

**MyCareNet Tarification V1
Cookbook
v1.3**

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eHealth platform

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1000 BRUSSELS

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1 Document management

1.1 Document history

Version	Date	Author	Description of changes / remarks
1	11/04/2014	eHealth platform	First version
1.1	30/10/2019	eHealth platform	Template update + anonymization of personal data
1.2	23/03/2022	eHealth platform	Update §3.2 Contact Support CIN/NIC
1.3	29/07/2022	eHealth platform	§3.2 Status (added) § 3.3 Support desk – contact points CIN/NIC (updated) § 5.1.3 WS-I Basic Profile (added) § 5.1.4 Tracing (added)

2 Introduction

2.1 Goal of the service

The “MyCareNet Tarification” (MCN Tarification) web service allows care providers to perform a tarification consultation. This tarification is calculated by the health insurance fund from patient data and health care provider data in order to establish the invoice.

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.

However, in order to interact in a smooth, homogeneous and risk controlled way with a maximum of partners, eHealth partners 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.

2.3 eHealth document references

All the document references can be found in the technical library on the eHealth portal¹. These versions or any following versions can be used for the eHealth service.

ID	Title	Version	Date	Author
1	Tarification_SSO.pdf	2.0	12/09/2016	eHealth platform

2.4 External document references

Within the MyCareNet Sharepoint ², you will find all the referenced documentation. It may evolve in time.

If some external documentation has been modified, you should notify the eHealth service management³, which will manage the maintenance of this document.

ID	Title	Version	Last modification date	Author
1	CEB 20140123 - Protocol en bijlage HCParty Versie V01R02 NL (1).zip	N.A.	30/01/2014	Baise Philippe

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

² 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>

³ ehealth_service_management@ehealth.fgov.be

2	CEB 20140123 - Protocol en bijlage HCParty Versie V01R02 NL (1).zip	N.A.	30/01/2014	Baise Philippe
3	CME 20140123 - Consultation Tarif Version V01R02 FR (1).zip	N.A.	30/01/2014	Baise Philippe
4	CME 20140123 - Protocole et Annexe HCParty Version V01R02 FR (1).zip	N.A.	30/01/2014	Baise Philippe
5	xsd-kmehr message protocole-1.0.0-SNAPSHOT (2) (1) (2).zip	N.A.	11/03/2014	Baise Philippe
6	MyCareNet Authentication Catalogue (19).pdf	N.A.	31/01/2014	Baise Philippe
7	NIPPIN GenSync (ESB 2 NIPPIN) (2).zip	N.A.	31/01/2014	Baise Philippe
8	TARIF-GenericSync Error codes.xls	N.A.	20/02/2014	Baise Philippe
9	Service_Catalogue_Commons (10).docx	N.A.	31/01/2014	Baise Philippe
10	Service_Catalogue_GenSync (16).pdf	N.A.	11/03/2014	Baise Philippe
11	ImplementationGuide_For_CareProvider.pdf	N.A.	11/03/2014	Baise Philippe

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 Business support

For business questions: MyCareNet Helpdesk (first line support)

3.3.2 MyCareNet Helpdesk:

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

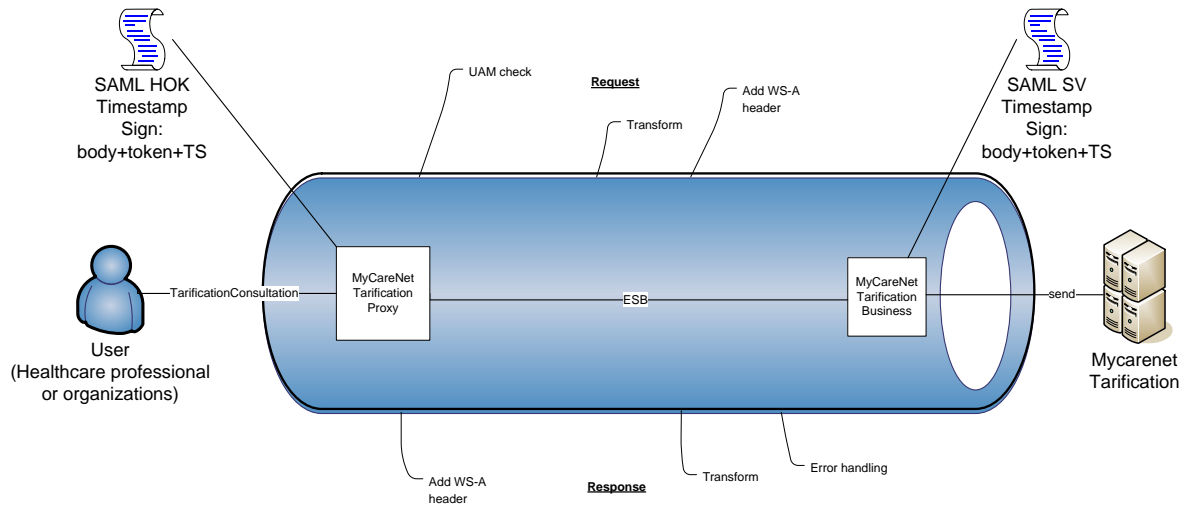


3.3.3 Technical contact centre MyCareNet:

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



4 Global overview



The SAML Holder-of-Key (HOK) policy secures the Tarification service. Therefore, prior to calling the services, you must obtain a SAML token at the eHealth STS. This token must be then included in the header of the request message, together with the timestamp. The timestamp and the body must be signed with the certificate as used in the HOK profile of the SAML token (see also more detailed technical description further in the cookbook). The body contains the *TarificationConsultation* request. The eHealth ESB verifies the security (authentication, authorization, etc.) and forwards the request to MyCareNet.

5 Step-by-step

5.1 Technical requirements

In order to be able to test the MyCareNet Tarification service, you need to take the following steps:

1. **Create a test case:**
If you do the testing for a real care provider, you can use the real NIHI number of this provider. Otherwise, you will first have to request the configuration of a test case at the eHealth platform (info@ehealth.fgov.be) with the request test case template you can find on the portal of the eHealth platform⁴.
2. **Request an eHealth test certificate:** Once the test case has been configured by the eHealth platform you will receive a NIHI number according to the service called and the required profile. You can then request the test certificate through the eHealth Certificate Manager.
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 MyCareNet Tarification WS.**

You can find the process for production, described in the second part of this cookbook.

The rules to access the Tarification are the same in acceptance as in production.

Access rules:

- authentication with a care providers certificate (see § 3 for the information on the certificates, and further in this section for the information about the SAML token).
- authentication with the certificate of a mandate holder (see § 3 for the information on the certificates, and further in this section for the information about the SAML token).

In order to implement a WS call 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 (WSstack for the client implementation) can be used instead.⁵

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 – Holder of Key cookbook.⁶

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. 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 Tarification SSO.

To access the Tarification WS, 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 the eHealth platform to verify that they correctly configured the requested test case.

5.1.2 Encryption

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

⁴ <https://www.ehealth.fgov.be/ehealthplatform/nl/service-ehealth-certificaten> or
<https://www.ehealth.fgov.be/ehealthplatform/fr/service-certificats-ehealth>

⁵ <https://www.ehealth.fgov.be/ehealthplatform/nl/service-ehealth-platform-services-connectors> or
<https://www.ehealth.fgov.be/ehealthplatform/fr/service-ehealth-platform-services-connectors>

⁶ <https://www.ehealth.fgov.be/ehealthplatform/nl/service-iam-identity-access-management> or
<https://www.ehealth.fgov.be/ehealthplatform/fr/service-iam-identity-access-management>



5.1.3 WS-I Basic Profile 1.1

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

5.1.4 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-\]]*\V[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

5.1.5 Security policies to apply

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

To call the Tarification web service:

- 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 be forwarded 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-SAMLSAMLTokenProfile.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 WSDL⁷ (also included in the documentation).

⁷ WSDL's can be found in the eHealth Service Registry: <https://portal.api.ehealth.fgov.be/>

5.2 Web service

The MCN Tarification WS has the following endpoints:

- Acceptation environment: <https://services-acpt.ehealth.fgov.be/beta/MyCareNet/Tarification/v1>
- Pilot environment: <https://services-acpt.ehealth.fgov.be/MyCareNet/Tarification/v1>
- Production environment: <https://services.ehealth.fgov.be/MyCareNet/Tarification/v1>

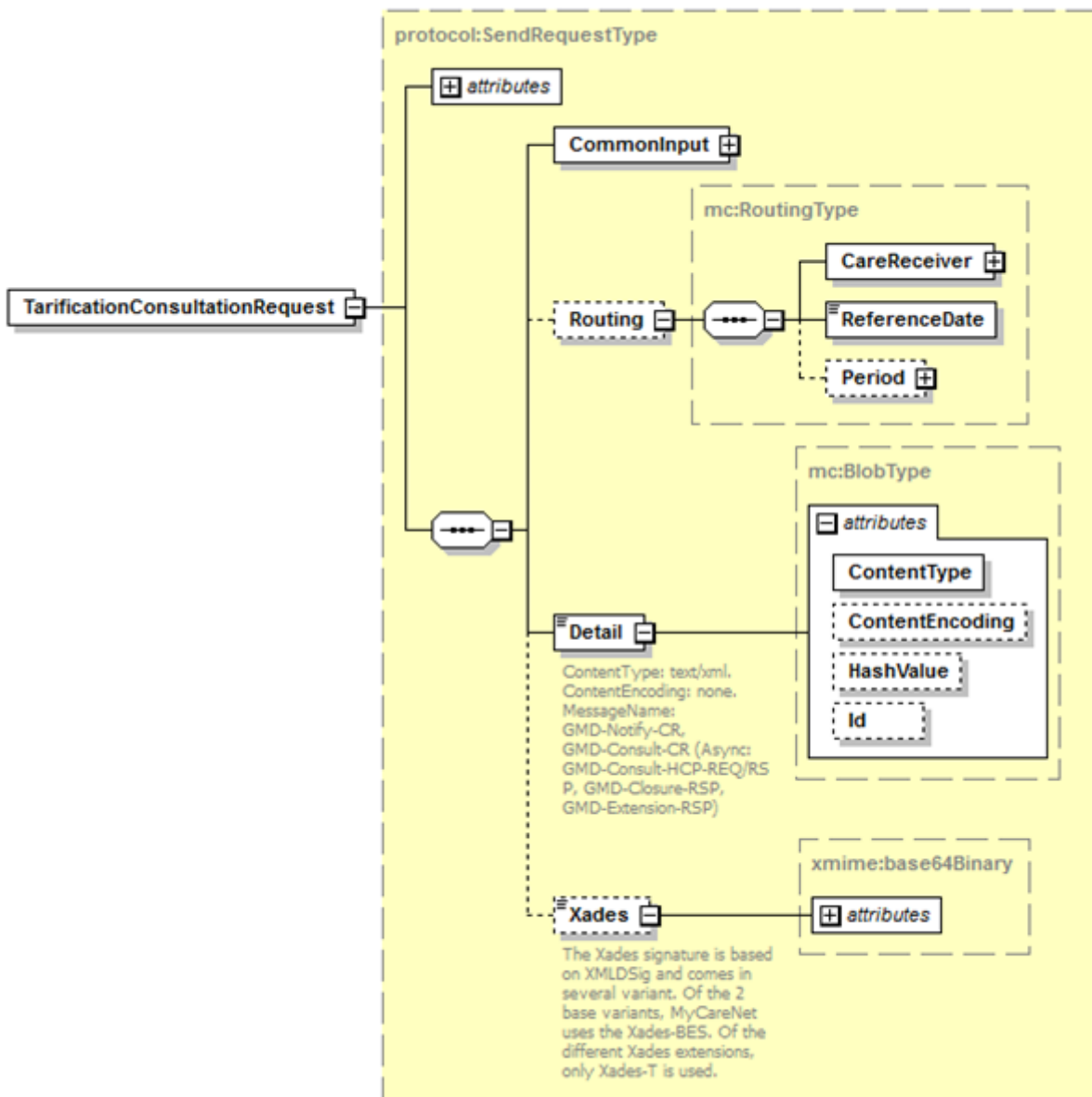
The remainder of this section describes the structure of the request and the response messages.

- Section 5.2.1 describes the request and response messages for the *tarificationConsultation* operation.
- Section 5.2.2 describes the common element types used in the structures of the request and response types.

For more detail on the specific elements and the concepts behind them, see the documentation provided by the CIN/NIC on their Sharepoint.

5.2.1 Method *TarificationConsultation*

5.2.1.1 Input arguments in *TarificationConsultationRequest*

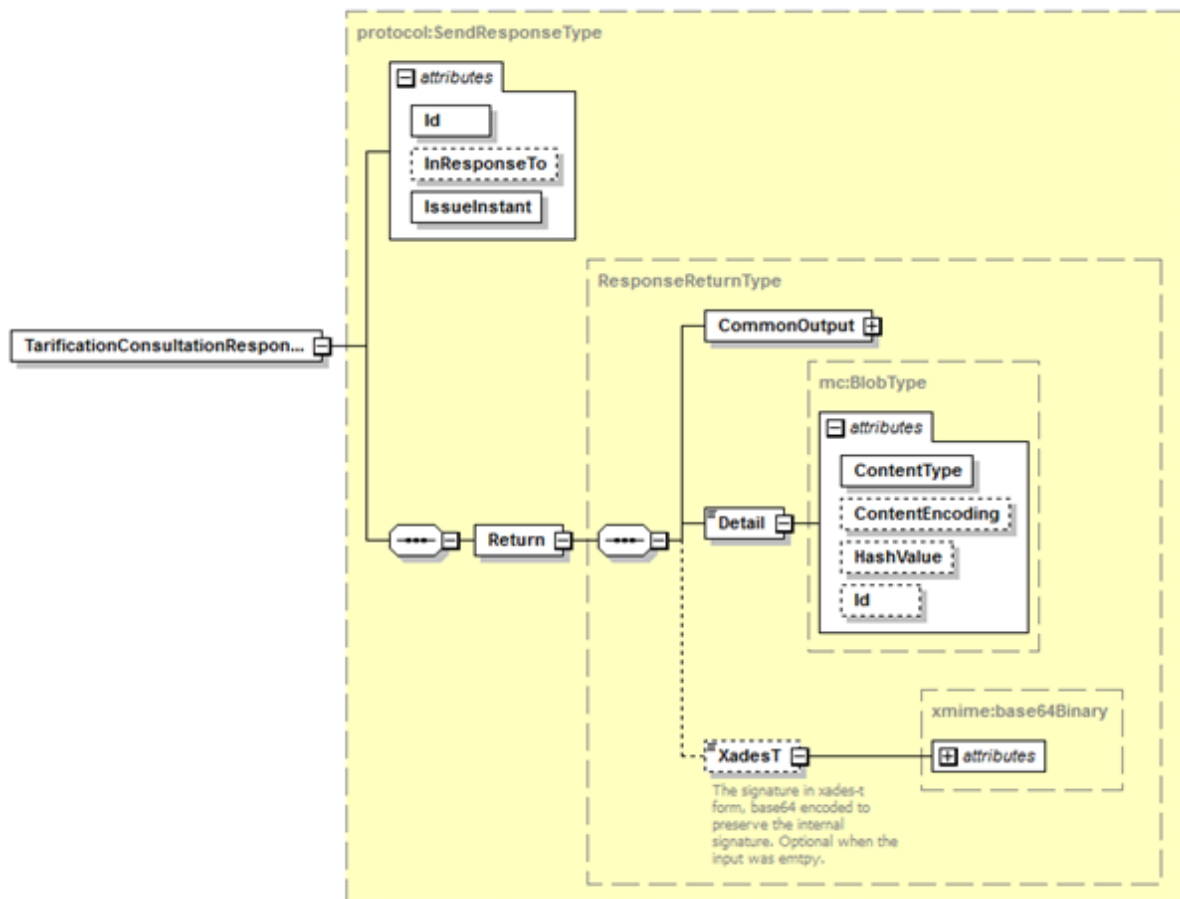


Field name	Description
CommonInput	See section 5.2.2.1
Routing	Mandatory element. See the documentation 'Service_Catalogue_Commons (10)' provided by the CIN/NIC. The data within this element should contain either the SSIN of the care receiver either the combination <i>health insurance organization/identification number of the care receiver within this organization</i>

Detail	<p>Base64 encoded detail of the request.</p> <p>See the documentation provided by the CIN/NIC for more details :</p> <ul style="list-style-type: none"> - 'Service_Catalogue_GenSync (16)' - 'CME 20140123 - Consultation Tarif Version V01R02 FR (1)' or 'CEB 20140123 - Raadplegen Tarieven Versie V01R00 NL (1)' <p>Attribute values :</p> <p>@ContentType must be set to 'text/xml'</p> <p>@ContentEncoding must be set to 'none'</p> <p>@HashValue must not be provided by the care provider, always provided to the care provider.</p> <p>@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.</p> <p>Note that the attribute "MessageName" in the Detail element is not present in the interface as provided by eHealth. This attribute value is then filled out by the eHealth platform according to the called operation (for the tarification service it is "TARIF-CR").</p>
Xades	No XAdES should be provided.

kbWfFuYwDlCjwva21IaHI6Y2Q+IA0KCQkJCTxrbWVocjpb250ZW50PiANCgkJCQkJPgttZWWhyOmhcGFydHk+IA0KCQkJCQkJP
 GttZWWhyOmlkIFM9IkiELUhdUEFSVfkiIFNWPSixLjAiPjE1ODk3MzEwMDA0PC9rbWVocjppZD4gDQoJCQkJCQk8a21IaHI6aW
 QgUz0iSU5TUylgU1Y9IjEuMCI+NjgwMTAxMDIzOTU8L2ttZWWhyOmlkPiANCgkJCQkJCTxrbWVocjppZCBTPSJDRc1Q1BBUIR
 ZliBTVj0iMS4zlj5wZXJzcGh5c2ljaWFuPC9rbWVocjppZD4gDQoJCQkJCQk8a21IaHI6Zmlyc3RuYW1IPkp1c3RpbmU8L2ttZWWhy
 OmZpcnN0bmFtZT4gDQoJCQkJCQk8a21IaHI6ZmFtaWx5bmFtZT5DYXJhbWJhcjwva21IaHI6ZmFtaWx5bmFtZT4gDQoJCQk
 CTwva21IaHI6aGNwYXJ0eT4gDQoJCQkJPc9rbWVocjpb250ZW50PiANCgkJCTwvY29yZTppdGvPiANCgkJPc9jb3JlOnRyY
 W5zYWNoaW9uPiANCgk8L2NvcmU6c2VsZWN0PiANCjwvUmV0cmlldmVUcmFuc2FjdGlvblJlcXVlc3Q+ </protocol:Detail>
 </TarificationConsultationRequest>

5.2.1.3 Output arguments in TarificationConsultationResponse



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 (16)' - 'CME 20140123 - Consultation Tarif Version V01R02 FR (1)' or 'CEB 20140123 - Raadplegen Tariieven Versie V01R00 NL (1)'

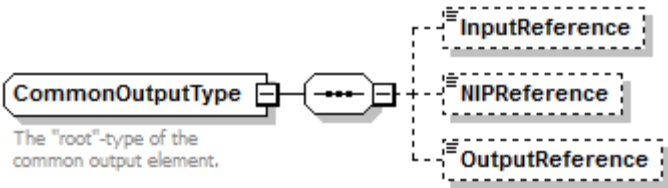
5.2.1.4 Response example

Business example is generated from the documentation 'CME 20140123 - Consultation Tarif Version V01R02 FR (1)' provided by CIN/NIC.



For the semantics of the particular elements and other information about the service see the documentation Service_Catalogue_Commons (10) and MyCareNet Authentication Catalogue (19) 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 (10) provided by the CIN/NIC

6 Risks and security

6.1 Security

6.1.1 Business security

In case the development adds another use case based on an existing integration, eHealth 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 the event of technical issues on the web service, the partner may obtain support from the contact centre that is responsible for this service.

If the eHealth platform finds a bug or vulnerability in its software, the partner should update his application with the newest version of the software within 10 business days.

When 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 eHealth immediately. He is not allowed to publish this bug or vulnerability in any case.

6.1.2 Web service

Web service 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. So, eHealth will process the message if it is received within the time-to-live value. There is a tolerance of 5 minutes to account for the clock skew, but in some situations, the actual response time may be longer than one minute. (see the SLA).
- Signature of the timestamp and body. This allows eHealth 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 and are not allowed to transfer.

Every user takes care of his username, password, and token and is forced to confidentiality of it. Every user is also responsible for every use, which includes the use by a third party, until the inactivation.



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 service in the acceptance environment, 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. You will find most of the required info on this subject, published on the eHealth portal.

In some cases, the eHealth platform provides you with test cases so you can 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 eHealth acceptance environment.

From this moment, you can start integration and acceptance tests. The eHealth platform suggests testing during a minimum of one month.

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

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 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 service for one of his applications will always test first in the acceptance environment 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

eHealth recommends performing tests for all of the following cases:

- Consult tarification as a doctor
- Consult tarification as doctor with the hospital certificate
- Consult tarification as a person who has received a mandate from a doctor
- Consult tarification as an organization who has received a mandate from a doctor

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 documentation TARIF-GenericSync Error codes provided by CIN/NIC.

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 case no more details are known.
SOA-01001	Consumer	Service call not authenticated	From the security information provided: <ul style="list-style-type: none"> • or the consumer could not be identified • or the credentials provided are not correct
SOA-01002	Consumer	Service call not authorized	The consumer is identified and authenticated, but is not allowed to call the given service.
SOA-02001	Provider	Service not available. Please contact service desk	An unexpected error has occurred. <ul style="list-style-type: none"> • Retries will not work. • Service desk may help with root cause analysis.
SOA-02002	Provider	Service temporarily not available. Please try later	An unexpected error has occurred. <ul style="list-style-type: none"> • Retries should work. • If the problem persists service desk may help.
SOA-03001	Consumer	Malformed message	This is 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): <ul style="list-style-type: none"> • 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.

Business error example :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <soapenv:Fault>
      <faultcode>soapenv:Server</faultcode>
      <faultstring>INCORRECT_INSS_DOCTOR_SAML</faultstring>
      <detail>
        <urn:BusinessError Id="urn:uuid:dcdc1fe0-6458-4e38-b954-65fe4f6931dc"
xmlns:urn="urn:be:fgov.ehealth.errors:soa:v1">
          <Origin>MYCARENET</Origin>
          <Code>INCORRECT_INSS_DOCTOR_SAML</Code>
          <Message xml:lang="en">For 'doctor' the SSIN '12345678912' in the CareProvider element must correspond to the
'urn:be:fgov:person:ssin' attribute in the saml '23456789123'</Message>
          <urn:Environment>Acceptation</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.:

```
<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. It should be provided (when available) when requesting support.

