

**ConsultRN - IdentifyPerson
Cookbook
Version 1.3**

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eHealth platform

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Table of contents

Table of contents	2
1. Document management	4
1.1 Document history	4
2. Introduction	5
2.1 Goal of the document	5
2.2 eHealth platform document references	5
3. Support	6
3.1 For issues in production	6
3.2 For issues in acceptance	6
3.3 For business issues	6
3.4 Certificates	6
3.5 Authorization from sectoral committee	6
4. Global overview	7
5. Step-by-step	8
5.1 Healthcare institution	8
5.2 Healthcare professionals	8
6. Description of xml messages	9
6.1.1 Formulating a request	9
6.1.2 Interpretation of the Reply	10
6.2 Generic structure	13
6.2.1 Identifier	13
6.2.2 Person	14
6.2.3 BirthDeceaseType	15
6.2.4 WhereType	16
6.2.5 NameType	17
6.2.6 GenderType	17
6.2.7 NationalityType	18
6.2.8 CivilStateType	19
6.2.9 AddressType	20
6.2.10 PlainAddressType	21
6.2.11 StandardAddressType	22
7. Error and failure messages	24
8. Test and release processes	26
8.1 Procedure	26
8.1.1 Initiation	26
8.1.2 Development and test procedure	26
8.1.3 Release procedure	26
8.1.4 Operational follow-up	26
9. Risks and security	27
9.1 Security	27



9.1.1	Business security	27
9.1.2	Web service	27
9.1.3	The use of username, password and token	27

To the attention of: "IT expert" willing to integrate this web service.

1. Document management

1.1 Document history

Version	Date	Author	Description of changes / remarks
1.0	20/08/2009	eHealth platform	Initial version
1.1	26/10/2016	eHealth platform	Add new list of error codes Update examples Update description of xml element Clarification of the management of SSIN Mutation
1.2	26/06/2017	eHealth platform	Update description of xml elements (request/response)
1.3	13/02/2018	eHealth platform	Add technical section for individual

2. Introduction

2.1 Goal of the document

This document is not a development or programming guide for internal applications. Instead, it provides functional and technical information and allows an organization to integrate and use the eHealth platform service.

However, in order to interact in a smooth, homogeneous and risk controlled way with a maximum of partners, these partners must commit to comply with the requirements of specifications, data format and release processes of the eHealth platform as described in this document.

Technical and business requirements must be met in order to allow the integration and validation of the eHealth platform service in the client application.

2.2 eHealth platform document references

- On the portal of the eHealth platform¹, you can find all the referenced documents. These versions or any following versions can be used for the service of the eHealth platform.
- The description of data returned by the KSZ can be found on the KSZ portal:

In dutch: <https://www.ksz-bcss.fgov.be/nl/diensten-en-support/diensten/ksz-registers>

In french: <https://www.ksz-bcss.fgov.be/fr/services-et-support/services/registre-national>

¹ <https://www.ehealth.fgov.be/ehealthplatform>

3. Support

3.1 For issues in production

eHealth platform contact center:

- Phone: 02/788 51 55
- Mail: support@ehealth.fgov.be
- Contact Form :
 - <https://www.ehealth.fgov.be/ehealthplatform/nl/contact> (Dutch)
 - <https://www.ehealth.fgov.be/ehealthplatform/fr/contact> (French)

3.2 For issues in acceptance

Integration-support@ehealth.fgov.be

3.3 For business issues

- regarding an existing project: the project manager in charge of the application or service
- regarding a new project and other business issues: info@ehealth.fgov.be

3.4 Certificates

- In order to access the secured eHealth platform environment you have to obtain an eHealth platform certificate, used to identify the initiator of the request. In case you do not have one, please consult the relevant information on the portal of the eHealth platform ¹.
- For technical issues regarding eHealth platform certificates
Acceptance: acceptance-certificates@ehealth.fgov.be
Production: support@ehealth.fgov.be

3.5 Authorization from sectoral committee

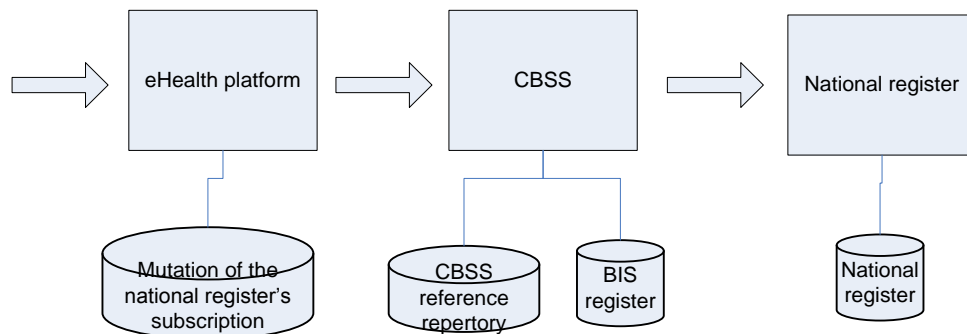
For consult RN, you always need an authorization from the sectoral committee.



4. Global overview

The service `IdentifyPerson` allows retrieving information according to the sectorial committee on the name, birth data, gender, decease data, civil state data, nationality, address of a person, based on a SSIN (social security identification number). Therefore, the called eHealth-service will internally connect to the CBSS, using a corresponding CBSS WS connected to the National Registry and BIS registry).

The service also registers an inscription for the requested person and the initiator of the request in the **ManageInscription** service of the eHealth platform as well as in the CBSS reference repository² if the inscription does not yet exist. This inscription is required to call **PersonHistory** and to obtain mutation from the **MutationSender** service.



For a **proper management of mutation & history of SSIN** within their different applications and their different patient files, and according to their respective sectorial committee authorizations, health organizations are advised to consult the recommendations published in the FAQ's of the technical library.

In this cookbook, we explain the structure and content aspects of the possible requests and the replies of the eHealth WS. An example illustrates each of those messages. In this document, you will find in addition, a list of possible errors.

This information should allow the IT department of an organization to develop and use the WS call.

Some technical and legal requirements must be satisfied in order to allow the integration of the WS in client applications.

² To indicate that the eHealth platform has a file for this person

5. Step-by-step

The call to the IdentifyPerson WS is subject to several conditions.

5.1 Healthcare institution

- An authorization of the sectoral committee and the compliance with the integration procedure. By applying this procedure, the eHealth platform will provide you with your **applicationID**, which is used by the eHealth platform to grant specific rights:
- An eHealth certificate, used to identify the initiator of the request. If you do not have one, please refer to the section “Basisdiensten” (NL) or “Services de base” (F) on the portal of the eHealth platform ¹.
- Time synchronisation: the servers of the eHealth platform are synchronized to a pool of global servers using NTP protocol. Partner’s clock offset cannot be more than 60 seconds against eHealth’s or the request could be discarded.

5.2 Healthcare professionals

In order to be able to access ConsultRN services as a healthcare professional, you need a valid token.

To implement a WS call protected with a SAML token you can reuse the implementation as provided in the "eHealth technical connector". Nevertheless, implementations of the eHealth platform use standards. Any other compatible technology (WS stack for the client implementation) can be used instead. Please refer to section “connector” on the portal of the eHealth platform¹.

Alternatively, you can write your own implementation. The usage of the Secure Token Service (STS) and the structure of the exchanged XML-messages are described in the eHealth STS cookbook. Please refer to the section “Basisdiensten” (NL) or “Services de base” (F) on the portal of the eHealth platform¹.

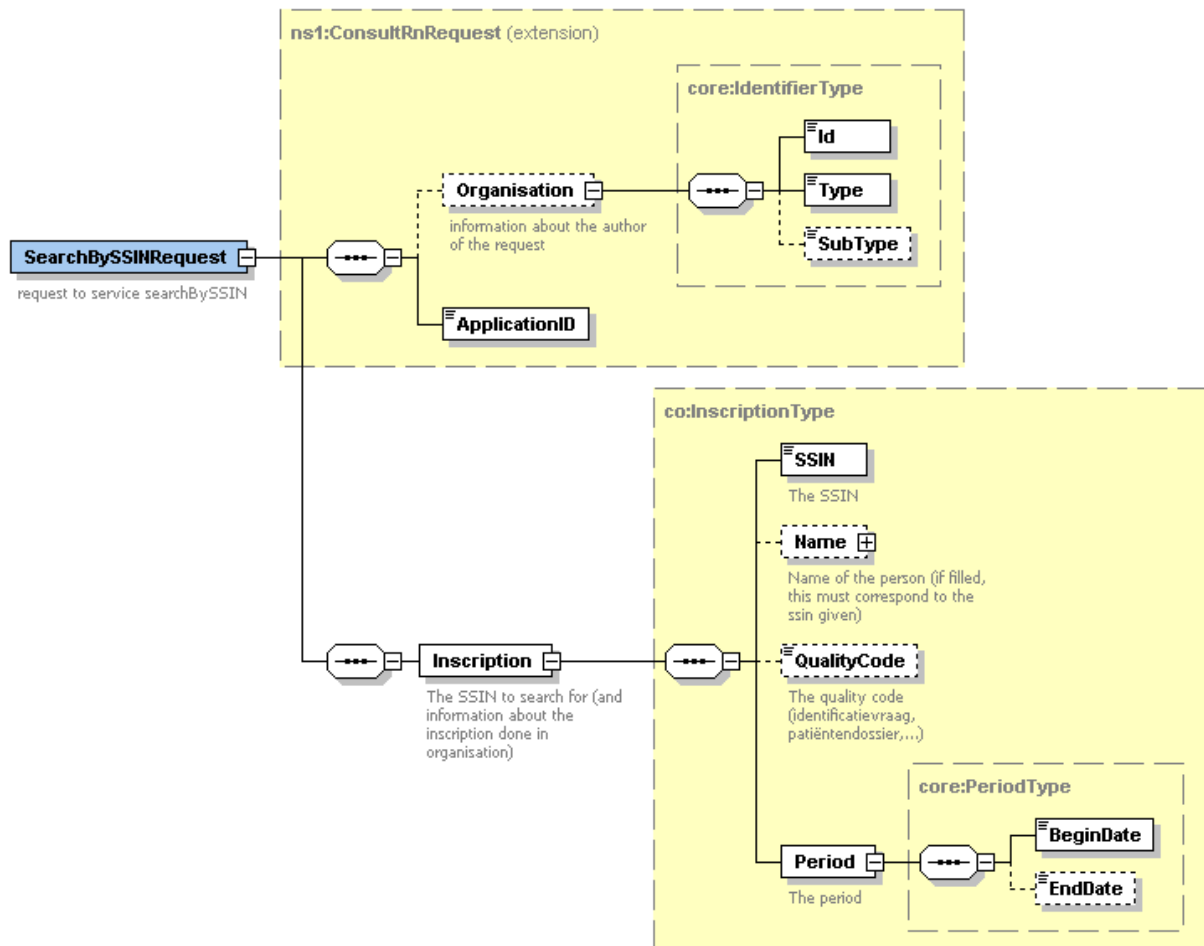
The technical information how to obtain a SAML token from the STS can be found in the separate document ConsultRN SSO on the portal of the eHealth platform¹.



6. Description of xml messages

6.1.1 Formulating a request

We discuss below the request, which must be sent to receive personal data on the basis of a SSIN (Social Security Identification Number).



The first part, common to all web services consulting the National Registry, contains:

Field name	Descriptions
Organisation	The organization block contains information about the organization having mandated the end user to make the request. <i>At the time, mandates are not allowed.</i> Therefore, if this information is mentioned it must be the same as the one existing in the certificate. (More information see section 6.2.1).
ApplicationID	The ApplicationID contains a number given by eHealth identifying the organization and the authorization given for a certain purpose to this organization. (Same format as an SSIN). <u>Healthcare institution</u> The value is the number given by the sectoral committee. <u>Healthcare professional</u> The value must be '0'.

The second part (Inscription) contains data for the inscription of this person in order to be able to retrieve his information latter with the mutation sender service.

Field name	Descriptions
SSIN	The SSIN field contains the INSS number of the individual to be registered (patient. ...).
Name (not used)	Name containing the last name, the first name and the middle name of the individual. If given it must match the SSIN.
QualityCode	<p>A position code is shown in QualityCode. The possible values have been defined by the eHealth platform.</p> <p><u>Healthcare institution</u> The value must be '1'. If not given, the eHealth platform assumes it must be 1.</p> <p><u>Healthcare professional</u> The value must be '6'.</p>
Period	<p>The period indicates for how long the inscription is valid. In principle, this corresponds to the period during which the organization keeps an active file about the individual. While the start date (BeginDate) is always mandatory, the end date (EndDate) is optional. If no end date is provided, the inscription lasts indefinitely (or until a deleteInscription request). The period must contain today.</p> <p><i>Remark:</i> If you have an active inscription for an individual where the "end date" is null, you cannot create a new inscription with an "end date" not null, you must first make a delete of the inscription with end date null (Cf Ws ManageInscription)</p>

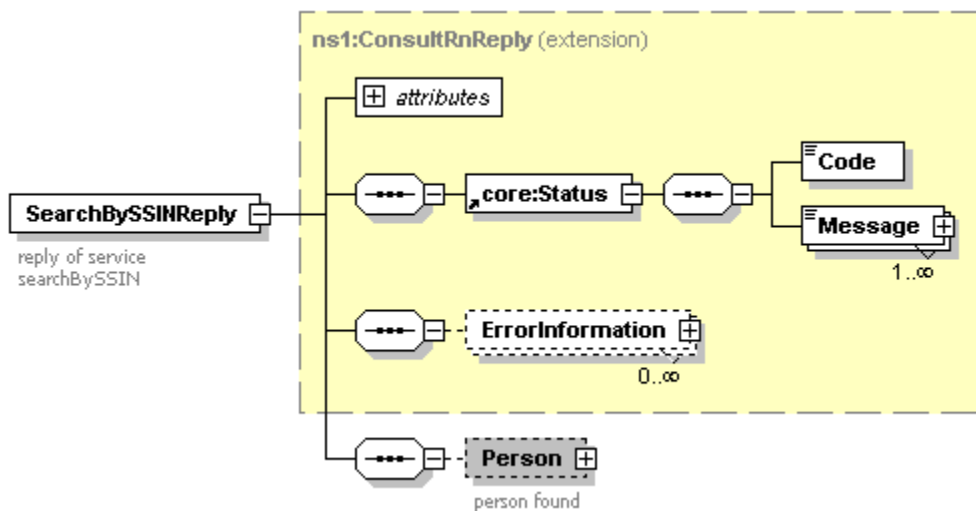
Example:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:urn="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:SearchBySSINRequest>
      <Organisation>
        <Id>71099911</Id>
        <Type>NIHII</Type>
        <SubType>HOSPITAL</SubType>
      </Organisation>
      <ApplicationID>xxxxxxxxxx</ApplicationID>
      <Inscription>
        <SSIN>12345678910</SSIN>
        <QualityCode>1</QualityCode>
        <Period>
          <BeginDate>2016-04-20</BeginDate>
          <EndDate>2019-06-20</EndDate>
        </Period>
      </Inscription>
    </urn:SearchBySSINRequest>
  </soapenv:Body>
```

6.1.2 Interpretation of the Reply

The parts of the reply sent back in response to a request for identifying a person are discussed below.





The first part, common to all web services consulting the National Registry, contains:

Field name	Descriptions
@Id	The number attributed to the request/reply by the eHealth platform.
Status	The <i>Status</i> block will contain a code and a message. If no error has occurred during the transaction, the <i>Code</i> will be '100' and the <i>Message</i> 'SUCCESS'. Otherwise: <ul style="list-style-type: none"> The <i>Code</i> will be an error code, which identifies the problem (more information see section 7). A problem can be related to the infrastructure (availability of the webservice ...) or to the content of the request. The <i>Message</i> will be a description of the error.
Error Information (not used)	This indicates more information about the reason of the failure (if known).

The second part contains information on the found person. (More information: see section 6.2.2)

Remarks:

1. Only those data are returned to which you are authorized to access.
2. Results may be as well in uppercase or in lowercase.

For example:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns3:SearchBySSINReply Id="CRN000000000B5NV" xmlns:ns2="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns3="urn:be:fgov:ehealth:consultRN:1_0:protocol">
      <ns2:Status>
        <Code>100</Code>
        <Message Lang="EN">Service successful</Message>
      </ns2:Status>
      <Person Origin="RN_RR">
        <SSIN>12345678910</SSIN>
        <PersonData>
          <Birth>
            <Date>1984-04-02</Date>
            <Localisation>
              <Municipality>
```



```

    <InsCode>21</InsCode>
    <PostalCode>1050</PostalCode>
    <Description Lang="FR">Ixelles</Description>
    <Description Lang="NL">Elsene</Description>
  </Municipality>    <Country>
    <InsCode>150</InsCode>
    <Description Lang="FR">Belgique</Description>
    <Description Lang="NL">België</Description>
    <Description Lang="DE">Belgien</Description>
  </Country>
</Localisation>
</Birth>
<Name>
  <First>Firstname</First>
  <Middle>Middle name</Middle>
  <Last>Last name</Last>
</Name>
<Gender>MALE</Gender>
<Nationality ModificationDate="1987-05-22">
  <InsCode>150</InsCode>
  <Description Lang="FR">Belgique</Description>
  <Description Lang="NL">België</Description>
  <Description Lang="DE">Belgien</Description>
</Nationality>
<Civilstate ModificationDate="2010-04-03">
  <Code>20</Code>
  <Description Lang="FR">Marié</Description>
  <Description Lang="NL">Gehuwd</Description>
  <Localisation>
    <Municipality>
      <InsCode>21</InsCode>
      <PostalCode>1050</PostalCode>
      <Description Lang="FR">Ixelles</Description>
      <Description Lang="NL">Elsene</Description>
    </Municipality>    <Country>
      <InsCode>150</InsCode>
      <Description Lang="FR">Belgique</Description>
      <Description Lang="NL">België</Description>
      <Description Lang="DE">Belgien</Description>
    </Country>
  </Localisation>
</Partner>
  <SSIN>12345678912</SSIN>
  <Name>
    <First>Firstname</First>
    <Middle>Middle name</Middle>
    <Last>Lastname</Last>
  </Name>
</Partner>
</Civilstate>
<Address>
  <StandardAddress>
    <Street>
      <Description Lang="FR">Rue Washington</Description>
      <Description Lang="NL">Washingtonstraat</Description>
    </Street>
  </StandardAddress>
</Address>

```

```

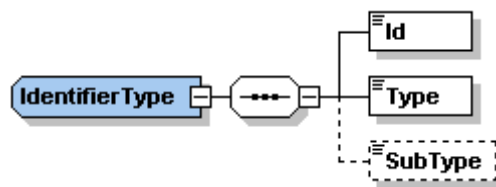
</Street>                <Housenumber>24</Housenumber>
<Municipality>
  <InsCode>21</InsCode>
  <PostalCode>1050</PostalCode>
  <Description Lang="FR">Ixelles</Description>
  <Description Lang="NL">Elsene</Description>
</Municipality>         <Country>
  <InsCode>150</InsCode>
  <Description Lang="FR">Belgique</Description>
  <Description Lang="NL">België</Description>
  <Description Lang="DE">Belgien</Description>
</Country>
</StandardAddress>
</Address>
</PersonData>
</Person>
</ns1:SearchBySSINReply>

```

6.2 Generic structure

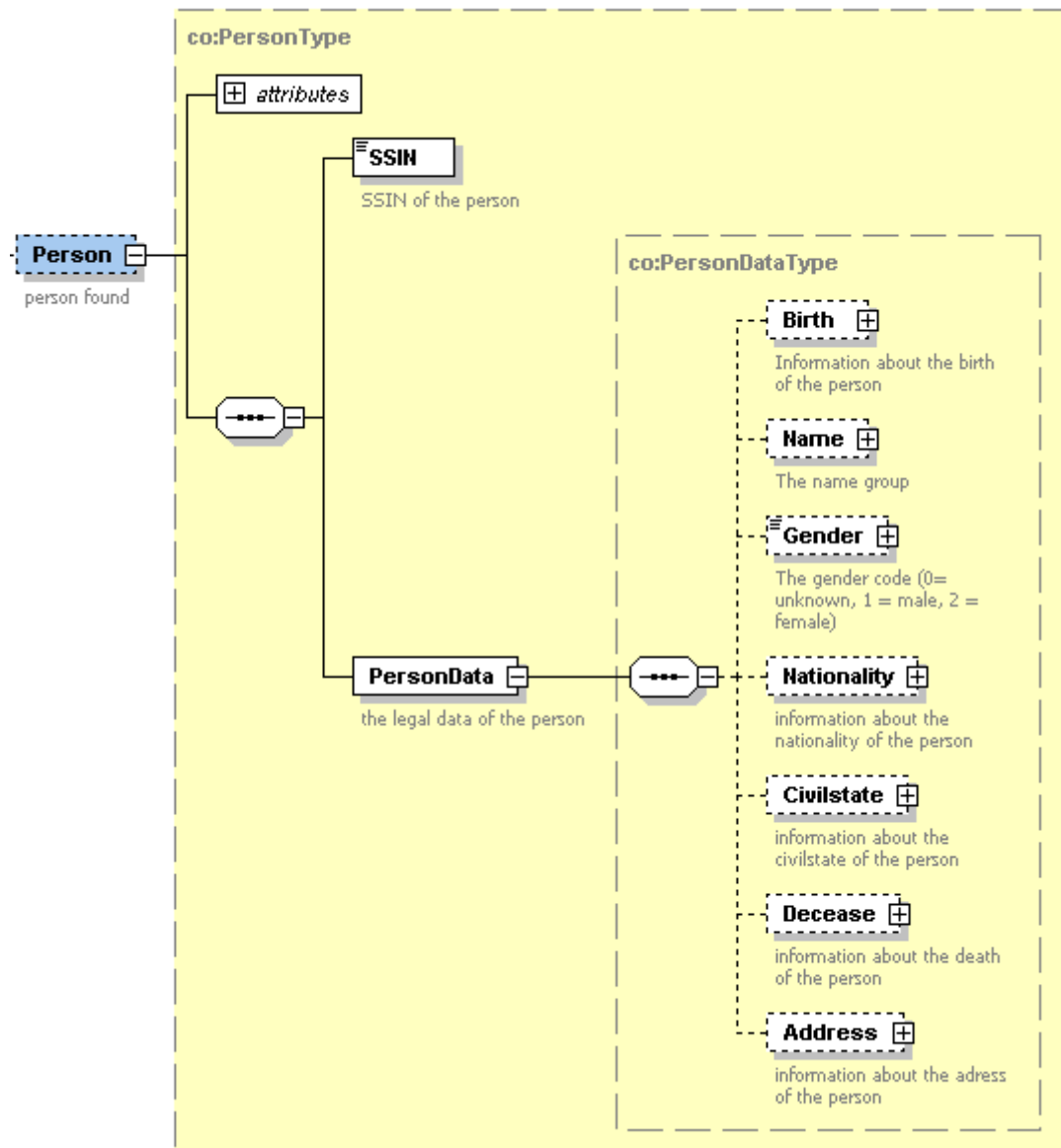
6.2.1 Identifier

An identifier is schematized as follows:



Field name	Descriptions
Id	Number identifying the organization
Type	The Type field identifies the organization type: <ul style="list-style-type: none"> - RIZIV-INAMI number, use type NIHII - Enterprise number, use type "CBE" - EHP number, use type "EHP"
Subtype	The Subtype field provides further specification on the organization type. For example, a hospital is identified with the type NIHII and the subtype HOSPITAL. The list of supported organization can be found on the eHealth portal ¹ .

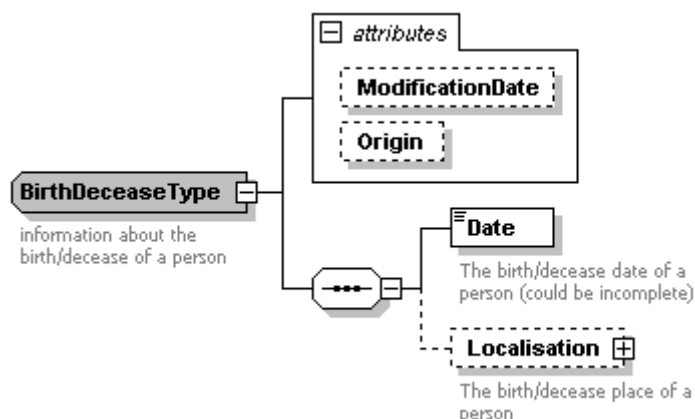
6.2.2 Person



Field name	Descriptions
@Origin	This field contains the source of this information: national register (NR) or BIS register (CBSS).
@ModificationDate (deprecated)	This field contains the date since when the information is valid (yyyy-mm-dd).
SSIN	The SSIN field contains the INSS number of the individual.
Birth	This block contains information about the date and the location of the birth (more information see section 6.2.3).
Name	This block contains information about the name of the person (more information see section 6.2.5).
Gender	This block contains information about the gender of the person. The possible values are MALE, FEMALE, UNKNOWN (more information see section 6.2.6).

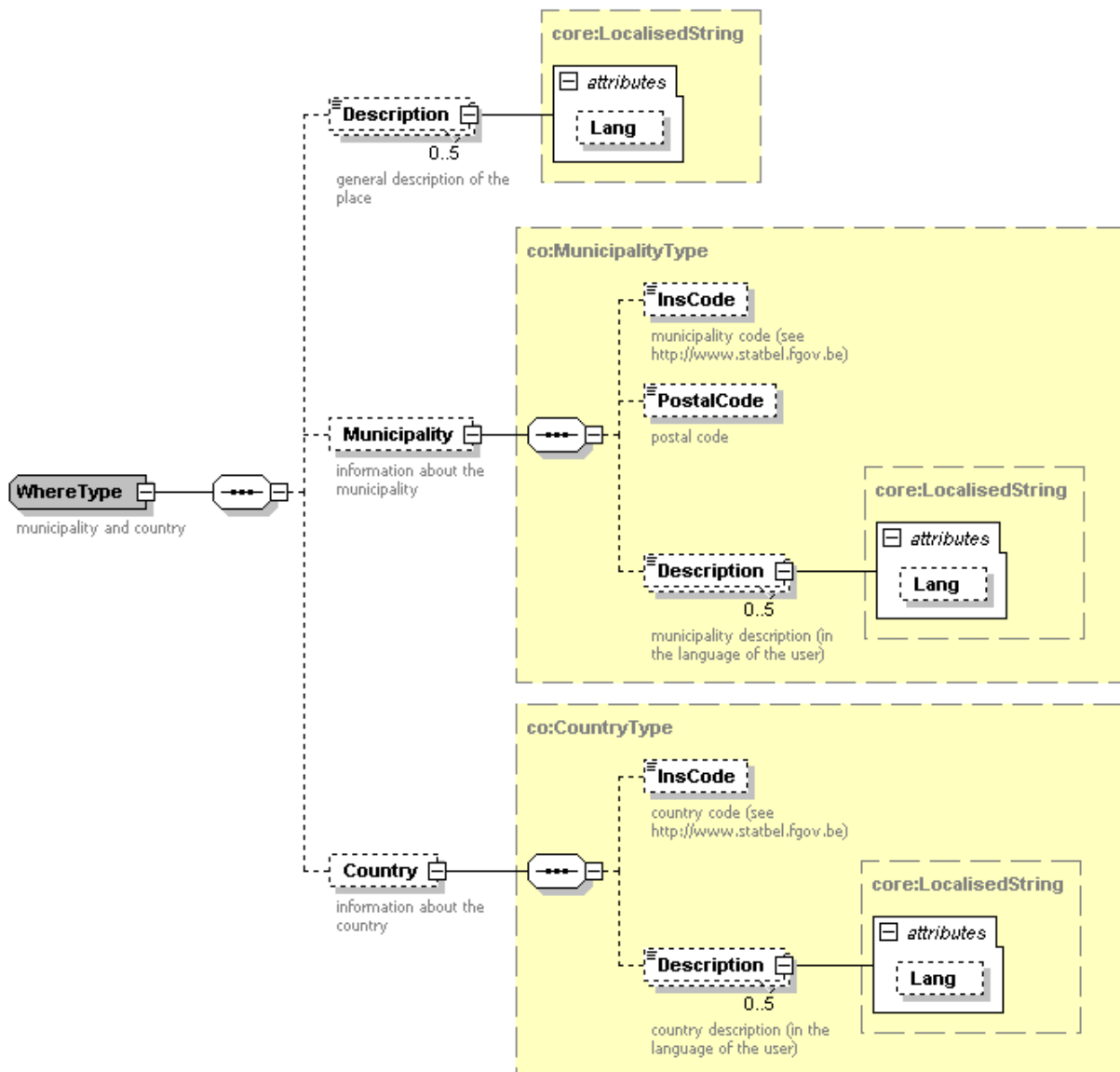
Nationality	This block contains information about the nationality of the person (more information see section 0).
Civilstate	This block contains information about the civil state of the person (more information see section 0).
Decease	This block contains information about the decease of the person (only present if the person is deceased, more information see section 6.2.3).
Address	This block contains the address of the person (more information see section 6.2.9).

6.2.3 BirthDeceaseType



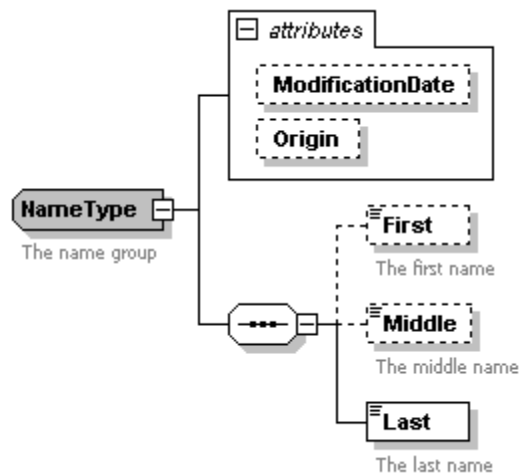
Field name	Descriptions
@ModificationDate (deprecated)	This field contains the date since when the information is valid (yyyy-mm-dd).
@Origin	This field contains the source of this information: national register (NR) or BIS register (CBSS).
Date	This field contains the birth date or the decease date (yyyy-mm-dd). The date can be incomplete (two possibilities: only the year is known: 1979-00-00 or only the year and month are known: 1979-10-00).
Localisation	This block contains the localization of the birth or the decease.

6.2.4 WhereType



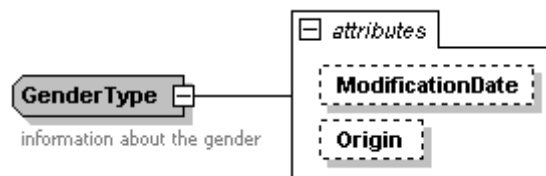
Field name	Descriptions
Description (not used)	This field contains a description of the location (this information cannot be linked to a municipality or a country).
Municipality	This block contains information about the municipality (only used when the location is in Belgium): <ul style="list-style-type: none"> • Inscore contains the INS code of the municipality • Description contains the description of the municipality • Postalcode contains the postal code of the municipality
Country	This block contains information about the country : <ul style="list-style-type: none"> • The Inscore contains the INS code of the country • Description contains the description of the country

6.2.5 NameType



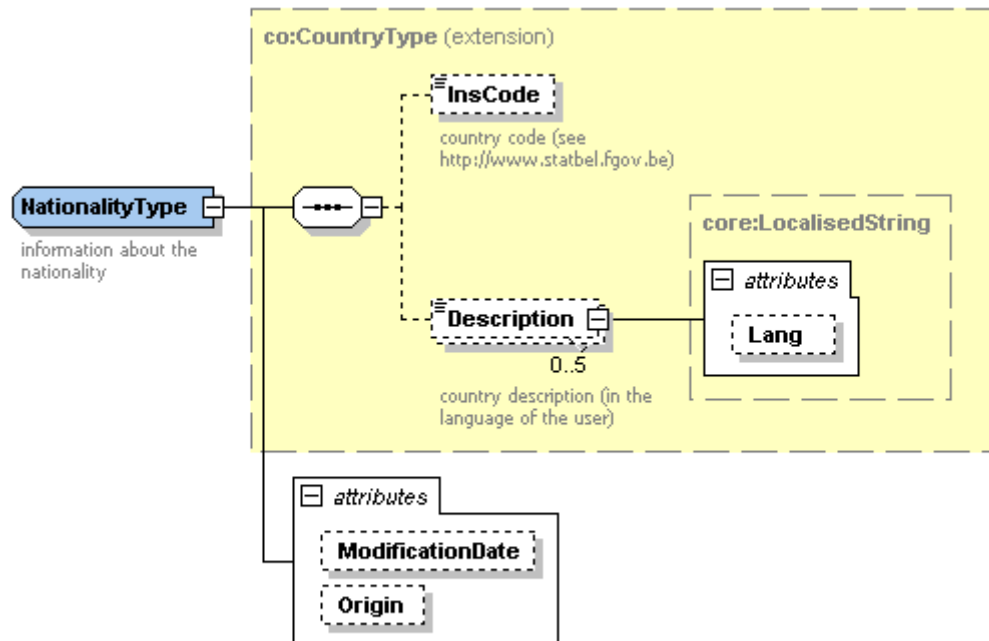
Field name	Descriptions
@ModificationDate	This field contains the date since when the information is valid (yyyy-mm-dd).
@Origin	This field contains the source of this information: national register (NR) of BIS register (CBSS).
First	This field contains the first name of the person.
Middle	This field contains the middle name of the person.
Last	This field contains the last name of the person. If the last name contains more than 48 characters, the first 48 characters will be returned in the response.

6.2.6 GenderType



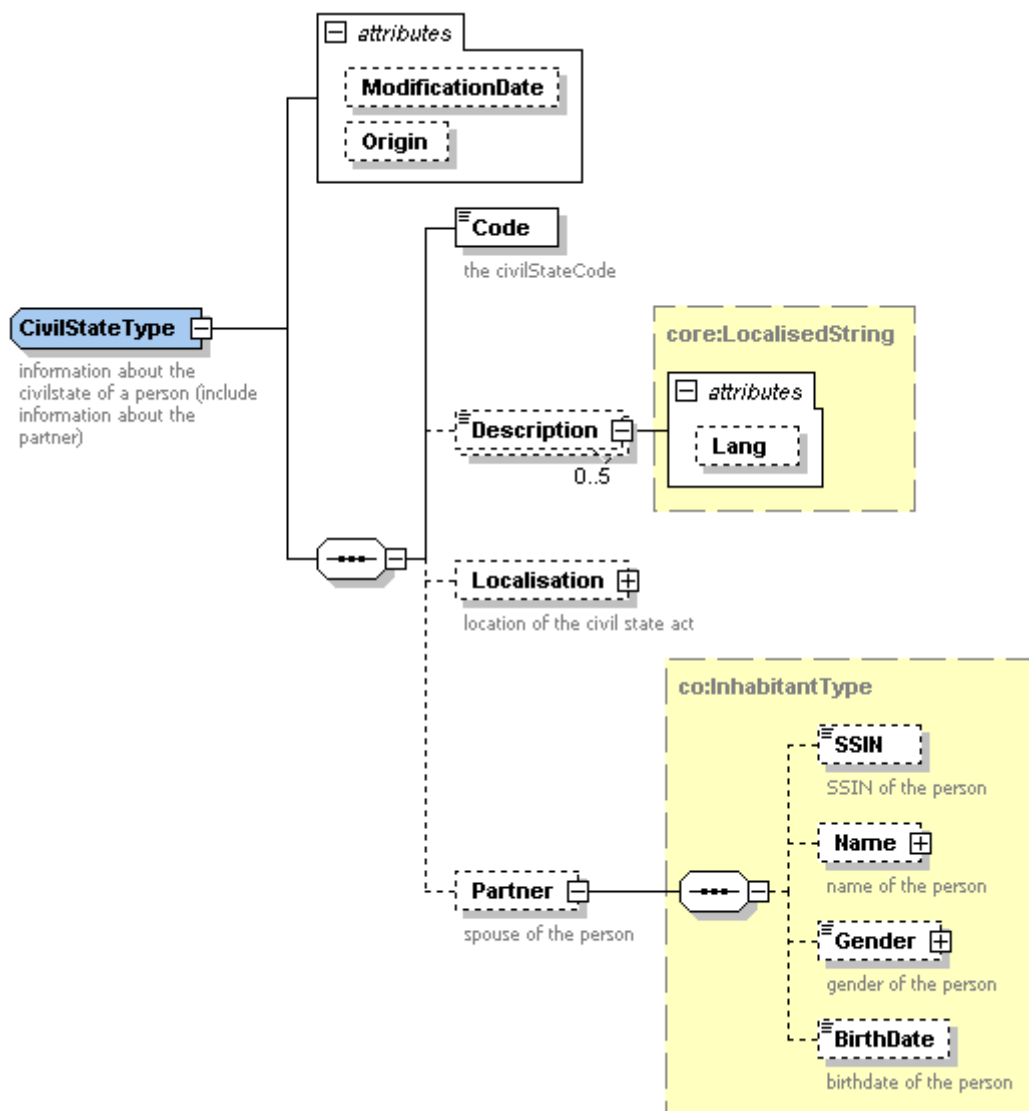
Field name	Descriptions
@ModificationDate	This field contains the date since when the information is valid (yyyy-mm-dd).
@Origin	This field contains the source of this information: national register (NR) or BIS register (CBSS).

6.2.7 NationalityType



Field name	Descriptions
@ModificationDate	This field contains the date since when the information is valid (yyyy-mm-dd).
@Origin	This field contains the source of this information: national register (NR) or BIS register (CBSS).
InsCode	This field contains the Ins code of the country.
Description	This field contains the description of the country.

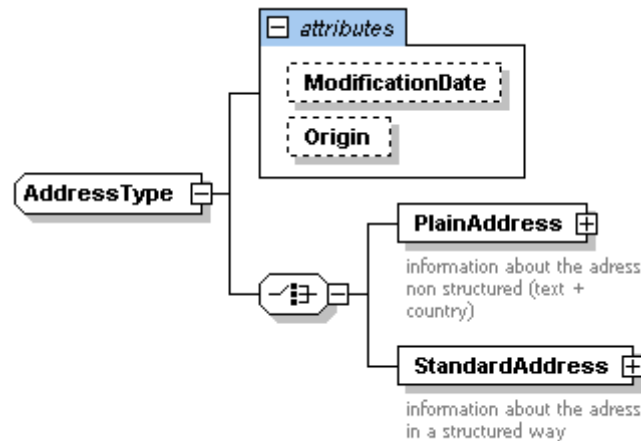
6.2.8 CivilStateType



Field name	Descriptions
@ModificationDate	This field contains the date since when the information is valid (yyyy-mm-dd).
@Origin	This field contains the source of this information: national register (NR) or BIS register (CBSS).
Code	This field contains the code indicating the civil state of the person.
Description	This field contains the description of this code.
Localisation	This block contains the localization linked to civil state. Example: localization of wedding....

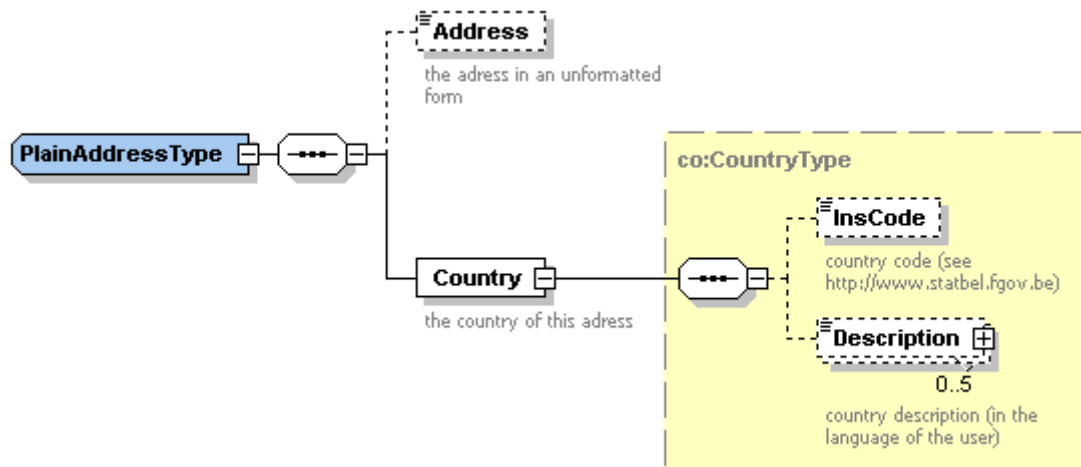
Partner	<p>This field contains information about the partner :</p> <ul style="list-style-type: none"> • the SSIN • the name • the gender • the birthdate <p>Remark: in the case of a widow or a divorce, the information about the partner will not be returned in the response.</p>
----------------	--

6.2.9 AddressType



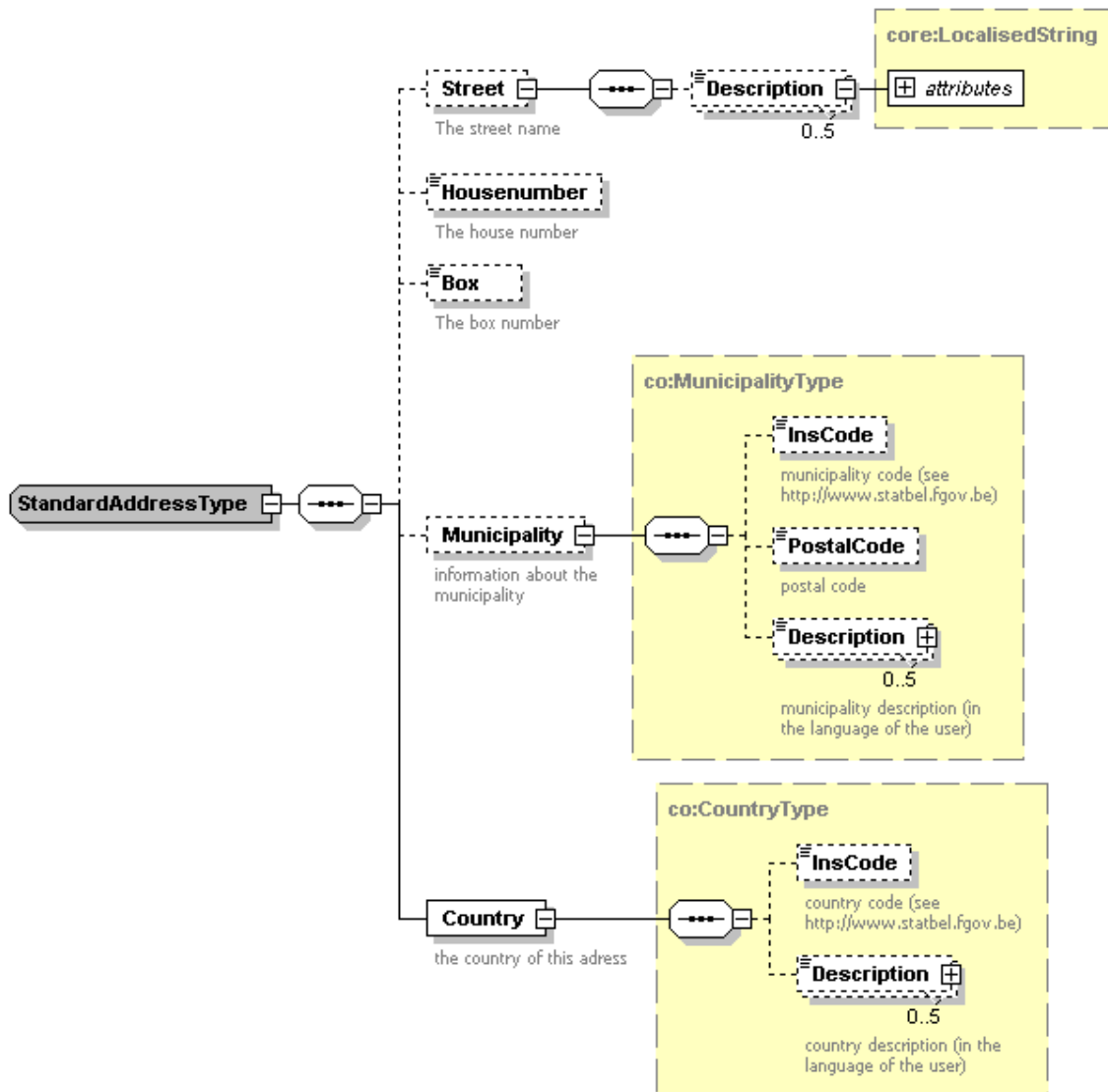
Field name	Descriptions
@ModificationDate	This field contains the date since when the information is valid (yyyy-mm-dd).
@Origin	This field contains the source of this information: national register (NR) of BIS register (CBSS).
PlainAddress	This block contains an address “unstructured”, only used when no standard address is available.
StandardAddress	This block contains an address with clear separation: street, number, and municipality.

6.2.10 PlainAddressType



Field name	Descriptions
Address	This field contains all the information known about the address (except the country).
InsCode	This field contains the Ins code of the country.
Description	This field contains the description of the country. Remark: the attribute <i>Lang</i> can be nil.

6.2.11 StandardAddressType



Field name	Descriptions
Street/Description	This field contains the street (and the translation if the street is in a bilingual municipality).
Housenumber	This field contains the number.
Box	This field contains the box.
Municipality/InsCode	This field contains the Ins code of the commune (only if the municipality is in Belgium).
Municipality/Postalcode	This field contains the postal code.
Municipality/Description	This field contains the description of the municipality (and the translation if in a bilingual municipality). Remark: the attribute <i>Lang</i> can be nil.
Country/InsCode	This field contains the Ins code of the country.

Country/Description	This field contains the description of the country. Remark: the attribute <i>Lang</i> can be nil.
---------------------	--



7. Error and failure messages

Each error message returned by the webservice will have the following structure:

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:SearchBySSINReply Id=" CRN00000000004P5" xsi:schemaLocation="urn:be:fgov:ehhealth:consultRN:1_0:protocol IdentifyPerson-1-0.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:eH="urn:be:fgov:ehhealth:commons:1_0:core" xmlns:ns1="urn:be:fgov:ehhealth:consultRN:1_0:protocol">
  <eH:Status>
    <Code>Error code</Code>
    <Message>Error type</Message>
    <Message>Error description</Message>
  </eH:Status>
</ns1:SearchBySSINReply>
```

Error codes	Error Types	Error description	Actions
0	Business Problem : invalid author	HCP Identifier is not in database	CBE, NIHII or EHP identifier is not configured in database. Please take contact with contact center
1	Business Problem : invalid author	Application not in database	The application id is not configured in the database. Please contact the contact center
2	Business Problem : invalid author	No granted right found for application	The application id is not allowed to call the webservice. Please contact the contact center
4	Business Problem : invalid author	Bad application ID (malformed)	The application Id is not valid. Please check the application id in your request.
8	Business Problem : invalid author	The applicationId is not linked to the organization	Please contact the contact center
11 – 40	Technical Error	Technical Error: While Delegating To Subsystem (CBSS webservice)	Please contact the contact center



41 – 59	Technical Error	Technical Error: Problem With System (eHealth)	Please contact the contact center
60	business error: invalid request	SSIN malformed	Please check that INSS in your request is valid
61	business error: invalid request	Required field missing	A needed field is missing in your request
62	business error: invalid request	Condition not satisfied	Please check in your request that StartDate != EndDate and StartDate >= currentDate
72	business error : No data found	No data found	There is no information found about the individual.
74	The SSIN ({0}) was replaced by {1}	The SSIN ({0}) was replaced by {1} (BCSS)	When you call again the webservice identifyPerson, you must use in your request the INSS {1} as input to get individual data.
81	Business Error : ssin doesn't exist	SSIN doesn't exist	The INSS is unknown in CBSS register
85	Business Problem	Period is invalid	The period in your request does not match the inscription period for the individual. Please check the period in your request. Check that your begin date contains "today".
86	business error : wrong quality	Wrong quality (IdentifyPerson)	Please check that you use a valid quality code in your request.



8. Test and release processes

8.1 Procedure

This chapter explains the procedures for testing and releasing an application in acceptance or production.

8.1.1 Initiation

If you intend to use the eHealth platform service, please contact info@ehealth.fgov.be. The project department will provide you with the necessary information and mandatory documents.

1. First, the users will need to request an agreement from the sectoral committee secretary@socsec.committee.belgium.be.
2. An approval letter from the sectoral committee, and a project identifier number, “application ID”, shall be sent to the users
3. The “integration team” supports the rest of the integration.

8.1.2 Development and test procedure

- The consult RN test is a set of test scenarios that cover the integration of the set of WS (Identify person, Phonetic search, manage inscription, person history and mutation sender).
- The test scenarios are available on the portal of the eHealth platform ¹.
- In order to get your production application ID, you should first prove in the acceptance environment that you have correctly implemented the call to the services. Therefore, you will need to complete the “test scenario form” and send it to the integration team.

8.1.3 Release procedure

When development tests are successful, you can request to access the acceptance environment of the eHealth platform. From this moment, you start the integration and acceptance tests. The eHealth platform suggests testing during minimum one month.

After successful acceptance tests, the partner sends his test results and performance results with a sample of “eHealth request” and “eHealth answer” by email to his point of contact at the eHealth platform.

Then the eHealth platform and the partner agree on a release date. The eHealth platform prepares the connection to the production environment and provides the partner with the necessary information. During the release day, the partner provides the eHealth platform with feedback on the test and performance tests.

For further information and instructions, please contact: integration-support@ehealth.fgov.be.

8.1.4 Operational follow-up

Once in production, the partner using the eHealth platform service for one of his applications will always test first in the acceptance environment before releasing any adaptations of its application in production. In addition, he will inform the eHealth platform on the progress and test period.

In case of technical issues on the WS, the technician of the partner in the Health sector may obtain support from eHealth contact center.



9. Risks and security

9.1 Security

9.1.1 Business security

In case the development adds an additional use case based on an existing integration, the eHealth platform must be informed at least one month in advance with a detailed estimate of the expected load. This will ensure an effective capacity management.

In case of technical issues on the WS, the partner may obtain support from the contact center (see Chap 3)

In case the eHealth platform finds a bug or vulnerability in its software, we advise the partner to update his application with the newest version of the software within 10 business days.

In case the partner finds a bug or vulnerability in the software or web service that the eHealth platform delivered, he is obliged to contact and inform us immediately. He is not allowed to publish this bug or vulnerability in any case.

9.1.2 Web service

WS security used in this manner is in accordance with the common standards. Your call will provide:

- SSL one way
- An X.509 certificate. This will contain the identifiers of the caller: NIHL number or enterprise number.
- Time-to-live of the message: one minute.
- Signature of the timestamp, body and binary security token. This will allow the eHealth platform to verify the integrity of the message and the identity of the message author.
- No encryption on the message.

For further information, please refer to your eHealth contact. In order to use the WS, an agreement from eHealth is required.

9.1.3 The use of username, password and token

The username, password and token are strictly personal. Partners and clients are not allowed to transfer them. Every user takes care of his username, password and token and he is forced to confidentiality of it. Moreover, every user is responsible of every use, which includes the use by a third party, until the inactivation.