------------|-----------|-----------|
| 4.2. PERSON NUMBER | 18 | |
| 5. Basic service information | | 20 |
| 5.1. Service access parameters | 20 | |
| Appendix | | 20 |
| SendOnBehalfOf | 20 | |

TABLE 1 DOCUMENT HISTORY

| Version | When | Who | What |
|-------------|------------|-----------------|--|
| 1.0 | 2010-09-26 | Johan Boogaerts | Document setup |
| 1.01 | 2011-01-24 | Johan Boogaerts | ISO NIS country code specifications |
| 1.02 | 2011-03-30 | Johan Boogaerts | RFC Scratched person short term |
| 1.03 | 2011-08-30 | Johan Boogaerts | Send on Behalf |
| 1.04 | 2012-02-09 | Johan Boogaerts | Template update |
| 2.0 | 2018-04-23 | Liesbet D'Hondt | Template update and getPerson v3 changes |

Objective of this document

This document describes request and response messages.

In principle the messages are as well documented via annotations in the corresponding XSD file. The documentation in the XSD is limited to the business entities. Relationships between business entities are additionally described in this document.

The complete functional package contains: E-government context, Service Portfolio, Webservice & Operation, Service Message Content, Service Error Codes, Service Testplans and service management documents.

Target group

This document is intended to be read by managers, analysts and developers.

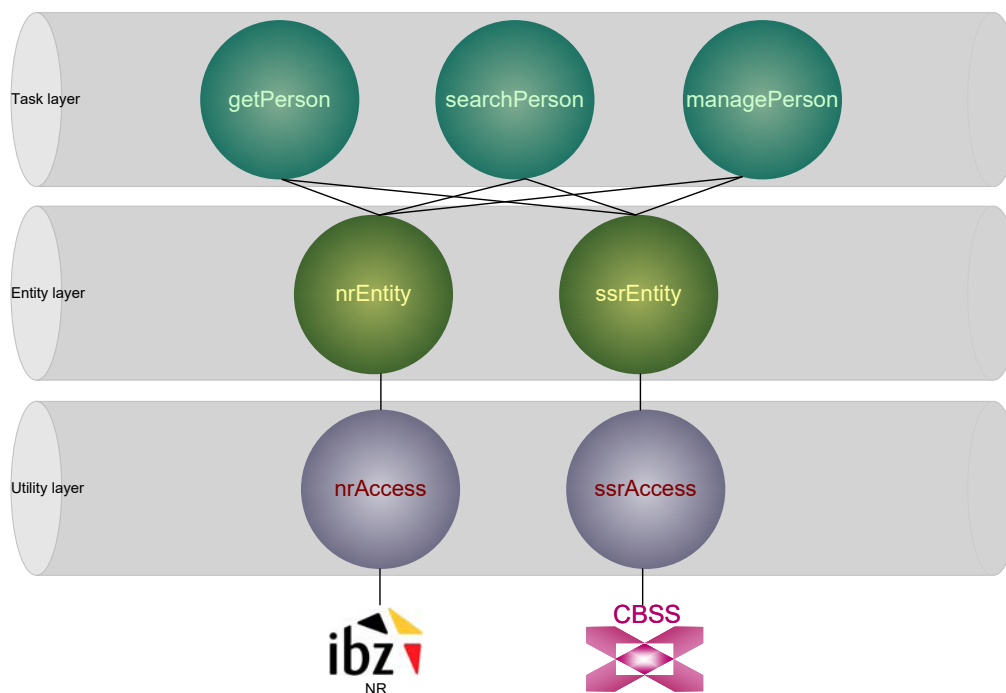
1. Introduction

Related to person information, FOD BOSA DT is offering services for:

- Searching a person by name
- Searching a person by address
- **Getting person basic information**
- Getting person extended information, including historical data
- Managing a person (limited to the bis registry)

This document handles the web services for getting person basic information.

| Functionality | operation | Wsd service name |
|----------------------------------|-----------|--------------------|
| Getting person basic information | getPerson | wsPersonGetService |



For a clear understanding of some notions please check chapter Basic concepts and the reference documents listed in the appendix.

This document also concerns the input and output messages of the GetPerson Service from the PersonService family.

Within the context of person services the business entities are person and address.

The access to the authentic sources for persons is under the supervision of the privacy commission. Per application the consumer needs an agreement of the privacy commission. FOD BOSA DT configures the FSB accordingly.

Part from the agreement of the privacy commission other options specified in the service contract impact the request message.

The representation codes for countries in the business context of address, birthplace and nationality are based on either the ISO-3166-1 Alpha2 codes or the NIS codes.

The FSB can be configured to use a particular certificate per application (agreement of the privacy commission) or a common certificate per consumer.

To meet the audit requirements in case the consumer opts for one common certificate, the consumer has to specify in each request the finality. This option is called "SendOnBehalf". Per application (finality) a particular "SendOnBehalf" identifier has been specified and configured.

Check with the consumer's service manager which option has been chosen to complete the request accordingly. The "SendOnBehalf" identifier has to be unique, clear and to be defined in agreement with FOD BOSA DT FSB service manager.

Service contract options having an impact on the request:

- The country representation code standard (only impacts the response)
- SendOnBehalf identifier (check the appendix)

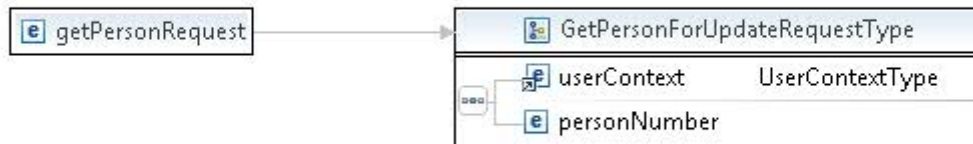
2. Request and response messages

2.1. General structure

2.1.1. Request message

The request message contains a person service generic user context element and an operation specific input parameter element.

The operation specific input parameter element is described below in an operation specific paragraph.



The user context element defines the user who is making the request and his language. The language defines the language the service returns error, warning and other descriptions. The user, identified via the person number, is required to authenticate and authorize the requestor.

Remark that the authentication and authorization at the NR and CBSS are respectively requestor (person) and application based.

| Input parameter | Optional / Mandatory | Description | Remark |
|-----------------|----------------------|--|---|
| personNumber | M | The national identification number of the person who has obtained access for a specific quality. | check digit validated by the national registry or CBSS |
| Language | M | The language the service should return error, warning and other descriptions. The language is defined as the ISO language code. For the service any language is allowed; in case the language is not Dutch, French or | Remark that a language different from Dutch, French and German will lead to a response in English |

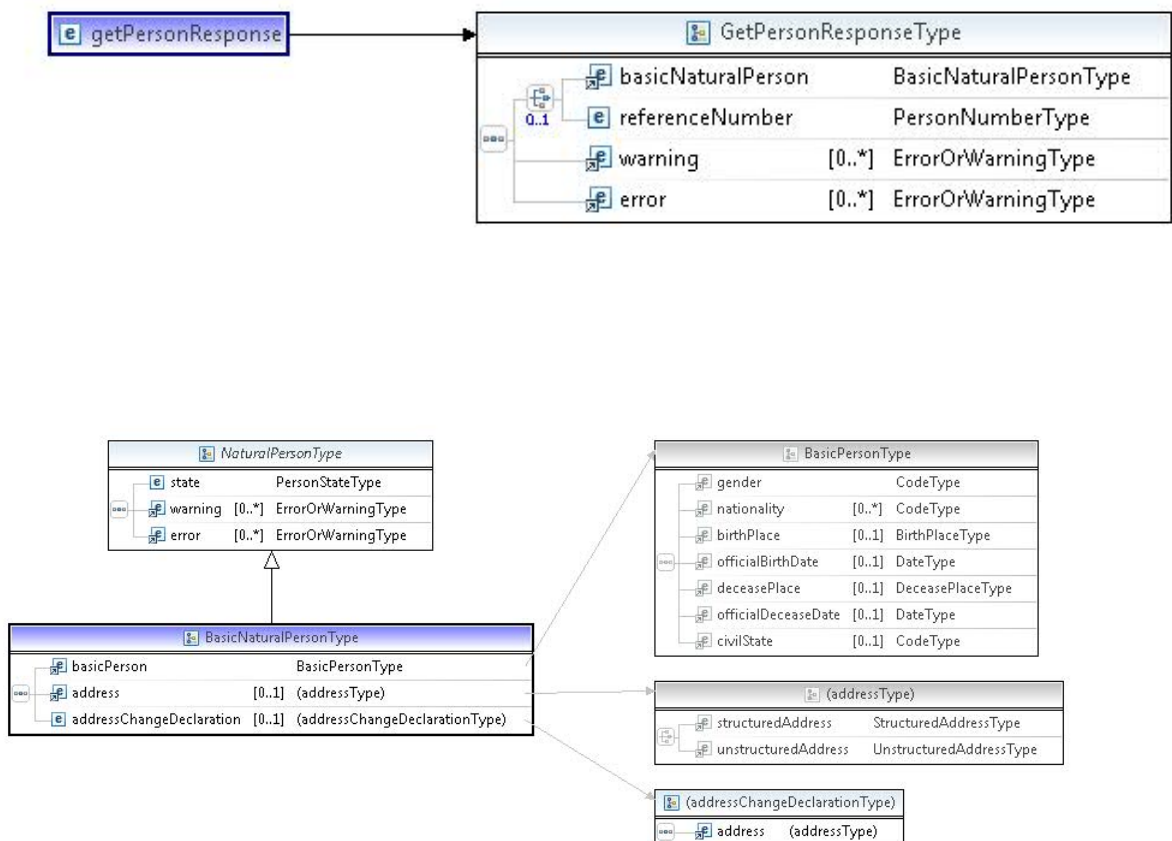
| | | | |
|--|--|--|--|
| | | German, the returned language is English | |
|--|--|--|--|

2.1.2. Response message

Independent of the person service or operation, the response message contains a warning and error element at response level (mark a warning and error element are as well defined in the person element). The service and operation response dependant part is described below in an operation specific paragraph.

Each response may contain an error or warning element. The response error and warning element have an impact on the complete response; the person error and warning element have an impact on one specific person.

Error codes are described in the person service error code list and description document.



2.1.3. Basic natural person

A common element for the person services responses is the basic natural person element composed of a basic person element and an address element.

A basic natural person has a state, in standard cases set to 'alive' or 'deceased'. Other states are 'disappeared' or 'unknown'. 'Unknown' is used in case of scratched persons and conflicting states between the national register and the registers of the CBSS.

A basic natural person may have business errors or warnings. Those business error and warnings only applies to that particular person.

A common business case when warnings are given is in case the person is scratched from the register of birth.

A complete list is given in the error and warning description document.

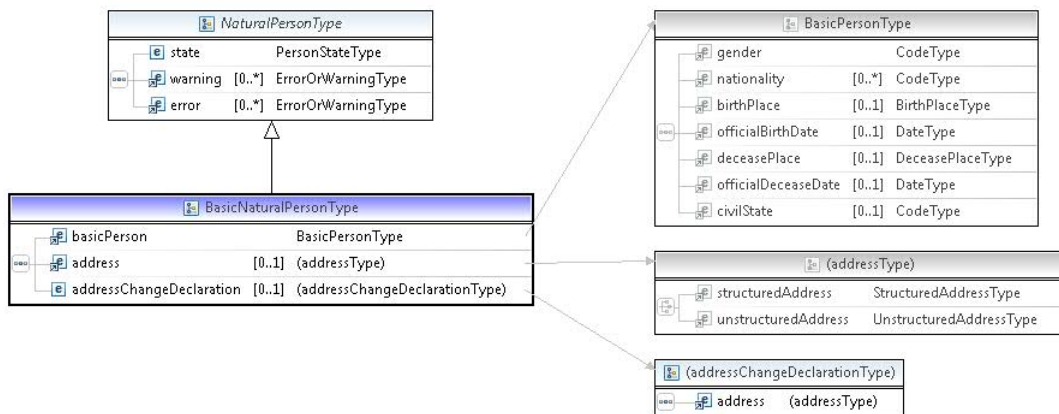
The main elements basic person and address contain the attributes trust and source. The source attribute defines the origin of the information; the trust attribute defines the information is extracted out of the authentic source or is composed based on best effort.

In case of a scratched person the RAD register of the BCSS may contain an address, which should be an address abroad. In case the RAD register does not contain an address, no address information will be returned.

Remark:

The RAD register of the CBSS is the authentic source for scratched persons. Based on the principles of authentic source, the basic natural person composed by the person services should contain only data extracted from the authentic source.

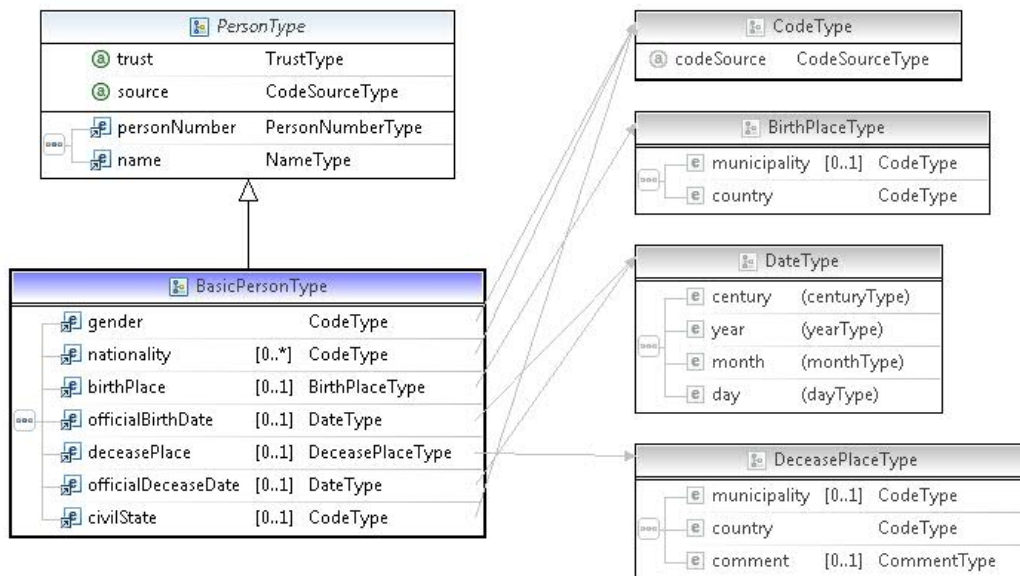
The schemas and tables below describe the basic natural person element; self-evident terms are not detailed.



| Field | Description |
|-------|-------------|
|-------|-------------|

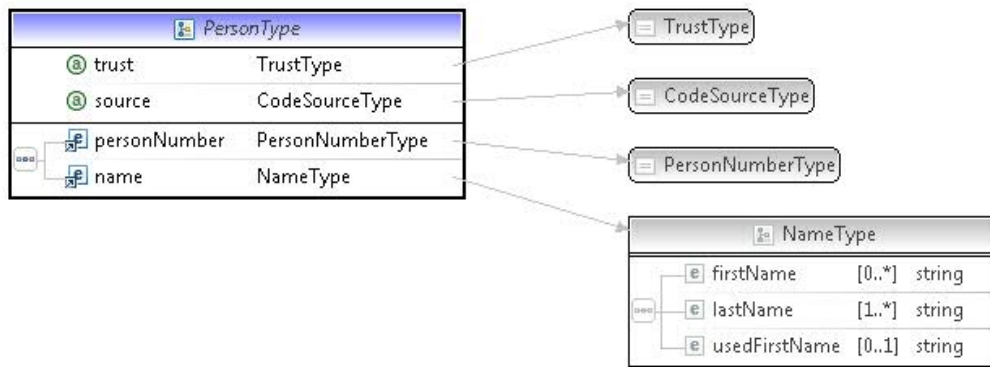
| | |
|---------|--|
| State | Possible values are 'alive', 'deceased', 'disappeared' or 'unknown' The status is based on data returned by the authentic sources |
| Error | Mark this error is person specific and might occur in case the authentic source returns an error related to one specific person. |
| Warning | Idem as error |

Mark the Basic Person type is incomplete represented on the figure above, see the figure below.

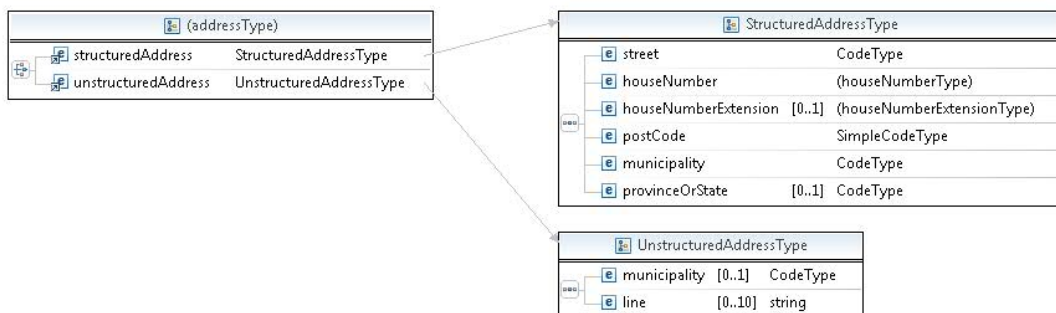


| | |
|------------------|---|
| Attribute trust | In case the person information returned matches the information of one of the authentic sources the value is trusted, else in case the information is a mixture of information out of the authentic sources the value is best effort. |
| Attribute source | The attribute source indicates the source of the data or the source of a code list. The attribute is used in case of the elements basic person and address to define the origin of the information. In case of code type, the source refers to the definition of the code list. |

| | |
|---------------|---|
| Person number | The national identification number or bis number of the person for whom the basic person information is required. |
| Gender | The gender of the person "male" / "female" |
| Nationality | <p>The nationality of a person as a code, equivalent to an ISO 3166-1 two letter country code and for historical countries, the ISO 3166-3 four-letter country code.</p> <p>The ISO 3166-1 specifications allow the definition of tailored codes used for specific purposes. For the person services the following specific codes are added:</p> <p>XA: stateless XB: not proven XC: abroad depreciated XD: at sea (international waters) XE: undefined</p> |
| Birth place | The birth place contains the country and municipality the person was born. For Belgian municipalities, the NIS code and description of the municipality is given; for foreign municipalities the description is completed and the municipality code contains the value 'nil' |
| Birthday | Mark the birthday is not defined as a date. The birthday might be estimated and may contain zeros for the month and day indicating the birthday is not precise; see also birthdate Tolerance |
| Decease place | Idem remark as for birth place |
| Civil state | <p>Marital status</p> <p>10: unmarried 20: Married 25: nullification of marriage 26: putative marriage 30: widow or widower 40 separated 41: divorce pronounced by applying the Law of June 30, 1994 50: separation from bed and board and property 51: separation from bed and board and property under the Act of June 30, 1994 60: dissolution of marriage in a special way 80: Partnership 81: end partnership 90: undetermined</p> <p>Codes 80, 81 and 90, are not available in the CBSS</p> |



| | |
|-----------------|---|
| Last name | A person has at least one last name and may have additional last names |
| Used first name | At the national registry a person can declare the used first name different out of the collection of his or her first names |



| | |
|----------------------|---|
| Structured address | A structured address is typically a Belgian address based on the NIS street and municipality codes |
| unstructured address | An unstructured address can contain up to 10 descriptive lines which may contain the street name, postal code etc. but could not be mapped to a structured address. |

2.1.4. Used code lists and enumerations

The schema definitions contain a reference to the code list. Please consult the XSD file for the source of a code list.

The language code list follows the rule above. Mark that the national registry only allows Dutch, French or German. Other languages have at the national registry an input validation error as a consequence.

The source of a code list is defined making use of the attribute codesource; the attribute is used to define the source of the data. A specific case is country codes; the attribute contains the value 'ISO-3166' or NIS to define the origin of country codes.

2.2. getperson

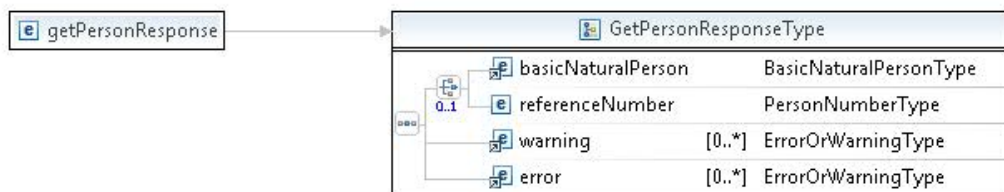
The getperson operation returns basic legal information based on the identification number.

2.2.1. Request

On top of the user context element as described above the following parameters are required:

| Input parameter | O/ M | Description | Remark |
|-----------------|------|---|--|
| personNumber | M | The national identification number or bis number of the person for whom the basic person information is required. | check digit validated by the national registry or CBSS |

2.2.2. Response



The expected output message contains a basic natural person element, which in case the request is made for an old person number is replaced by a reference number element,

containing the new person number. The basic natural person element contains the person detail information.

The output message may contain errors and warnings. Mark this error or warning is response specific.

3. Detailed Capability Scenario's

3.1. OPERATION GETPERSON

Based on the person number, the service returns person information. The person information is retrieved from the authentic sources. The only input parameter is the person number.

3.1.1. STANDARD SCENARIO

The person number is a (correct) national identification number; the person is not scratched and has not obtained a new identification number.

The service responds a basic natural person element. The source of the basic natural person is the NR.

3.1.2. ALTERNATIVE SCENARIO SCRATCHED PERSON

The person number is a (correct) national identification number; the person is scratched and has not obtained a new identification number.

The service responds a basic natural person element. The source of the basic person in the response is the CBSS.

3.1.3. ALTERNATIVE SCENARIO NEW NATIONAL IDENTIFICATION NUMBER PERSON

The person number is a (correct) national identification number; the person is not scratched and has obtained a new identification number.

The service responds a reference number element.

3.1.4. ALTERNATIVE SCENARIO BIS NUMBER

The person number element is a (correct) bis number; the person is not scratched and has obtained a identification number.

The service responds a basic natural person element. The source of the basic natural person is the CBSS.

3.1.5. ALTERNATIVE SCENARIO INVALID IDENTIFICATION NUMBER

The person number is an invalid national identification number.

The service responds a Soap Fault.

4. Basic concepts

Before describing the functionality of the person services some background information is given to obtain a common ground of person related information in Belgium.

4.1. AUTHENTIC SOURCES

In Belgium person information is managed by 2 federal organizations, defined as authentic source:

- the national registry (part of the ministry of home affairs)
- the Crossroads Bank of Social Security CBSS

The organizations mainly manage 3 sources:

- the national register for persons subscribed to a Belgian municipality or embassy
- the bis register of the CBSS for persons not subscribed to a Belgian municipality or embassy, but having a capacity with a Belgian government institution (independent whether the institution is federal, regional, provincial or municipal)
- the rad register of the CBSS for persons removed from the registry of births, deaths and marriages

The access to the national registry and the registers of the CBSS is strictly limited and under the supervision of the privacy commission.

The 'ter' and 'homeless' register make the inventory complete. The ter register is managed by the CBSS. The register concerns person which do not meet the minimal identification criteria. An incomplete person record is only available for the organisation that has created the record.

The homeless register may not be considered as a person register. The homeless register gives an overview of persons without residence benefiting income support. This register should be considered as a separate authentic source managed by the PPS Social Integration.

4.1.1. THE NATIONAL REGISTRY

The responsibility and competence of the registry of births, deaths and marriages (burgerlijke stand) is in the hands of the Belgian municipalities and embassies. The information is centralized in the national register.

Municipalities keep person records of their inhabitants in different registers; a population register, a foreigner register and a temporary register. A minor part of the national register records are the person records kept by diplomatic missions and consular posts.

The person services consult the national register as a all.

A person managed in the NR is unique identified by a national identification number.

4.1.2. Crossroads Bank for Social Security

4.1.2.1 BIS registry

Persons not subscribed to a Belgian municipality or embassy and having a capacity with a Belgian governmental organization (independent of federal, regional, provincial or municipal) are centralized in the BIS register of the CBSS; the CBSS themselves are making use of the national register as authentic source for persons subscribed in a Belgian municipality or embassy.

A person managed in the BIS register is unique identified by a bis number.

4.1.2.2 RAD registry

Part from the bis registry, the CBSS is managing the RAD registry. The rad registry concerns persons scratched from the national Persons not subscribed in a Belgian municipality or embassy the CBSS are registered in bis registry of the CBSS.

Persons subscribed to the register (of births, deaths and marriages) of the municipality can be removed from that registry. By consequence those persons have the scratched state in the national registry. Persons who were registered to the register (of births, deaths and marriages) of the municipality and are removed by the municipality are called 'scratched persons'.

The information concerning a scratched person is managed by the CBSS. The information of a person removed from the registry of a municipality is transferred to the RAD registry of the CBSS.

The CBSS is the master of data for a scratched person.

A municipality can remove a person from the registry in case of

- discharged abroad
- subscribed to a foreign country but without a diplomatic post
- deletion in official capacity
- declared absent
- Abduction, Loss of right of residence
- Abduction, Loss of subscription

4.2. PERSON NUMBER

A person number is a national identification number (in case the national registry has attributed the number) or a bis number (in case the CBSS has attributed the number). A

person number is a number of 11 digits and identifies a person uniquely. This number is also called the social security inscription number SSIN.

The attribution of a person number is the responsibility of the national registry or the bis registry of the CBSS.

The person number is not a meaning less identification number but contains information about the birthday and gender. National identification numbers are subject of change in case the person is changing gender or refines his birthdate. A bis number is not subject of change in case of gender change or new birthdate declaration.

In case a person identified by a bis number is subscribed in a municipality, the bis number is replaced by a national identification number.

In very rare occasions a national identification number is replaced by a bis number. The case may happen after a long asylum procedure. A deported asylum seeker who was officially registered in a municipality has in the national registry a cancelled file. This has the same meaning as if the person never exists. In case the asylum seeker has worked officially (paid social security) the person is created in the bis registry.

Layout of the person number:

| Position | Description | Remark |
|----------|---------------------------|--|
| 1-6 | Birthday in YYMMDD format | In some cases the birthday is unknown or not precise. The year is known, but not the month and or day. In those cases the month and or day are 00. Bis numbers attributed by the Crossroads Bank for Social Security have the month value plus 20 (20-32) or plus 40 (40-52). |
| 7-9 | Serial number | In case of a national number a male persons have an odd number and a female an even number. |
| 10-11 | Check digit | Based on mod97 |

5. Basic service information

5.1. Service access parameters

Table 1 Service access parameters get basic person information

| | |
|---|--|
| Endpoint URL (Test & Acceptance) | https://fsb.services.int.belgium.be/PersonServices/4.0/GetPersonService |
| Endpoint URL (Production) | https://fsb.services.pr.belgium.be/PersonServices/4.0/GetPersonService |
| Message exchange pattern(s) | Synchronous |
| Message protocol | SOAP |
| Transport-level security | 1-way SSL with digital certificate |
| Message-level security | WS-Security X.509 certificate token for Timestamp signing in SHA256 and message body signing in SHA 256, response contains a timestamp and payload also signed in SHA256 |

Appendix

SendOnBehalfOf

The soap request in case of send on behalf of has:

- In the soap header a sentOnBehalfOf element containing the identifier has agreed
- In the usercontext element nil specified

Example for a getPerson request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v4="http://fsb.belgium.be/getPersonService/v4_00" xmlns:head="http://fsb.belgium.be/header"
xmlns:v41="http://fsb.belgium.be/getPersonService/messages/v4_00"
xmlns:v1="http://fsb.belgium.be/data/business/context/v1_00">

  <soapenv:Header>
```

```
<v11:sentOnBehalfOf># SendOnBehalfOfIdentifier #</v11:sentOnBehalfOf>

  <head:fsbHeader>

    <head:messageId>${=java.util.UUID.randomUUID()}</head:messageId>

  </head:fsbHeader>

</soapenv:Header>

<soapenv:Body>

  <v41:getPersonRequest>

    <v1:userContext>

      <v1:personNumber xsi:nil="true" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>

      <v1:language>nl</v1:language>

    </v1:userContext>

    <v41:personNumber>0000000000</v41:personNumber>

  </v41:getPersonRequest>

</soapenv:Body>

</soapenv:Envelope>
```