**MyCareNet – Generic Insurability
Cookbook
Version 1.4**

This document is provided to you, free of charge, by the

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	25/04/2012	eHealth platform	Initial version
1.1	14/11/2012	eHealth platform	Update
1.2	15/05/2014	eHealth platform	Review in the context of the additional sectors
1.3	11/03/2022	eHealth platform	§ 3.2 Support MyCareNet (updated)
1.4	29/07/2022	eHealth platform	§ 2.3 eHealth platform document references (updated) §3.2 Status (updated) § 3.3 Support desk – contact points CIN/NIC (updated) § 5.1.5 Tracing (updated)

2. Introduction

2.1 Goal of the service

Generic Insurability service allows consulting the insurability status of a patient by the care providers. The care provider need to request a SAML token from the eHealth STS prior to calling the Generic Insurability services.

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 service.

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

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

Detailed description of the functionality of the services, the semantics of the particular elements and other general information about the services is out of the scope of this document. This kind of information can be found in the documentation provided by MyCareNet on their Sharepoint[1].

In order to be able to test the MyCareNet Tarification application, you need to take the following steps (see also section 5):

1. Create a test case : If you do the test 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 eHealth.

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

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 certificate.

4. Call the Generic Insurability web services.

In the second part of this cookbook you will find the process for production. .

2.3 eHealth platform document references

On the portal of the eHealth platform, you can find all the referenced documents.[2]. These versions, or any following versions, can be used for the eHealth platform service.

ID	Title	Version	Date	Author
1	SOA – Error guide	1.0	10/06/2021	eHealth platform
2	Request test case template	3.0	22/02/2018	eHealth platform
3	WSDL	N.A.	N.A.	eHealth platform
4.	STS HolderofKey– Cookbook	1.5	13/07/2022	eHealth platform

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[1] *https://share.intermut.be/home/MyCareNet/Extranet*

[2] *www.ehealth.fgov.be/ehealthplatform*

2.4 External document references

All documents are available to the public and can be found through the internet. However, they are not supported by the eHealth platform.

The MyCareNet documentation is accessible through their Sharepoint[3] and may evolve in time.

In the event of changes to the external documentation, you should notify the eHealth service management[4] which will manage the maintenance of this document.

ID	Title	Source	Date	Author
1	Assurabilité CME 2012 - FR.zip	N.A.	20/12/2012	Baise Philippe
2	Verzekerbaarheid CEB - 2012 - NL.zip	N.A.	20/12/2012	Baise Philippe
3	Service_Catalogue_Gen Ins_All.pdf	N.A.	18/12/2012	Baise Philippe
4	Service_Catalogue_Co mmons.docx	N.A.	17/12/2012	Baise Philippe
5	MyCareNet Authentication Catalogue.docx	N.A.	12/03/2013	Baise Philippe
6	GenericIns Error codes.xls	N.A.	16/05/2013	Baise Philippe
7	ImplementationGuide_ For_CareProvider.docx	N.A.	15/01/2013	Baise Philippe

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[3] In order to have access to the Sharepoint, an account is needed. Use the following link to request it :
https://ned.mycarenet.be/contact or *https://fra.mycarenet.be/contact*

[4] *ehealth_service_management@ehealth.fgov.be*

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.

3.3 Support desk – contact points CIN/NIC

3.3.1 Insurability business support

For business questions: MyCareNet Helpdesk (first line support)

3.3.2 MyCareNet Helpdesk:

- Telephone: 02 891 72 56
- Mail: *support@intermut.be*

3.3.3   Technical contact centre MyCareNet:
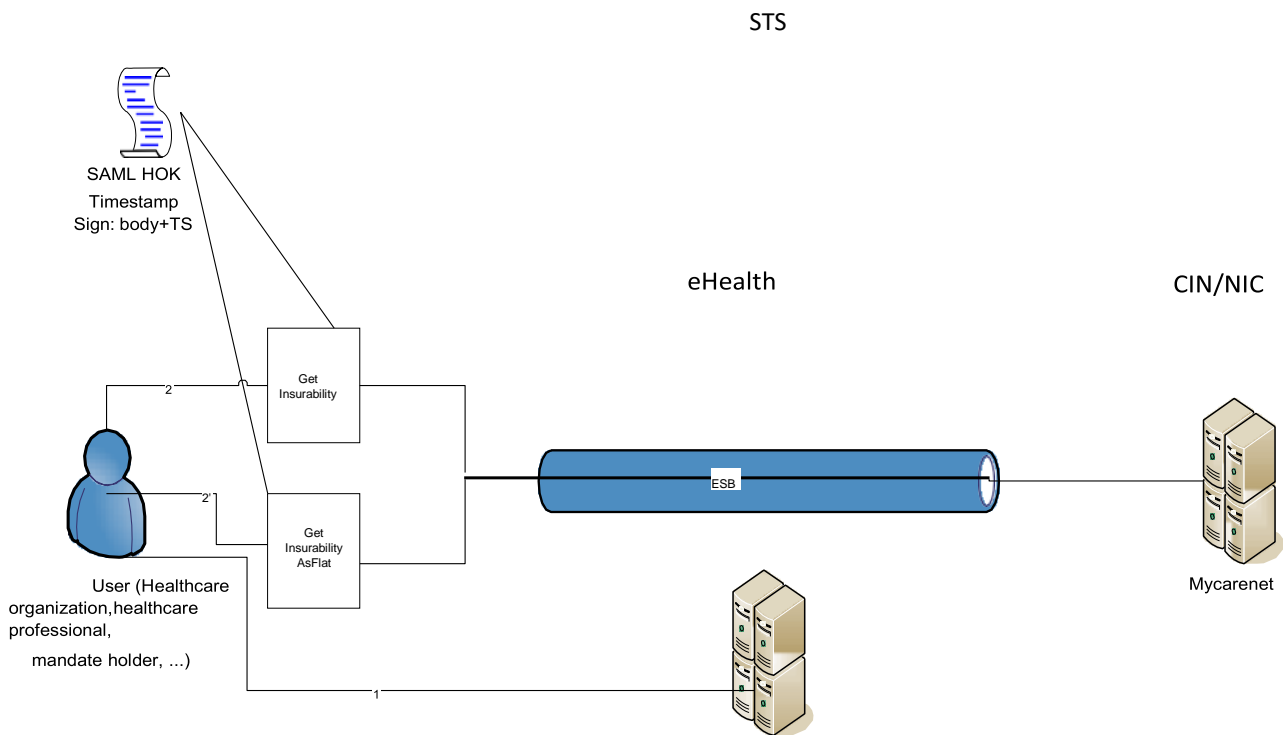
- Telephone: 02 431 47 71
- Mail: ***ServiceDesk@MyCareNet.be***

4. Global overview

The Generic Insurability services are secured with the SAML Holder-of-Key (HOK) policy. Therefore, prior to calling the services, a SAML token must be obtained at the eHealth STS (1). The obtained token must be then included in the header of the request message (2 or 2'), together with the timestamp. The latter and the body must be signed with the certificate as used in the HOK profile of the SAML token. The body contains the Generic Insurability request. The eHealth ESB verifies the security (authentication, authorization, etc.) and forwards the request to MyCareNet. The service can return an XML response, or the response can be formatted as "flat" (hospital only) – depending on the called operation.

5. Step-by-step

5.1 Technical requirements

In order to test the service, the eHealth development team must always create a test case first. The rules for accessing the Generic Insurability web services, are the same in acceptation as in production.

Access rules:

- authentication with a care providers certificate
- authentication with the certificate of a mandate holder

So, before doing any test, request your test cases from the eHealth development team at ***info@ehealth.fgov.be***, using the template "***request.testcases.generic.insurability.webservice.xls***". [5]

If you have any questions about the template, you can send an e-mail to ***info@ehealth.fgov.be***.

In order to implement a web service call protected with a SAML token you can reuse the implementation as provided in the "eHealth technical connector". Nevertheless, eHealth implementations use standards, however, any other compatible technology (web service stack 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 Secure Token Service and the structure of the exchanged xml-messages are described in the eHealth STS cookbook.

https://www.ehealth.fgov.be/ehealthplatform/fr/SecureTokenService-HOK.pdf

5.1.1 Use of the eHealth SSO solution

This section specifies how the call to STS must be done to have access to the web service. You must specify several attributes in the request. The details on the identification attributes and the certification attributes can be found in the separate document GenInsSSO.

To access to the GenericInsurability web service, the response token must contain "true" for the 'boolean' certification attributes and a non-empty value for other certification attributes.

If you obtain "false" or empty values, contact eHealth to verify the configuration of the requested test cases.

5.1.2 Encryption

Encryption (ETEE) is not used in the context of this project.

5.1.3 Security policies to apply

We expect that you use SSL one way for the

transport layer.To call the Generic Insurability

webservice:

- Add the business message to the SOAP body

- Add to the SOAP header the following elements:
  - **SAML Token**: The SAML Assertion received from the eHealth STS. This Assertion needs to beforwarded exactly as received in order to not to break the signature of the eHealth STS. The token needs to be added, accordingly to the specifications of the OASIS SAML Token Profile (holder-of-key). (***http://www.oasis-open.org/committees/download.php/16768/wssv1.1-spec-os-SAMLTokenProfile.pdf***).
  - **Timestamp**.
  - A **signature** that has been placed on the SOAPBody and the timestamp with the certificate of which the public key is mentioned in the SAML Assertion.
- The signature element (mentioned above) needs to contain:
  - SignedInfo with References to the SOAPBody and the Timestamp.

KeyInfo with a SecurityTokenReference pointing to the SAML Assertion.

See also the WSSP in the WSDL[6] (also included in the documentation).

5.1.4 WS-I Basic Profile 1.1

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

5.1.5 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 Process overview

5.2.1 Web service

The Generic Insurability web service has the following operations available:
- getInsurability
- getInsurabilityAsFlat (for hospital only)

The Generic Insurability web service has the following endpoints:
- Pilot environment: https://services-acpt.ehealth.fgov.be/GenericInsurability /v1
- Production environment: https://services.ehealth.fgov.be/GenericInsurability/v1

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[6] ***https://portal.api.ehealth.fgov.be***

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
- Section 5.2.2 describes the request and response messages for the getInsurabilityAsFlat operation.
- Section 5.2.3 describes the common element types used in the structures of the request and response types.
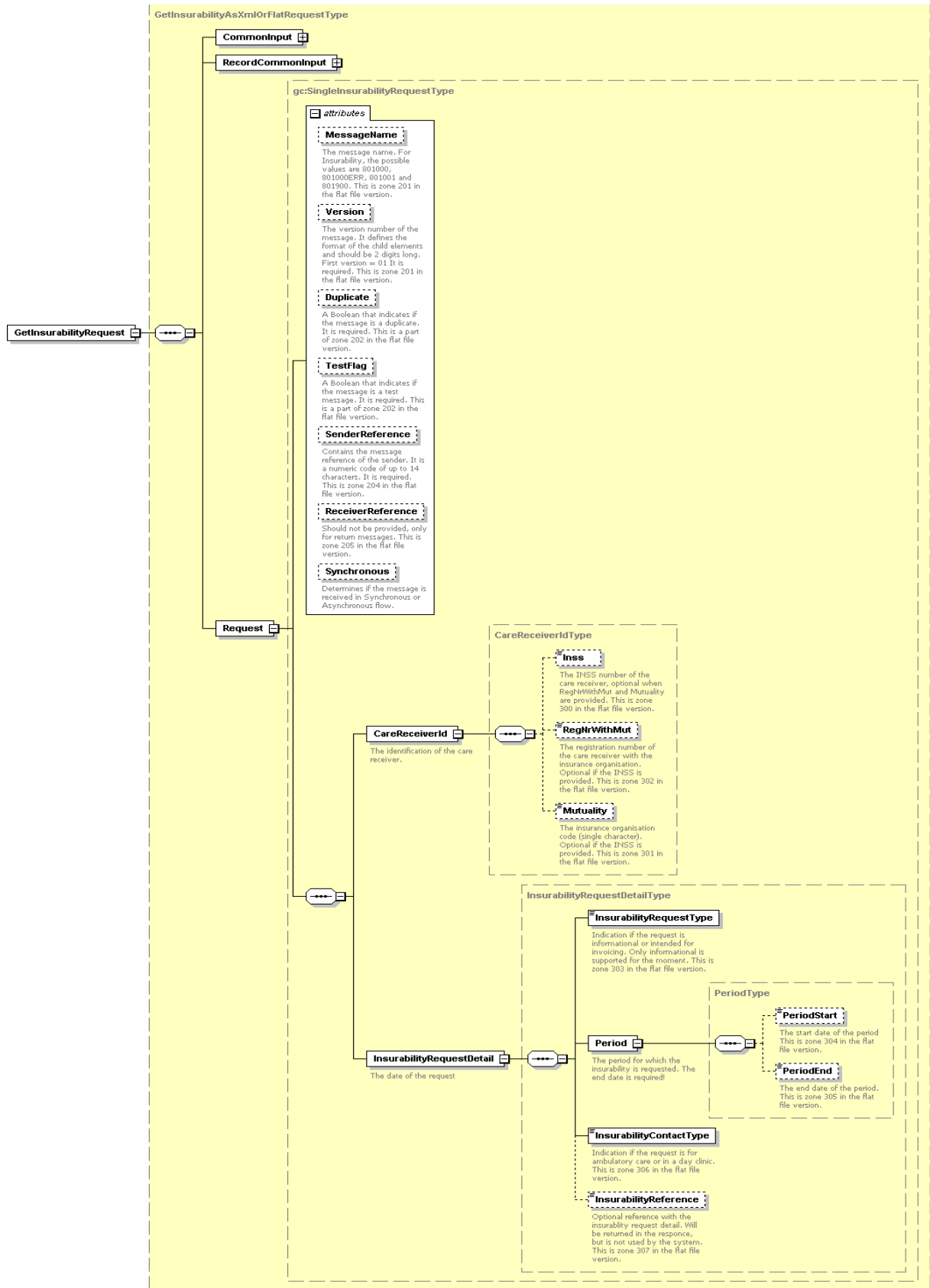
For details on the specific elements and their concepts, please refer to the documentation provided by the CIN/NIC Sharepoint.

5.2.2   Method getInsurability

This method aims to display the insurability of a single care receiver for a certain period and returns the information in xml form.

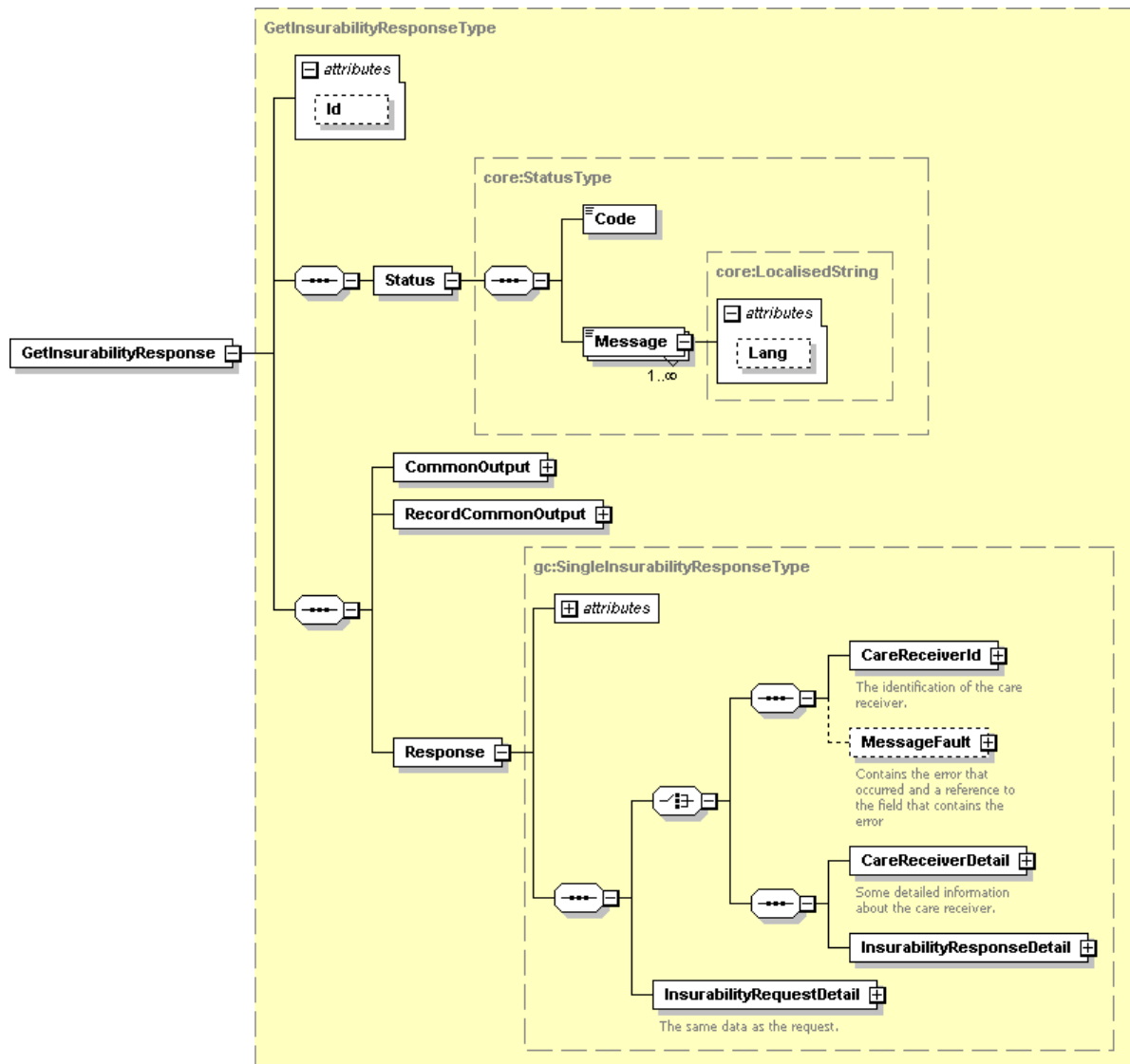### 5.2.2.1 Input arguments in GetInsurabilityRequest

Field name	Description
CommonInput	See section 5.2.3.1 : CommonInputType
RecordCommonInput	See section 5.2.3.2 : RecordCommonInputType
Request	See the documentation 'Service_Catalogue_GenIns_All' provided by the CIN/NIC

5.2.2.2 Output arguments in GetInsurabilityResponse

Generated by XMLSpy   www.altova.com

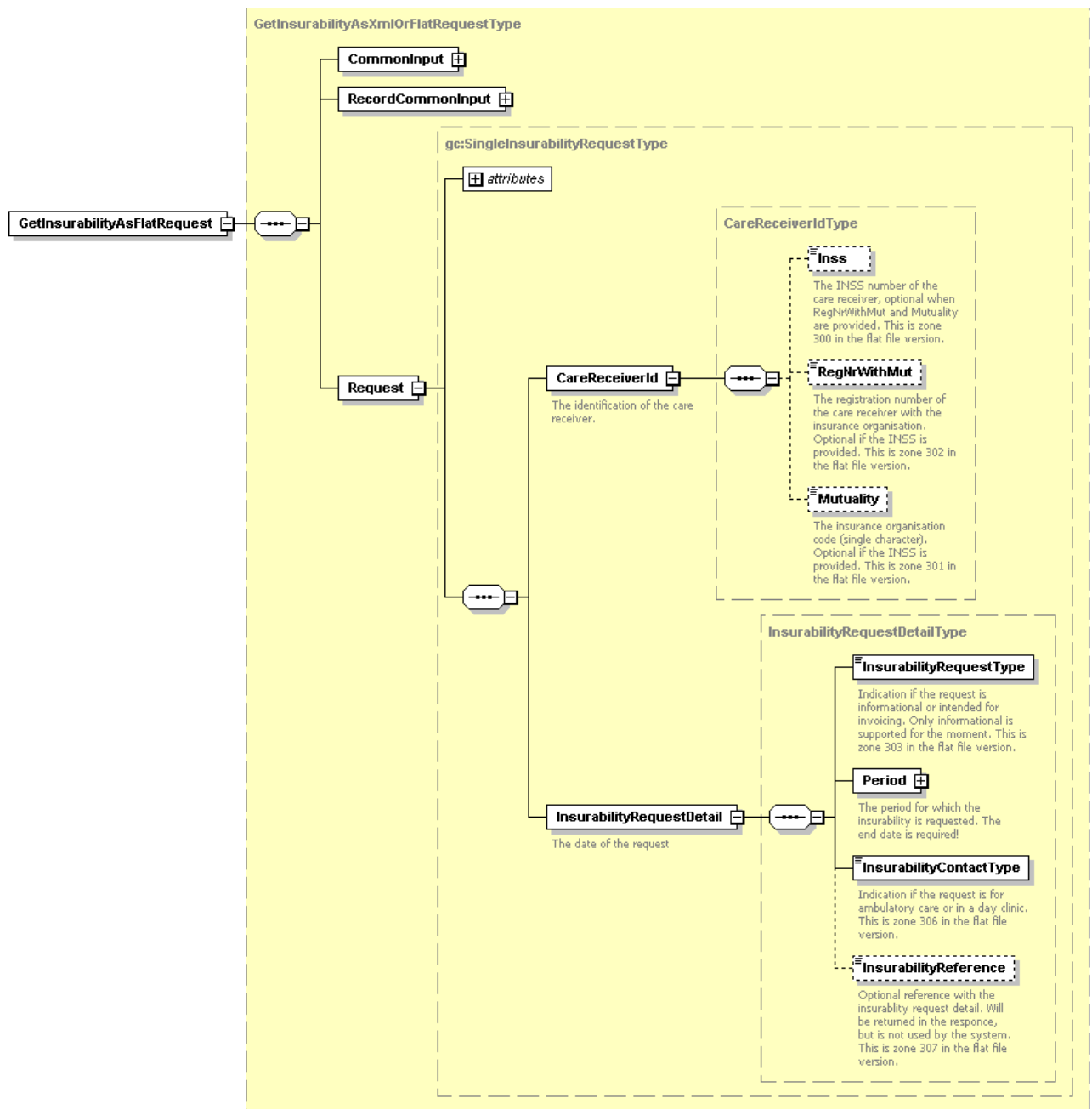| Field name	Description
Status	The Status element contains a code and a message. If no error has occurred during the call, the code is set to "200" and the message is "Success". Otherwise, you get a SOAP fault exception is returned (see also Section 8).
CommonOutput	See section 5.2.3.3 : CommonOutputType
RecordCommonOutput	See section 5.2.3.4 : RecordCommonOutputType
Response	See the documentation 'Service_Catalogue_GenIns_All' provided by the CIN/NIC

5.2.2.3 Example

The documentation provided by CIN/NIC Sharepoint can give you some business examples.

5.3 Method getInsurabilityAsFlat (for hospital only)

Just as the getInsurability, this method aims to display the insurability of one care recipient for a certain period of time. However, this method returns the insurability in plain text form. The input and some headers in the response remain xml.

5.3.1.1 Input arguments in GetInsurabilityAsFlatRequest

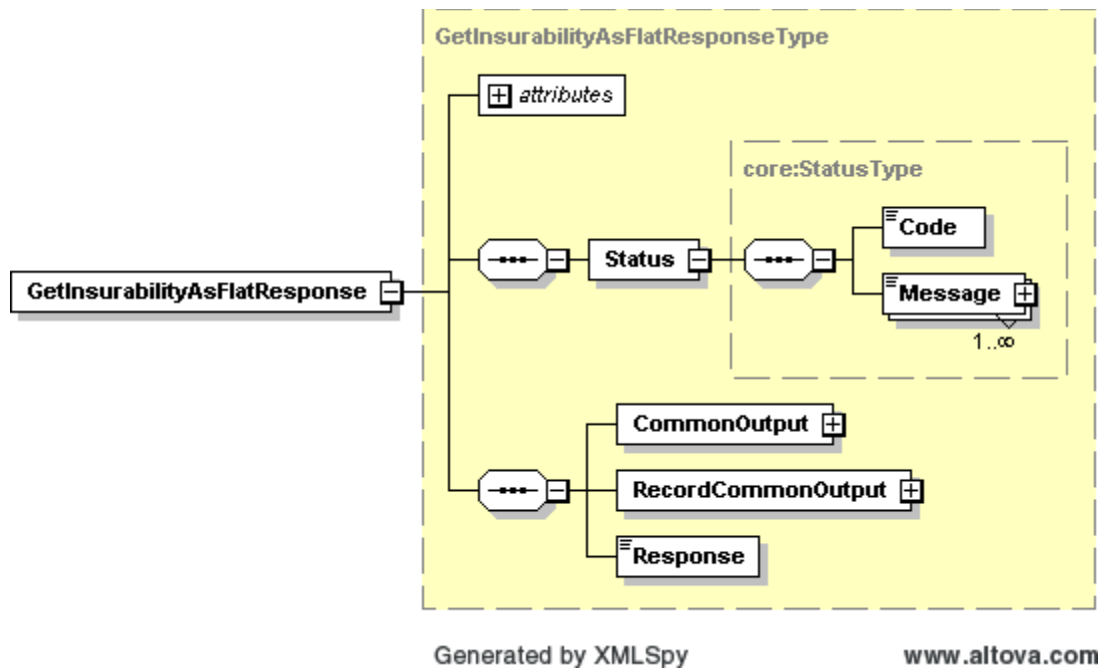| Field name	Description
CommonInput	See section 5.2.3.1 : CommonInputType
RecordCommonInput	See section 5.2.3.2 : RecordCommonInputType
Request	See the documentation provided by the CIN/NIC Sharepoint

### 5.3.1.2 Output arguments in GetInsurabilityAsFlatResponse

Generated by XMLSpy   www.altova.com

Field name	Description
Status	The Status element contains a code and a message. If no error has occurred during the call, the code is set to "200" and the message is "Success". Otherwise, a SOAP fault exception is returned (see also Section 8).
CommonOutput	See section 5.2.3.3 : CommonOutputType
RecordCommonOutput	See section 5.2.3.4 : RecordCommonOutputType
Response	String representation of the flat insurability response. See the documentation provided by the CIN/NIC Sharepoint.

5.3.1.3 Example

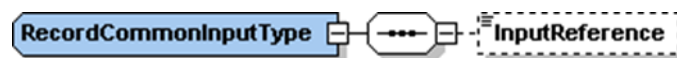On the CIN/NIC Sharepoint, you can find some business examples.

5.3.2 Used types

5.3.2.1 CommonInputType
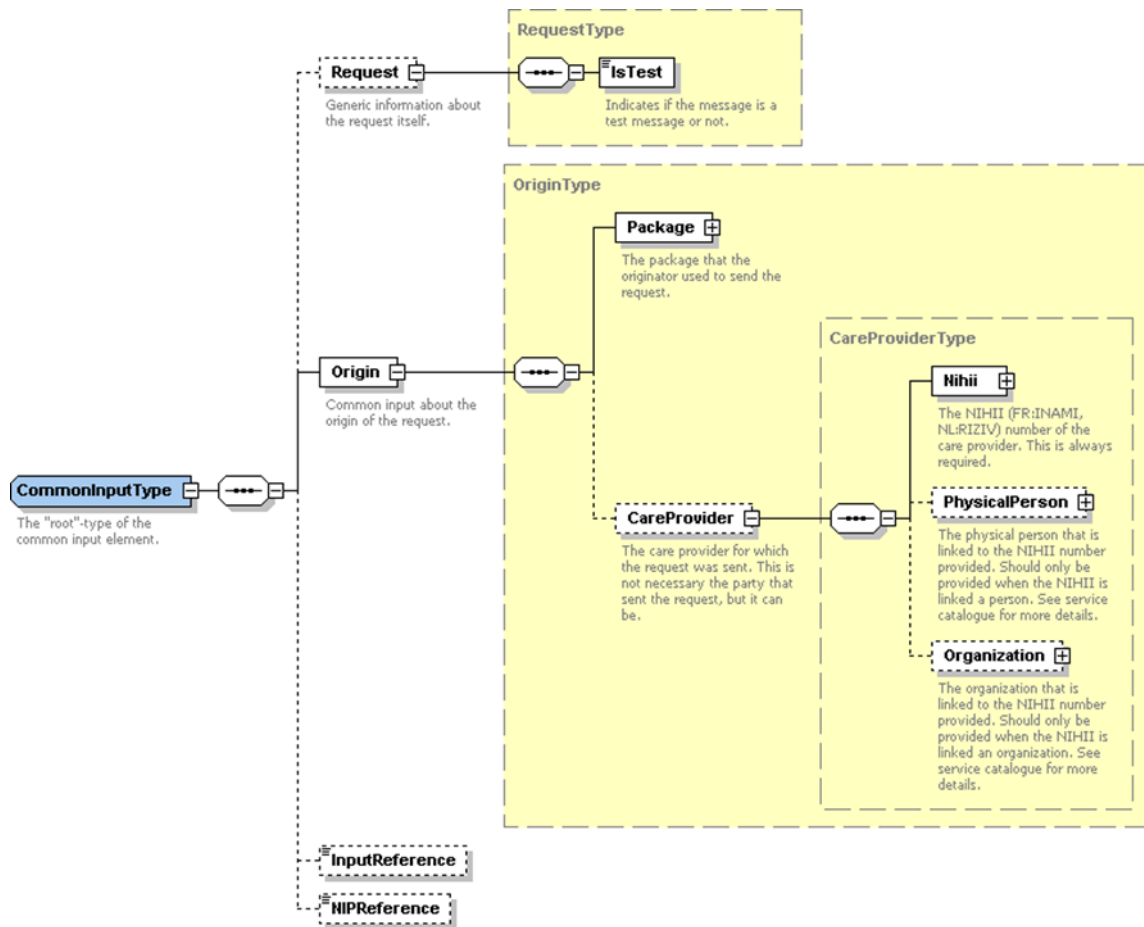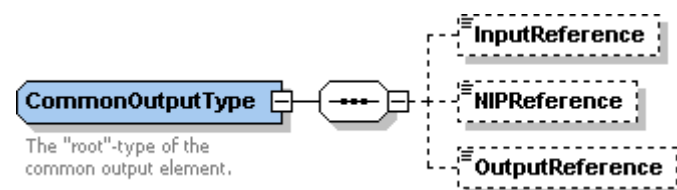

For the semantics of the particular elements and other information about the service please refer to the documentation "Service_Catalogue_Commons" provided by the CIN/NIC Sharepoint.

5.3.2.2 RecordCommonInputType

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

5.3.2.3 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 Sharepoint.

5.3.2.4 RecordCommonOutputType
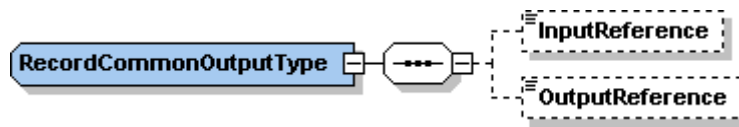

For the semantics of the particular elements and other information about the service see the documentation "Service_Catalogue_Commons" provided by the CIN/NIC.

6. Risks and security

6.1 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 center (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

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.
- Signature of the timestamp, body and binary security token. This allows the eHealth platform to verify the integrity of the message and the identity of the message author.
- No encryption on the message.

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

You have to develop a client in order to connect to our WS. On the portal of the eHealth platform, you can find most of the information on the integration.

Upon request and depending on the case, the eHealth platform provides you with a **test case** 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 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 using the eHealth platform service for one of his applications, will always test in the acceptance environment first before releasing any adaptations of his 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 and/or GetInsurabilityAsFlat (contact NIC/CIN 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 codesfor the eHealth Service Bus. For possible business errors, refer to the documentation "GenericIns Error codes" and "Service_Catalogue_GenIns_All" provided by the CIN/NIC Sharepoint.

Table 1: Description of the possible SOAP fault exceptions.

Error code	Component	Description	Solution/Explanation
SOA-00001	?	Service error	This is the default error sent to the consumer in caseno more details are known.
SOA-01001	Consumer	Service call not authenticated	From the security information provided, • or the consumer could not be identified • or the credentials provided are not correct
SOA-01002	Consumer	Service call notauthorized	• The consumer is identified and authenticated but is not allowed to call the given service.
SOA-02001	Provider	Service not available. Please contact servicedesk	• An unexpected error has occurred • Retries will not work • Service desk may help with root cause analysis
SOA-02002	Provider	Service temporarily not available. Please trylater	• An unexpected error has occurred • Retries should work • If the problem persists service desk may help
SOA-03001	Consumer	Malformed message	This is the default error for content related errors in case no more details are known.
SOA-03002	Consumer	Message must be SOAP	Message does not respect the SOAP standard
SOA-03003	Consumer	Message must contain SOAP body	Message respects the SOAP standard, but body is missing.
SOA-03004	Consumer	WS-I compliance failure	Message does not respect the WS-I standard.
SOA-03005	Consumer	WSDL compliance failure	Message is not compliant with WSDL in Registry/Repository.
SOA-03006	Consumer	XSD compliance failure	Message is not compliant with XSD in Registry/Repository
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 Mycarenet at *ServiceDesk@MyCareNet.be*.

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

```
<soapenv:Header>

    <add:MessageID
xmlns:add="http://www.w3.org/2005/08/addressing">6f23cd40-09d2-4d86-
b674- b311f6bdf4a3</add:MessageID>

</soapenv:Header>
```

This message ID is important for tracking of the errors and should be provided (when available) when requestingsupport