

**RNConsult – SSINHistory
Cookbook
Version 1.3**

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eHealth platform

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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	02/03/2017	eHealth platform	Initial version
1.1	28/03/2017	eHealth platform	Update business errors
1.2	12/04/2021	eHealth platform	§ 2.1 WS-I Basic Profile
1.3	20/07/2022	eHealth platform	§ 2.2 Tracing (update) § 3.2 Status (added)

2. Introduction

2.1 Goal of the service

N/A

2.2 Goal of the document

This document provides technical information on calling the web service SSIN history, as provided by the eHealth-platform.

The eHealth platform will provide the SSIN history web service in order to allow the coherent management of SSIN/SSiB within EHR of patient. The call to the SSIN History does not request any agreement from the sectoral committee.

Based on a unique identifier (SSIN or SSiB number), users will have the opportunity to obtain the history of unique identifier related to this person and to identify the current active identifier.

More and more health data are related to the unique national identifier of a patient. This unique identifier is used as primary key for patient health data exchange (e.g. within prescription, Sumehr ...). If for most of the Belgians, this unique identifier does not change, there are about 70.000 NISS mutations per year (Less than 3% of the population). We therefore highly advise software producers to call this service only in case of a reasonable doubt.

For an organization with a granted access to the ConsultRN services, we advise to first implement the call to those services and apply the guidelines published in the FAQ's of the technical library.

We advise to communicate on a patient with the active identifier. Nevertheless, each business should clarify the "consolidation rules & guidelines" to apply on files related to a single person but with two distinct unique identifiers.

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

This information should allow the IT department of an organization to develop and use the web service call. Some technical and legal requirements must be satisfied in order to allow the integration of the eHealth web services in client applications. This document is not a development or a programming guide for internal applications; eHealth partners always keep a total freedom within those fields. Nevertheless, in order to interact in a smooth, homogeneous and risk control way with a maximum of partners, eHealth partners must commit to comply with specifications, data format, and release processes described within this document. In addition, our partners in the health sector must also comply with the business rules of validation and integration of data within their own applications in order to minimize errors and incidents..

2.3 eHealth platform document references

On the portal of the eHealth platform, you can find all the referenced documents.¹ These versions, or any following ones, can be used for the eHealth platform service.

ID	Title	Version	Date	Author
1	SOA – Error guide	1.0	10/06/2021	eHealth platform

¹ www.ehealth.fgov.be/ehealthplatform

2.4 External document references

All documents can be found through the internet. They are available to the public, but not supported by the eHealth platform.

ID	Title	Source	Date	Author
1	Basic Profile Version 1.1	http://www.ws-i.org/Profiles/BasicProfile-1.1-2004-08-24.html	24/08/2004	Web Services Interoperability Organization

3. Support

3.1 Helpdesk eHealth platform

3.1.1 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 chapter about the eHealth Certificates on the portal of the eHealth platform

- <https://www.ehealth.fgov.be/ehealthplatform/nl/ehealth-certificaten>
- <https://www.ehealth.fgov.be/ehealthplatform/fr/certificats-ehealth>

For technical issues regarding eHealth platform certificates

- Acceptance: acceptance-certificates@ehealth.fgov.be
- Production: support@ehealth.fgov.be

3.1.2 For issues in production

eHealth platform contact centre:

- Phone: 02 788 51 55 (on working days from 7 am till 8 pm)
- 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)

3.1.3 For issues in acceptance

Integration-support@ehealth.fgov.be

3.1.4 For business issues

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

3.2 Status

The website <https://status.ehealth.fgov.be> is the monitoring and information tool for the ICT functioning of the eHealth services that are partners of the Belgian eHealth system.

3.2.1 Technical contact centre MyCareNet:

- Telephone: 02 431 47 71
- Mail: ServiceDesk@MyCareNet.be



4. Global overview

P.M.



5. Step-by-step

5.1 Technical requirements

- The call to SSIN web service is not conditioned to the authorization of the sectoral committee
- An eHealth certificate that is used to identify the initiator of the request.
- If you do not have one, see:
Dutch version: <https://www.ehealth.fgov.be/ehealthplatform/nl/service-ehealth-certificaten>
French version: <https://www.ehealth.fgov.be/ehealthplatform/fr/service-certificats-ehealth>
- Time synchronization. eHealth servers are synchronized to a pool of global servers using NTP protocol. Partner's clock offset cannot be more than 60 seconds against eHealth's, request would otherwise be discarded.

5.1.1 WS-I Basic Profile 1.1

Your request must be WS-I compliant (See Chap 2.4 - External Document Ref).

5.1.2 Tracing

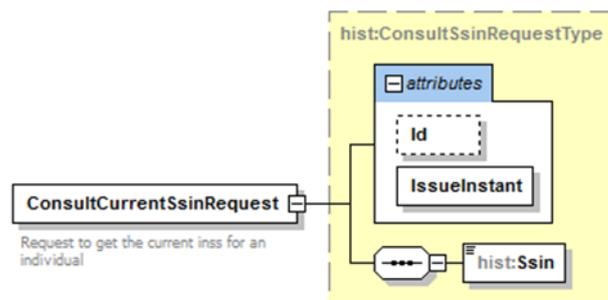
To use this service, the request SHOULD contain the following two http header values (see RFC <https://datatracker.ietf.org/doc/html/rfc7231#section-5.5.3>):

1. User-Agent: information identifying the software product and underlying technical stack/platform. It MUST include the minimal identification information of the software such that the emergency contact (see below) can uniquely identify the component.
 - a. Pattern: {minimal software information}/{version} {minimal connector information}/{connector-package-version}
 - b. Regular expression for each subset (separated by a space) of the pattern: `[[a-zA-Z0-9-√]*√[0-9azA-Z-_.]*`
 - c. Examples:
User-Agent: myProduct/62.310.4 Technical/3.19.0
User-Agent: Topaz-XXXX/123.23.X freeconnector/XXXXX.XXX
2. From: email-address that can be used for emergency contact in case of an operational problem.
Examples:
From: info@mycompany.be

5.2 Method ConsultCurrentSSIN

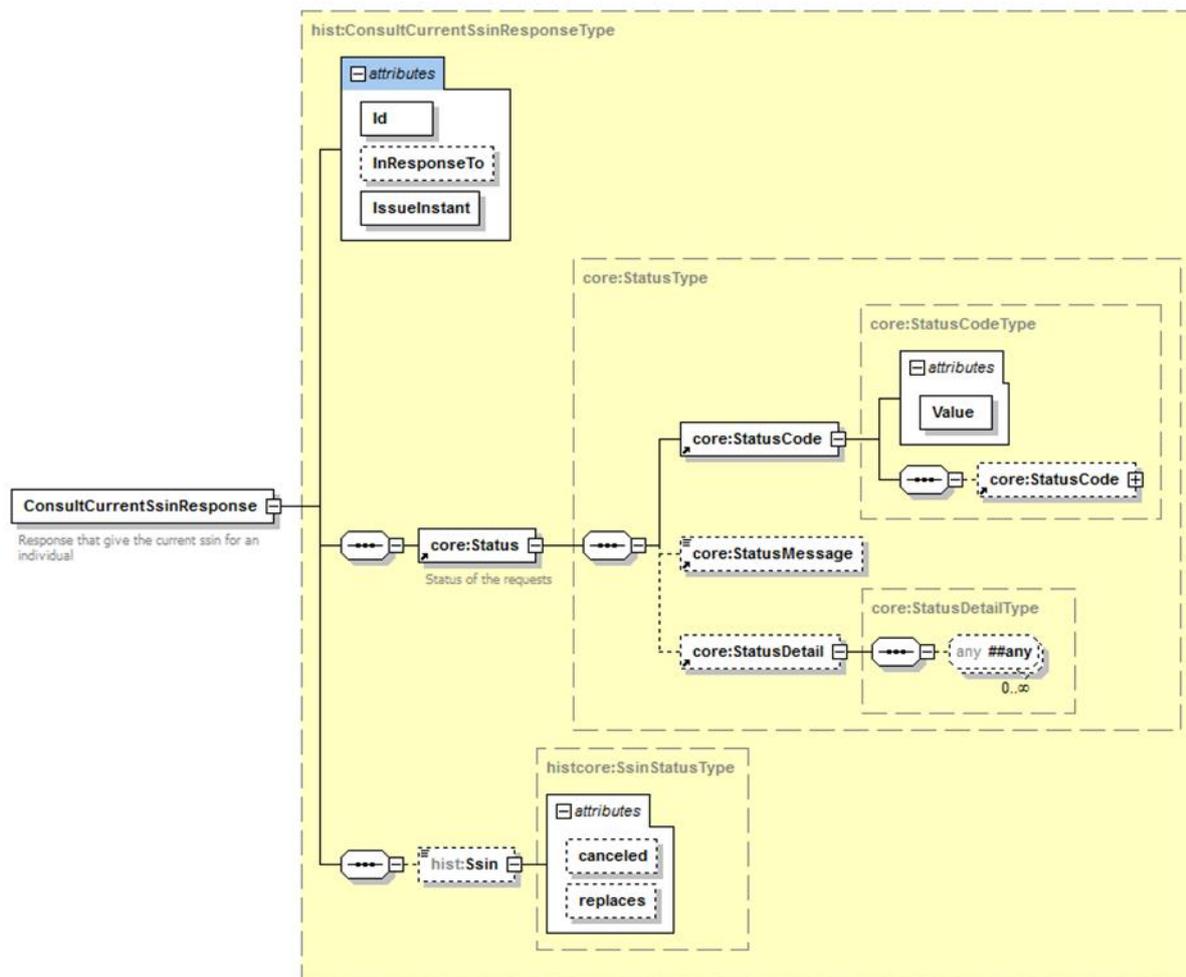
This method allows getting the current identifier about an individual.

5.2.1 Formulating a request



Field name	Descriptions
@Id	The number attributed to the request by eHealth platform
@IssueInstant	Timestamp of the request
Ssin	This field contains the SSIN number of the individual

5.2.2 Interpretation of the Response



Field name	Descriptions
@Id	Ticket number identifier the response by the CBSS
@InResponseTo	The number, attributed to the request by eHealth platform
@IssueInstant	Timestamp of the response
Status	This field contains the status response (See section 6)
Ssin	This field contains the last active SSIN identifier
@canceled	This attribute has the value true if the SSIN is canceled
@replaces	This attribute contains the SSIN requested if this one is not the last SSIN identifier

Example:

xxxxxxxxxx1 is replaced by xxxxxxxxxxxx2

Request:

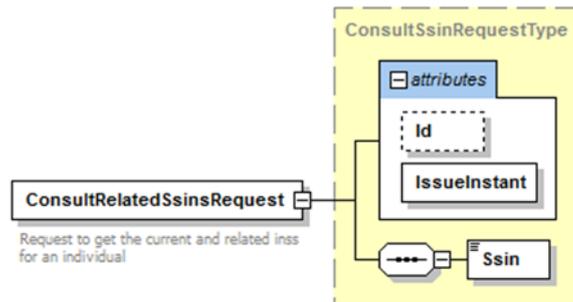
```
<?xml version="1.0" encoding="UTF-8"?>
<ConsultCurrentSsinRequest xmlns="urn:be:fgov:ehhealth:consultrn:ssinhistory:protocol:v1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Id="ID1" IssueInstant="2001-12-17T09:30:47Z"
xsi:schemaLocation="urn:be:fgov:ehhealth:consultrn:ssinhistory:protocol:v1 ehealth-ssinhistory-protocol-1_0.xsd">
    <Ssin> xxxxxxxxxxxx1</Ssin>
</ConsultCurrentSsinRequest>
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<n1:ConsultCurrentSsinResponse xmlns="urn:be:fgov:ehhealth:commons:core:v2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:n1="urn:be:fgov:ehhealth:consultrn:ssinhistory:protocol:v1" Id="97a2db32-d788-41de-a787-31c83e9c75b7"
InResponseTo="1234" IssueInstant="2001-12-17T09:30:47Z"
xsi:schemaLocation="urn:be:fgov:ehhealth:consultrn:ssinhistory:protocol:v1 ehealth-ssinhistory-protocol-1_0.xsd">
    <Status>
        <StatusCode Value="urn:be:fgov:ehhealth:2.0:status:Success" />
    </Status>
    <n1:Ssin Replaces="xxxxxxxxxx1"> xxxxxxxxxxxx2</n1:Ssin>
</n1:ConsultCurrentSsinResponse>
```

5.3 Method ConsultRelatedSSINS

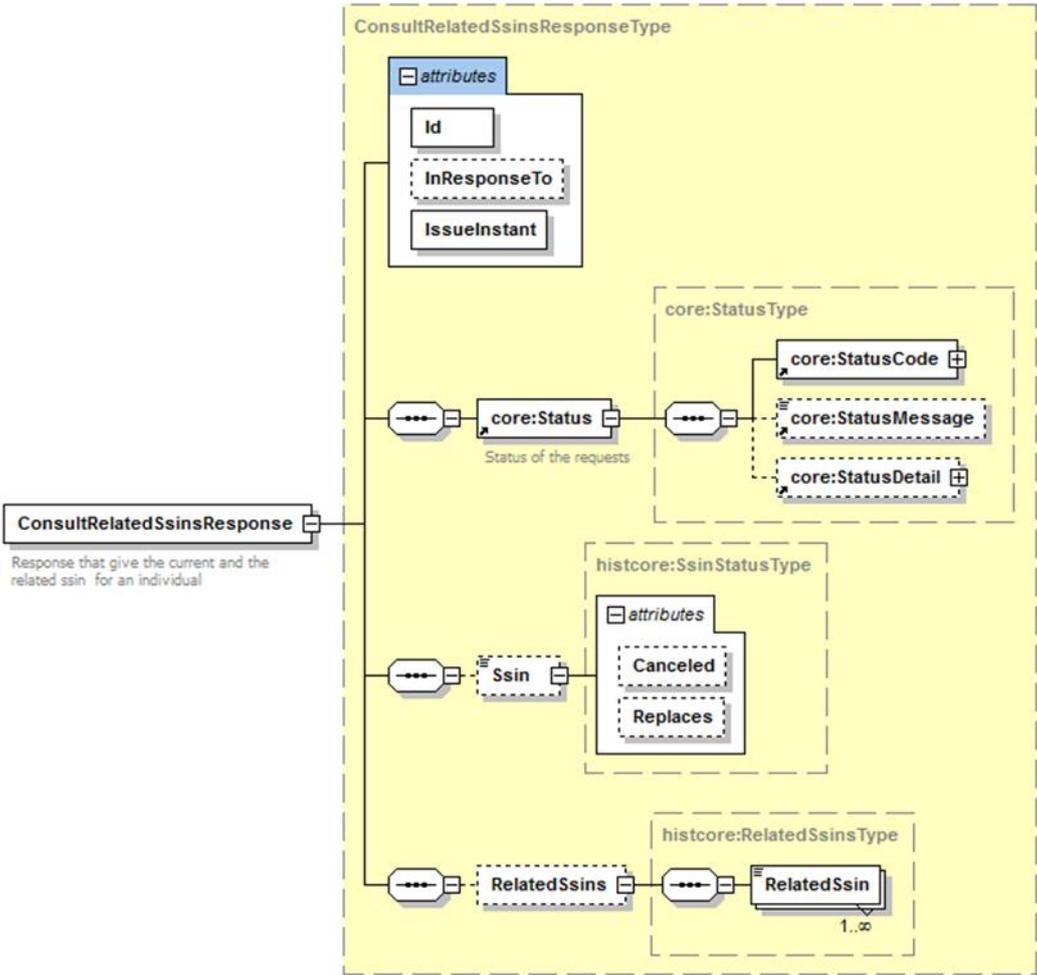
5.3.1 Formulating a Request



Field name	Descriptions
@Id	The number attributed to the request by eHealth platform
@IssueInstant	Timestamp of the request
Ssin	This field contains the SSIN number of the individual.



5.3.2 Interpretation of the Response



Field name	Descriptions
@Id	Ticket number identifier the response by the CBSS
@InResponseTo	The number attributed to the request by eHealth platform
@IssueInstant	Timestamp of the response
Status	This field contains the status response.
Ssin	This field contains the last active SSIN identifier
@canceled	This attribute has the value true if the SSIN is cancelled
@replaces	This attribute contains the SSIN requested if this one is not the last SSIN identifier
RelatedSsins	This field contains the list of current and previous individual identifier
RelatedSsin	This field contains the current identifier or a previous identifier



Example:

xxxxxxxxxx1 is replaced by

xxxxxxxxxx2 xxxxxxxxxxxx2 is replaced

by xxxxxxxxxxxx3

Request:

```
<?xml version="1.0" encoding="UTF-8"?>
<ConsultRelatedSsinsRequest xmlns="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Id="ID1" IssueInstant="2001-12-17T09:30:47Z"
xsi:schemaLocation="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1 ehealth-ssinhistory-protocol-
1_0.xsd">
    <Ssin>xxxxxxxxxx1</Ssin>
</ConsultRelatedSsinsRequest>
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<n1:ConsultRelatedSsinsResponse xmlns="urn:be:fgov:health:commons:core:v2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:histcore="urn:be:fgov:health:consultrn:ssinhistory:core:v1"
xmlns:n1="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1" Id="1234" InResponseTo="2720d69c-b681-4a8e-
9474-
6be05d8fe7a3" IssueInstant="2001-12-17T09:30:47Z"
xsi:schemaLocation="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1 ehealth-ssinhistory-protocol-1_0.xsd">
    <Status>
        <StatusCode Value="urn:be:fgov:health:2.0:status:Success" />
    </Status>
    <n1:Ssin> xxxxxxxxxxxx3</n1:Ssin>
    <n1:RelatedSsins>
        <histcore:RelatedSsin> xxxxxxxxxxxx3</histcore:RelatedSsin>
        <histcore:RelatedSsin> xxxxxxxxxxxx2</histcore:RelatedSsin>
        <histcore:RelatedSsin> xxxxxxxxxxxx1</histcore:RelatedSsin>
    </n1:RelatedSsins>
</n1:ConsultRelatedSsinsResponse>
```

5.4 Status

For a request submitted, we receive in the response a status indicating if the request was executed with success or not. Each response will have the following structure:

5.4.1 ConsultCurrentSsinResponse

5.4.1.1 Success

```
<n1:ConsultCurrentSsinResponse xmlns="urn:be:fgov:health:commons:core:v2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:n1="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1"
Id="ID1" InResponseTo="String" IssueInstant="2001-12-17T09:30:47Z"
xsi:schemaLocation="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1 ehealth-ssinhistory-protocol-1_0.xsd">
    <Status>
        <StatusCode Value="urn:be:fgov:health:2.0:status:Success" />
    </Status>
```



5.4.1.2 Business error

```
<n1:ConsultCurrentSsinResponse xmlns="urn:be:fgov:health:commons:core:v2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:n1="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1"
Id="ID1" InResponseTo="String" IssueInstant="2001-12-17T09:30:47Z"
xsi:schemaLocation="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1 ehealth-ssinhistory-protocol-1_0.xsd">
<Status>
    <StatusCode Value="urn:be:fgov:health:2.0:status:Requester">
    <StatusCode Value="Error Value" />
    </StatusCode>
    <StatusMessage>Error description</StatusMessage>
</Status>
```

Error Value	Error Description	Action
urn:be:fgov:health:2.0:status:DataNotFound	The SSIN given in request does not exist.	There is no information found about the individual. Please check that the SSIN exists.
urn:be:fgov:health:2.0:status:InvalidInput	The structure of the SSIN given in request is invalid.	Please check that SSIN in your request is valid.
urn:be:fgov:health:2.0:status:InvalidInput	ID cannot be longer than 36 characters.	Please check that the length of request id is less than 36 characters.

5.4.1.3 Technical error

```
<n1:ConsultCurrentSsinResponse xmlns="urn:be:fgov:health:commons:core:v2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:n1="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1" Id="ID1" InResponseTo="String"
IssueInstant="2001-12-17T09:30:47Z" xsi:schemaLocation="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1
ehealth-ssinhistory-protocol-1_0.xsd">
<Status>
    <StatusCode Value="urn:be:fgov:health:2.0:status:Responder" />
</Status>
```

5.4.2 ConsultRelatedSsinsResponse

5.4.2.1 Success

```
<n1:ConsultRelatedSsinsResponse xmlns="urn:be:fgov:health:commons:core:v2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:n1="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1"
Id="ID1" InResponseTo="String" IssueInstant="2001-12-17T09:30:47Z"
xsi:schemaLocation="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1 ehealth-ssinhistory-protocol-1_0.xsd">
    <Status>
        <StatusCode Value="urn:be:fgov:health:2.0:status:Success" />
    </Status>
```

5.4.2.2 Business error

```
<n1:ConsultRelatedSsinsResponse xmlns="urn:be:fgov:health:commons:core:v2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:n1="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1"
Id="ID1" InResponseTo="String" IssueInstant="2001-12-17T09:30:47Z"
xsi:schemaLocation="urn:be:fgov:health:consultrn:ssinhistory:protocol:v1 ehealth-ssinhistory-protocol-1_0.xsd">
    <Status>
        <StatusCode Value="urn:be:fgov:health:2.0:status:Requester">
        <StatusCode Value="Error Value" />
        </StatusCode>
        <StatusMessage>Error description</StatusMessage>
    </Status>
```



<Status>

Error Value	Error Description	Action
urn:be:fgov:ehhealth:2.0:status:DataNotFound	The SSIN given in request does not exist.	There is no information found about the individual. Please check that the SSIN exists.
urn:be:fgov:ehhealth:2.0:status:InvalidInput	The structure of the SSIN given in request is invalid.	Please check that SSIN in your request is valid.
urn:be:fgov:ehhealth:2.0:status:InvalidInput	ID cannot be longer than 36 characters.	Please check that the length of request id is less than 36 characters.

5.4.2.3 Technical error

```
<n1:ConsultRelatedSsinsResponse xmlns="urn:be:fgov:ehhealth:commons:core:v2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:n1="urn:be:fgov:ehhealth:consultrn:ssinhistory:protocol:v1"
Id="ID1" InResponseTo="String" IssueInstant="2001-12-17T09:30:47Z"
xsi:schemaLocation="urn:be:fgov:ehhealth:consultrn:ssinhistory:protocol:v1 ehhealth-ssinhistory-protocol-1_0.xsd">
```

```
<Status>
```

```
<StatusCode Value="urn:be:fgov:ehhealth:2.0:status:Responder" />
```

```
<Status>
```

When a technical error occurs, please refer to the contact center.



6. Risks and security

6.1 Security

6.1.1 Business security

In case the development adds a use case based on an existing integration, the eHealth platform must be informed at least one month in advance. A detailed estimate of the expected load is necessary to be able to ensure an effective capacity management.

When technical issues occur on the WS, the partner can obtain support from the contact centre (see Chap 3)

If the eHealth platform should find a bug or vulnerability in its software, the partner must update his application with the latest version of the software, within ten (10) business days.

If the partner finds a bug or vulnerability in the software or web service made available by the eHealth platform, he is obliged to contact and inform us immediately. He is not allowed, under any circumstances, to publish this bug or vulnerability.

6.1.2 Web service

Web service security used in this manner is following the common standards. Your call will provide:

- SSL one way
- An X.509 certificate which will contain the identifiers of the caller: NIHI number or enterprise number.

More information on how to obtain such a certificate:

<https://www.ehealth.fgov.be/ehealthplatform/nl/service-ehealth-certificaten>

<https://www.ehealth.fgov.be/ehealthplatform/fr/service-certificats-ehealth>

- Time to live of the message: one minute
- Signature of the timestamp, body and binary security token allowing eHealth 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 the separate document. In order to use the web services, an agreement from eHealth is required.

6.1.3 The use of username, password and token

The username, password, and token are strictly personal.

Every user takes care of his username, password and token, and he is forced to confidentiality of it. It is prohibited to transfer them to partners and clients. Until inactivation, every user is responsible for every use, including the use by a third party.



7. Test and release procedure

7.1 Procedure

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

7.1.1 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.

7.1.2 Development and test procedure

There are no specific SSIN history tests

In order to release the service in production, you should first prove in the acceptance environment that you have correctly implemented the call to the services. Therefore, you'll need to complete the test scenario form" and send it to the integration team at integration-support@ehealth.fgov.be

7.1.3 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 and performance results with a sample of "eHealth request" and "eHealth answer" by email to his point of contact at the eHealth platform.

Once a release date has been agreed on, 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.

7.1.4 Operational follow-up

Once in production, the partner in the Health sector who is using the web service for one of his applications will always test firstly in acceptance before releasing any adaptations of his application. In addition, the partner will inform eHealth on the changes and test period.

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

