

# WEB SERVICE AND OPERATION / SERVICE MESSAGE DESCRIPTION

## NRPROXYSERVICE V3.0

# Content

## Contents

Introduction	6
1. Request and response message	7
1.1. General structure	7
1.1.1. Request message	7
1.1.2. Response message	8
1.1.3. Additional context/entity information	9
1.1.4. Used code lists and enumerations	10
1.2. operation get*(person number, includeHistory)	11
1.2.1. Request	11
1.2.2. Response	11
1.2.3. Examples	11
2. Service Description	12
2.1. Operation getProfession	13
2.2. Operation getLegalCohabitation	13
2.3. Operation getLegalDisability	13
3. Detailed Capability Scenarios	14

<b>3.1. Operation get* (Person Number, includeHistory)</b>	<b>14</b>
3.1.1. Standard scenario – no history requested	14
3.1.2. Alternative scenario – historical details requested	14
<b>4. Basic concepts</b>	<b>15</b>
<b>4.1. PERSON NUMBER</b>	<b>15</b>
<b>5. Basic service information</b>	<b>16</b>
<b>5.1. Service access parameters</b>	<b>16</b>
<b>6. Appendix</b>	<b>17</b>
<b>6.1. Reference documents</b>	<b>17</b>

TABLE 1 DOCUMENT HISTORY

Version	When	Who	What
<b>1.0</b>	2019-04-01	Liesbet D'Hondt	Document setup

## 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.

# Introduction

The person services support the common requirements of our consumers. Some of our consumers need particular information not of interest for most of the consumers.

An example is the profession of a person. FPS Justice requires the information for the preparation of the composition of the jury for the court of Assizes. The requirement of FPS Justice is not common for our consumers.

To support those particular one-off requirements, BOSA DT offers a service returning per operation a limited set of information out of the authentic source.

The NRproxy returns person details for one particular person, identified by a person number. The details returned depend on the operation. The consumer is able to request the actual details or historical details.

The NRProxy service operations return raw data from the National Registry which datamodel is then exposed.

Each operation returns a minimum set of details, the minimum identification criteria, including name details, person number, birthdate and gender and the administrative authority managing the person.

The information returned per operation is described in the service operation description document.

# 1. Request and response message

## 1.1. General structure

### 1.1.1. Request message

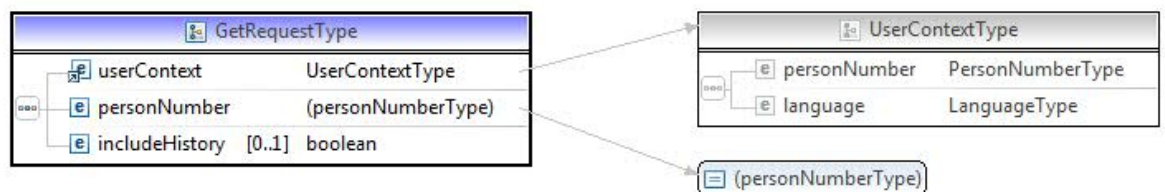
The NRProxy service returns for a person raw data from the national registry. Other information types are returned depending on the operation. The consumer can request the information with or without history.

The request message contains two parameters, the person number and a Boolean includeHistory.

Input parameter	Description	Precondition
Person number	The person number of the person	The consumer executes a check digit before sending the request <sup>1</sup> .
includeHistory	Boolean specifying whether historical details are required	

Input parameter	M/O	Type
Person number	M	11 digits
IncludeHistory	O	boolean

M/O: Mandatory/Optional



The userContext element is completed with the person number of the executor of the request and including the desired response language.

The affinity and proportionality of your application is linked to the FSB Consumer Certificate and configured on FSB. Check with your service manager if you need more information.

### 1.1.2. Response message

The structure of the response contains either a business error or the expected response, as described in the reference architecture of the FSB. The expected response might contain warnings.

<sup>1</sup> Check rules are :

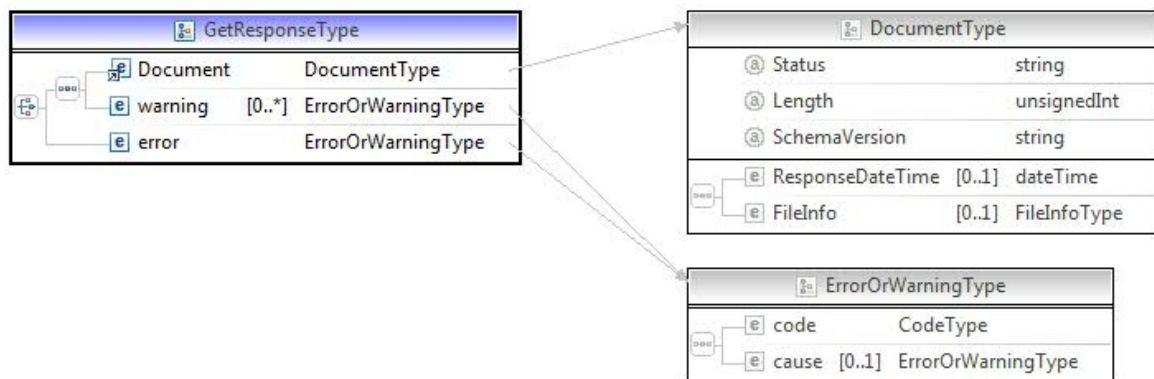
When born before January 1° 2000 XXXXXX YYY ZZ where  $97-\text{mod}(\text{XXXXXXXXYY}, 97)=ZZ$ ; when born after December 31° 1999: XXXXXX YYY ZZ where  $97-\text{mod}(2\text{XXXXXXXXYY}, 97)=ZZ$ .



The expected response is encapsulated in a document element conform to the schema definition of the National Registry tx25 response. The information contained in the response is the raw data of the authentic source which is limited to particular information types depending on the operation.

The NRProxy service is limiting the document element to

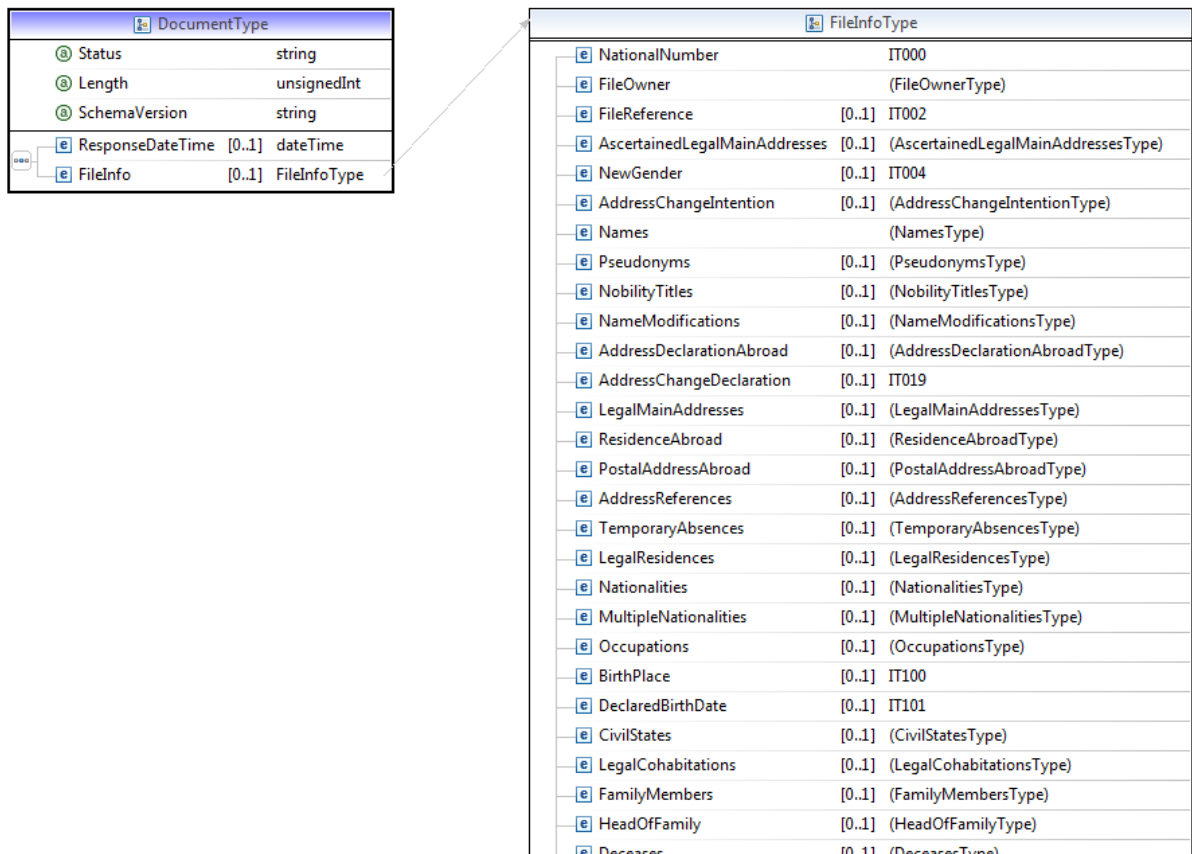
- the minimal identification criteria (IT000, IT001 & IT010)
- the requested information types conform to the definition of the operation



### 1.1.3. Additional context/entity information

The document “instructions of the national registry” provided by the National Registry describes the information types and their particular content. A reference to that document is available in the section Appendix/Reference documents.

For example, the picture below illustrates the layout of the document element. Mark not all of the information types are visible in this picture.



#### 1.1.4. Used code lists and enumerations

The table below gives an overview of the errors that might occur. For more details concerning error handling, check the “person services” service code description document, which is common for all the person services.

**Table 2: Negative scenarios – FSB error codes**

FSB error code	Description
4016	No access for the person with this specific national number
4015	Requested transaction not allowed for client
5100	Invalid language code
5105	Invalid format - check digit (mod97)
5140	No persons found with number
4014	Invalid SAML assertion
4001	An unknown error was received from NR
4013	Person is not allowed to perform searches for other people

Codes used in the document element of the National Registry are described in the document “instructions of the national registry”.

## 1.2. operation get\*(person number, includeHistory)

### 1.2.1. Request

This general structure is applicable to the request of all of the operation. The consumer specifies the request operation name.

Operation	Request element
getProfession	getProfessionRequest
getLegalCohabitation	getLegalCohabitationRequest
getLegalDisability	getLegalDisabilityRequest

### 1.2.2. Response

The general structure is applicable to the response of all of the operation.

### 1.2.3. Examples

In the example below, the history of professions of a person is requested. In the example below the optional Header option “sent on behalf of” is applied, this option determines the finality by using the used FSB Consumer Certificate + sentOnBehalfOf (if more information is needed, please contact your Service Manager)

## 2. Service Description

Consumers are advised to make use of the basic person services. The basic person services `getPerson` & `searchPerson` deliver person details in a canonical data model, regrouping data's from the National Registry as well as from the registries of the CBSS.

The NRproxy returns person details for one particular person, identified by a person number. The details returned depend on the operation. The consumer is able to request the actual details or historical details.

The NRProxy service operations return raw data from the National Registry which data model is then exposed.

Each operations returns a minimum set of details, the minimum identification criteria:

- IT010      Name details
- IT000      Person number, birthdate and gender
- IT001      Administrative authority managing the person

Table 3: List of operations and returned IT's

Operation	Returned IT's
Miminal identification criteria	000 001 010
<code>getProfession</code>	070
<code>getLegalCohabitation</code>	123
<code>getLegalDisability</code>	111 113

### Remarks

- The operations should only be applied with a person number being a national number; the consumer is responsible for analyzing the person number
- The consumer is responsible for applying and analyzing the master data rules. As described below in paragraph 5.1, two authoritative sources master the person details data. In case a person has been unsubscribed by a Belgian municipality (or embassy), part of the historical information is available in the RAD registry.
- The NRproxy service is not overruling permissions given by the privacy commission
- The list of operations is subject of change

## **2.1. Operation getProfession**

The operation returns the actual or historical profession details of a person.

Check the instructions of the National Registry for more details concerning profession.

## **2.2. Operation getLegalCohabitation**

The operation returns the actual or historical legal cohabitation information of a person.

Check the instructions of the National Registry for more details concerning legal cohabitation.

## **2.3. Operation getLegalDisability**

The operation returns the actual or historical legal cohabitation information of a person.

Check the instructions of the National Registry for more details concerning legal disability.

## 3. Detailed Capability Scenarios

The scenarios are applicable to all of the operations listed in the table above.

Each of the operations is applied with two parameters; the person number and a Boolean includeHistory. If the Boolean includeHistory is set to true, the historical details are returned.

The scenario's listed below describe the positive business scenario's. The table below gives an overview of the errors that might occur. For more details concerning error handling, check the "person services" service code description document, which is common for all the person services.

Table 4: Negative scenarios – FSB error codes

FSB error code	Description
4016	No access for the person with this specific national number
4015	Requested transaction not allowed for client
5100	Invalid language code
5105	Invalid format - check digit (mod97)
5140	No persons found with number
4014	Invalid SAML assertion
4001	An unknown error was received from NR
4013	Person is not allowed to perform searches for other people

### 3.1. Operation get\* (Person Number, includeHistory)

Each of the operations returns the minimal identification criteria and a list of information types as defined in Table 4: List of operations and returned IT's.

#### 3.1.1. Standard scenario – no history requested

The request contains a valid person number. Historical information is not requested.

The response contains the minimal identification criteria and the information type conform the operation definition, without historical details. The schema respects the schema definition of the National Registry.

#### 3.1.2. Alternative scenario – historical details requested

The request contains a valid person number. Historical information is requested.

The response contains the minimal identification criteria and the information type conform the operation definition. The response includes Historical details. The schema respects the schema definition of the National Registry.

## 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.

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

### 4.1. 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 an 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	<p>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.</p> <p>Bis numbers attributed by the Crossroads Bank for Social Security have the month value plus 20 (20-32) or plus 40 (40-52).</p>

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

<b>Endpoint URL (Test &amp; Acceptance)</b>	<a href="https://fsb.services.int.belgium.be/PersonServices/3.0/NRProxyService">https://fsb.services.int.belgium.be/PersonServices/3.0/NRProxyService</a>
<b>Endpoint URL (Production)</b>	<a href="https://fsb.services.prn.belgium.be/PersonServices/3.0/NRProxyService">https://fsb.services.prn.belgium.be/PersonServices/3.0/NRProxyService</a>
<b>Message exchange pattern(s)</b>	Synchronous
<b>Message protocol</b>	SOAP
<b>Transport-level security</b>	1-way SSL with digital certificate
<b>Message-level security</b>	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



## 6. Appendix

### 6.1. Reference documents

Service code description document of the person service family, including the error handling

[Instructions National Registry](#)

- [Description of the Information Types \(01/06/2021\)](#)

Remarks

- The documents above are subject of change. The hyperlink above contains a date notation. Check the web site of the RNR for the most accurate version.
- The hyperlinks refer to the Dutch language version of those documents, the French language versions are available as well.