MyVSBNNet Insurability Web Service
Cookbook
Version 1.0

This document is provided to you free of charge by the
eHealth platform
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All are free to circulate this document with reference to the URL source.
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To the attention of: “IT expert” willing to integrate this web service.
1. Document management

1.1 Document history

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author</th>
<th>Description of changes / remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>17/05/2018</td>
<td>eHealth platform</td>
<td>First version</td>
</tr>
</tbody>
</table>
2. Introduction

2.1 Goal of the service

The MyVSB*Net Insurability WS allows the care providers to make a request of insurability VSB electronically to know if a person is insured or not with a statement of the reason for non-insurability. The care provider needs to request a SAML token from the eHealth Secure Token Service (STS) prior to calling the Generic Insurability services.

*: Vlaamse Sociale Bescherming

2.2 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.

Detailed description of the functionality of the service, the semantics of the particular elements and other general information about the service is out of the scope of this document. This kind of information can be found in the documentation provided by MyCareNet and VSB on their Sharepoint.

In order to be able to test the MyVSBNet Insurability service, you need to take the following steps (see also section 5):

1. **Create a test case:** If the testing is done for a real care provider, the real NIHII number of the care provider can be used. Otherwise, you will receive a test NIHII number from the eHealth development team (you must indicate the service called and the kind of profile needed). You always need to request the configuration of the test cases at the eHealth platform.

2. **Request an eHealth test certificate:** a test certificate must be requested at the eHealth platform.

3. **Obtain the SAML token from the STS:** the eHealth test certificate obtained in the previous step is used for identification at the STS and as the Holder-Of-Key (HOK) certificate.

4. **Call the MyVSBNet Insurability WS.**

2.3 eHealth platform document references

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

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Version</th>
<th>Date</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Glossary.pdf</td>
<td>1.0</td>
<td>01/01/2010</td>
<td>eHealth platform</td>
</tr>
<tr>
<td>2</td>
<td>Cookbook STS</td>
<td>1.0</td>
<td>31/08/2010</td>
<td>eHealth platform</td>
</tr>
<tr>
<td>3</td>
<td>VSBInsurability WS_SSO.pdf</td>
<td>1.0</td>
<td>17/05/2018</td>
<td>eHealth platform</td>
</tr>
</tbody>
</table>

1 [www.ehealth.fgov.be/ehealthplatform](http://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.

All the MyCareNet documentation can be found within their Sharepoint\(^2\). This is also the case for VSB documentation\(^3\). The documentation referenced in this section may evolve in time.

If some external documentation has been modified, please notify the eHealth service management\(^4\) who manages the maintenance of this document.

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Source</th>
<th>Date</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>VSB Cookbook DF001 - DetermineInsurability</td>
<td>NA</td>
<td>23/02/2018</td>
<td>Agentschap Zorg &amp; Gezondheid</td>
</tr>
<tr>
<td>3</td>
<td>VSB Cookbook TestCases DF001 DetermineInsurability</td>
<td>NA</td>
<td>14/03/2018</td>
<td>Agentschap Zorg &amp; Gezondheid</td>
</tr>
<tr>
<td>4</td>
<td>GenericSync Error codes</td>
<td>NA</td>
<td>08/02/2017</td>
<td>CIN</td>
</tr>
<tr>
<td>5</td>
<td>Message definition NIPPIN MHE</td>
<td>NA</td>
<td>13/04/2018</td>
<td>CIN</td>
</tr>
<tr>
<td>6</td>
<td>MyCareNet Authentication Catalogue</td>
<td>NA</td>
<td>08/02/2017</td>
<td>CIN</td>
</tr>
<tr>
<td>7</td>
<td>NIPPIN GenSync V3 (ESB 2 NIPPIN)</td>
<td>NA</td>
<td>22/12/2017</td>
<td>CIN</td>
</tr>
<tr>
<td>8</td>
<td>Service_Catalogue_iSocial_Commons</td>
<td>NA</td>
<td>10/03/2017</td>
<td>CIN</td>
</tr>
<tr>
<td>9</td>
<td>Service_Catalogue_iSocial_GenSync</td>
<td>NA</td>
<td>15/03/2017</td>
<td>CIN</td>
</tr>
</tbody>
</table>

2.5 Service history

This chapter contains the list of changes made to the service with respect to the previous version.

<table>
<thead>
<tr>
<th>Previous version</th>
<th>Previous release date</th>
<th>changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>/</td>
<td>/</td>
</tr>
</tbody>
</table>

Remark: = “None” when the major version = 1

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\(^1\) In order to have access to the Sharepoint, you need to create an account which can be requested at: [http://fra.mycarenet.be/wie-zijn-we/contact or http://ned.mycarenet.be/wie-zijn-we/contact](http://fra.mycarenet.be/wie-zijn-we/contact or http://ned.mycarenet.be/wie-zijn-we/contact)


\(^4\) [ehealth_service_management@ehealth.fgov.be](mailto:ehealth_service_management@ehealth.fgov.be)
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

For both sectors based on context in the message:
- eMOHM : vsb.eMOHM@zorg-en-gezondheid.be
- eWZCfin : vsb.eWZCfin@zorg-en-gezondheid.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 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
The Insurability service is secured with the SAML HOK policy. Therefore, prior to calling the services, a SAML token must be obtained at the eHealth STS. The obtained token must be then included in the header of the request message, where the timestamp and the body must be signed with the certificate as used in the HOK profile of the SAML token (more detailed technical description can be found further in the chapter 5 of this cookbook). The body contains the Insurability request. The eHealth ESB verifies the security (authentication, authorization, etc.) and forwards the request to MyVSBNet. Then, the service returns the response delivered by the MyVSBNet backend.
5. Step-by-step

5.1 Technical requirements

In order to test the service, the eHealth development team first has to create a test case. The rules to access the Insurability are the same in acceptance as in production.

Access rules:

- authentication with a care providers certificate;

The eHealth development team has to configure all test cases.

So, before doing any test, request your test cases from the eHealth development team (info@ehealth.fgov.be).

In order to implement a WSCall protected with a SAML token you can reuse the implementation as provided in the "eHealth technical connector". Nevertheless, eHealth implementations use standards and any other compatible technology (WStack for the client implementation) can be used instead.

- https://www.ehealth.fgov.be/ehealthplatform/nl/service-ehealth-platform-services-connectors
- https://www.ehealth.fgov.be/ehealthplatform/fr/service-ehealth-platform-services-connectors

Alternatively, you can write your own implementation. The usage of the STS and the structure of the exchanged xml-messages are described in the eHealth STS cookbook.

- https://www.ehealth.fgov.be/ehealthplatform/STS_HolderOfKey-Cookbook v1 dd 17052018.pdf

5.1.1 Use of the eHealth SSO solution

This section specifies how to call the STS in order to have access to the WS service. You must precise several attributes in the request. The details on the identification attributes and the certification attributes can be found in the separate document VSBInsurability WS_SSO.pdf.

To access the Insurability WS, the response token must contain “true” for all of the ‘boolean’ certification attributes and a non-empty value for other certification attributes.

If you obtain “false” or empty values, contact the eHealth platform to verify that they correctly configured the requested test case.

5.1.2 Security policies to apply

We expect that you use SSL one way for the transport layer.

As web service security policy, we expect:

- A timestamp (the date of the request), with a Time to live of one minute (if the message doesn’t arrive during this minute, it shall not be treated).
- The signature with the certificate of
  - the timestamp, (the one mentioned above)
  - the body (the message itself)
  - and the binary security token: an eHealth certificate or a SAML token issued by STS

This will allow eHealth to verify the integrity of the message and the identity of the message author.

A document explaining how to implement this security policy can be obtained at the eHealth platform.

The STS cookbook can be found on the eHealth portal.

5.2 Web service

The Insurability WS has one operation available:

- `getInsurability`

The Insurability WS has the following endpoints:

- Pilot environment: [https://services-acpt.ehealth.fgov.be/MyVSBNet/Insurability/v1](https://services-acpt.ehealth.fgov.be/MyVSBNet/Insurability/v1)
- Production environment: [https://services.ehealth.fgov.be/MyVSBNet/Insurability/v1](https://services.ehealth.fgov.be/MyVSBNet/Insurability/v1)

The remainder of this section describes the structure of the request and the response messages. Section 5.2.1 describes the request and response messages for the `getInsurability` operation, and section 5.2.2 describes the common element types used in the structures of the request and response types. For more details on the specific elements and the concepts behind them, see the documentation as provided by the CIN/NIC on their Sharepoint.

5.2.1 Method `getInsurability`

The goal of this method is to send a request of insurability VSB to know if a person is insured or not (with a statement of the reason for non-insurability) for a provided period. The response returned contains the insurability information according to the given period in xml form.

### 5.2.1.1 Input arguments in `GetInsurabilityRequest`

<table>
<thead>
<tr>
<th>Field name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CommonInput</td>
<td>See section 5.2.2.1 : CommonInputType</td>
</tr>
</tbody>
</table>
Routing

Mandatory element. See the documentation ‘Service_Catalogue_Commons’ provided by the CIN/NIC. The data within this element should contain either the SSIN of the care receiver either the combination health insurance organization/identification number of the care receiver within this organization.

Detail

Detail of the request. The content of the message should respect some standard format to allow additional information exchange. See the documentation provided by the CIN/NIC for more details about the structure:
- ‘Service_Catalogue_GenSync’

Attribute values:
@ContentType: “text/xml”
@ContentEncoding: “none”
@ContentEncryption: /
@HashValue: /
@Id: The ID of the blob for usage in the XAdES signature. It is an “NCName” instead of an “ID” in order to be able to have different blobs with the same (fixed) id without causing an XSD validation.

Note that the attribute “MessageName” in the Detail element is not present in the interface as provided by the eHealth platform. This attribute value is then filled out by the eHealth platform according to the called operation (for the Insurability service it is “VL-VERZ”).

5.2.1.2 Output arguments in GetInsurabilityResponse
### Field name | Description
--- | ---
"Response" | @Id : Unique Id for tracing
 | @InresponseTo : ‘Id’ attribute of the request if available
 | @IssueInstant : Generation response moment

Return  
See the documentation provided by the CIN/NIC for more details :
- ‘Service_Catalogue_GenSync’

#### 5.2.1.3 Request/Response Example

An example of request / response is available below. The blob of this example is generated from the documentation^ provided by CIN/NIC.

**Request** :

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
xmlns:urn="urn:be:fgov:ehealth:vm:mycarenet:commons:protocol:v1"
xmlns:ns0="urn:be:fgov:ehealth:vsb:insurability:protocol:v1"
xmlns:ns1="urn:be:fgov:ehealth:mycarenet:commons:core:v3">
  <soapenv:Header/>
  <soapenv:Body>
    <ns0:GetInsurabilityRequest IssueInstant="${issueInstant}">
      <ns1:Request>
        <ns1:IsTest>true</ns1:IsTest>
        <ns1:Origin>
          <ns1:Package>
            <ns1:License>
              <ns1:Username>banehbuscon</ns1:Username>
              <ns1:Password>3p@DUyn65</ns1:Password>
            </ns1:License>
          </ns1:Package>
          <ns1:Nihii>
            <ns1:Quality>trussmaker</ns1:Quality>
            <ns1:Value>70127535123</ns1:Value>
          </ns1:Nihii>
          <ns1:PhysicalPerson>
            <ns1:Name>Leemans Nicolas</ns1:Name>
            <ns1:Ssin>94040750922</ns1:Ssin>
          </ns1:PhysicalPerson>
        </ns1:Origin>
        <ns1:InputReference>AAA113</ns1:InputReference>
        <ns0:CommonInput/>
        <ns1:ReferenceDate>2018-04-20</ns1:ReferenceDate>
      </ns1:Request>
      <ns1:CareReceiver>
        <ns1:Ssin>35021198120</ns1:Ssin>
      </ns1:CareReceiver>
      <ns0:Routing/>
    </ns0:GetInsurabilityRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

---

^ VSB Cookbook TestCases DF001 DetermineInsurability
5.2.2 Used Types

5.2.2.1 CommonInputType

For the semantics of the particular elements and other information about the service, see the documentation Service_Catalogue_Commons and MyCareNet Authentication Catalogue provided by the CIN/NIC.

5.2.2.2 CommonOutputType

For the semantics of the particular elements and other information about the service see the documentation Service_Catalogue_Commons provided by the CIN/NIC.
6. Risks and security

6.1.1 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.

6.1.2 Web service

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

- SSL one way
- Time-to-live of the message: one minute. Note that the time-to-live is the time difference between the Created and Expires elements in the Timestamp and is not related to the timeout setting on the eHealth ESB, etc. This means that eHealth will process the message if it is received within the time-to-live value (there is also tolerance of 5 minutes to account for the clock skew), but the actual response time may be greater than one minute in some situations.
- 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.
7. Test and release procedure

7.1 Procedure

This chapter explains the procedures for testing and releasing an application in acceptation 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

You have to develop a client in order to connect to our WS. Most of the required integration info to integrate is published on the portal of the eHealth platform.

Upon request, the eHealth platform provides you in some cases, with a mock-up service or test cases in order for you to test your client before releasing it in the acceptance environment.

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 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.

7.1.4 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.

7.2 Test cases

The eHealth platform recommends performing tests for all of the following cases:

- GetInsurability (contact VSB for test data of the patients)

In addition, the organization should also run negative test cases.
8. Error and failure messages

There are different possible types of response:

- If there are no technical errors, responses as described in section 5 are returned.
- In the case of a technical error, a SOAP fault exception is returned (see table below).

If an error occurs, first please verify your request. Following table contains a list of common system error codes for the eHealth Service Bus. For possible business errors, refer to the documentation ‘GenericSync Error codes’ and ‘Service_Catalogue_Commons’ provided by the CIN/NIC.

Table 1: Description of the possible SOAP fault exceptions.

<table>
<thead>
<tr>
<th>Error code</th>
<th>Component</th>
<th>Description</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOA-00001</td>
<td>-</td>
<td>Service error</td>
<td>This is the default error sent to the consumer in case more details are unknown.</td>
</tr>
<tr>
<td>SOA-01001</td>
<td>Consumer</td>
<td>Service call not authenticated</td>
<td>From the security information provided;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• or the consumer could not be identified</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• or the credentials provided are not correct</td>
</tr>
<tr>
<td>SOA-01002</td>
<td>Consumer</td>
<td>Service call not authorized</td>
<td>The consumer is identified and authenticated, but is not allowed to call the given service.</td>
</tr>
<tr>
<td>SOA-02001</td>
<td>Provider</td>
<td>Service not available</td>
<td>• An unexpected error has occurred;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Please contact service desk</td>
<td>• Retries will not work;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Service desk may help with root cause analysis.</td>
</tr>
<tr>
<td>SOA-02002</td>
<td>Provider</td>
<td>Service temporarily not available</td>
<td>• An unexpected error has occurred;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Please try later</td>
<td>• Retries should work;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• If the problem persists service desk may help.</td>
</tr>
<tr>
<td>SOA-03001</td>
<td>Consumer</td>
<td>Malformed message</td>
<td>This is the default error for content related errors in case more details are unknown.</td>
</tr>
<tr>
<td>SOA-03002</td>
<td>Consumer</td>
<td>Message must be SOAP</td>
<td>Message does not respect the SOAP standard.</td>
</tr>
<tr>
<td>SOA-03003</td>
<td>Consumer</td>
<td>Message must contain SOAP body</td>
<td>Message respects the SOAP standard, but body is missing.</td>
</tr>
<tr>
<td>SOA-03004</td>
<td>Consumer</td>
<td>WS-I compliance failure</td>
<td>Message does not respect the WS-I standard.</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td>-------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>SOA-03005</td>
<td>Consumer</td>
<td>WSDL compliance failure</td>
<td>Message is not compliant with WSDL in Registry/Repository.</td>
</tr>
<tr>
<td>SOA-03006</td>
<td>Consumer</td>
<td>XSD compliance failure</td>
<td>Message is not compliant with XSD in Registry/Repository.</td>
</tr>
</tbody>
</table>
| SOA-03007 | Consumer | Message content validation failure | From the message content (conform XSD):
- Extended checks on the element format failed;
- Cross-checks between fields failed. |

If the cause is a business error, please contact MyVSBNet (see section 3.3).

Business error example:

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:soapenv:Fault="soapenv:Fault">
  <faultcode>soapenv:Server</faultcode>
  <faultstring>INCORRECT_NIHII_TRUSSMAKER_SAML: For trussmaker the NIHII '70127777123' in the CareProvider element must correspond to the 'urn:be:fgov:person:ssin:ehealth:1.0:nihii:trussmaker:nihii11' attribute in the SAML '70127535123'.</faultstring>
  <detail>
    <urn:BusinessError xmlns:urn="urn:be:fgov:ehealth:errors:soa:v1">
      <Origin>MYCARENET</Origin>
      <Code>INCORRECT_NIHII_TRUSSMAKER_SAML</Code>
      <Message xml:lang="en">For trussmaker the NIHII '70127777123' in the CareProvider element must correspond to the 'urn:be:fgov:person:ssin:ehealth:1.0:nihii:trussmaker:nihii11' attribute in the SAML '70127535123'.</Message>
      <urn:Environment>Test</urn:Environment>
    </urn:BusinessError>
  </detail>
</soapenv:Fault>
</soapenv:Body>
</soapenv:Envelope>
```

The soap header (only when the received response is not a SOAP fault) contains a message ID, e.g.:

```xml
<soapenv:Header>
</soapenv:Header>
```

This message ID is important for tracking of the errors so when available, please provide it when requesting support.