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# **The eHealth Platform**

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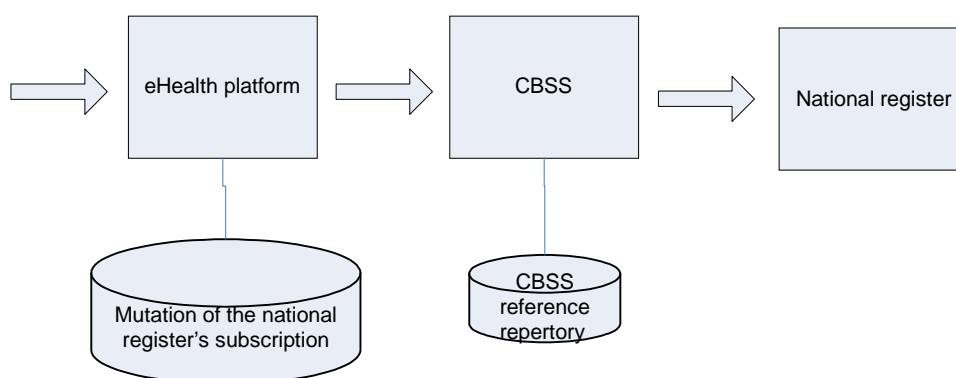
## Integration and use of the Web service

# ManageInscription

### Goal of the document

This document provides technical information on calling the web service ManageInscription, as provided by the eHealth-platform. This web service will allow our partners in the Health sector to query the National Register of Belgian citizen data, directly from their own applications.

The service ManageInscription allows to subscribe (or unsubscribe) a person for a period and hence obtain information about the mutations on the person data.



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. Also, a list of possible errors can be found in the 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 was written in order to provide you with an overview of requirements which have to be met in order to integrate correctly with the web services offered by eHealth.

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 controlled 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.

# 1 Technical, business and privacy requirements

- An agreement from the sectorial committee to access data (more information, see [http://www.ksz-bcss.fgov.be/Fr/organisation/organis\\_3.htm](http://www.ksz-bcss.fgov.be/Fr/organisation/organis_3.htm))
- An eHealth certificate. This is used to identify the initiator of the request. If you don't have one, see [https://www.ehealth.fgov.be/fr/page\\_menu/website/home/platform/basicservices/certificates.html](https://www.ehealth.fgov.be/fr/page_menu/website/home/platform/basicservices/certificates.html)
- An applicationID. This is used to identify the purpose of the call and is given by eHealth. The procedure to obtain this ID is currently under review, and will be added to the eHealth portal as soon as available.

## 2 Release and test processes

### Request to integrate the service (acceptation environment first)

Please contact [info@ehealth.fgov.be](mailto:info@ehealth.fgov.be)

### Development and Test procedures

You have to develop a client to connect to our web service. eHealth asks you to test your client first with a mock-up service. When your tests are successful, you can connect to our web service in our acceptance environment (based on the URL provided, do not forget to apply the eHealth policy, see section 7) and begin your integration and acceptance tests. We ask you to test during minimum one month.

eHealth doesn't provide test cases. Nevertheless, eHealth recommends performing tests for all of the following cases:

- Create an inscription
- Create the same inscription
- Delete the inscription

In addition, the organization should also run negative test cases:

- Create an inscription for a long period (more than 6 month)

### Request for release into production

If acceptance tests are successful, the partner in the Health sector sends its test results, test performance results, with sample of "request" and "eHealth answer" to the eHealth point of contact.

If everything's fine, eHealth and the partner agree on a release date. eHealth should prepare the connection to the production environment and provides to the partner the URL of our production environment.

During the release day, the partner in the Health sector provides feed-back to eHealth contact on the release tests result.

## Maintenance, support and monitoring of the service

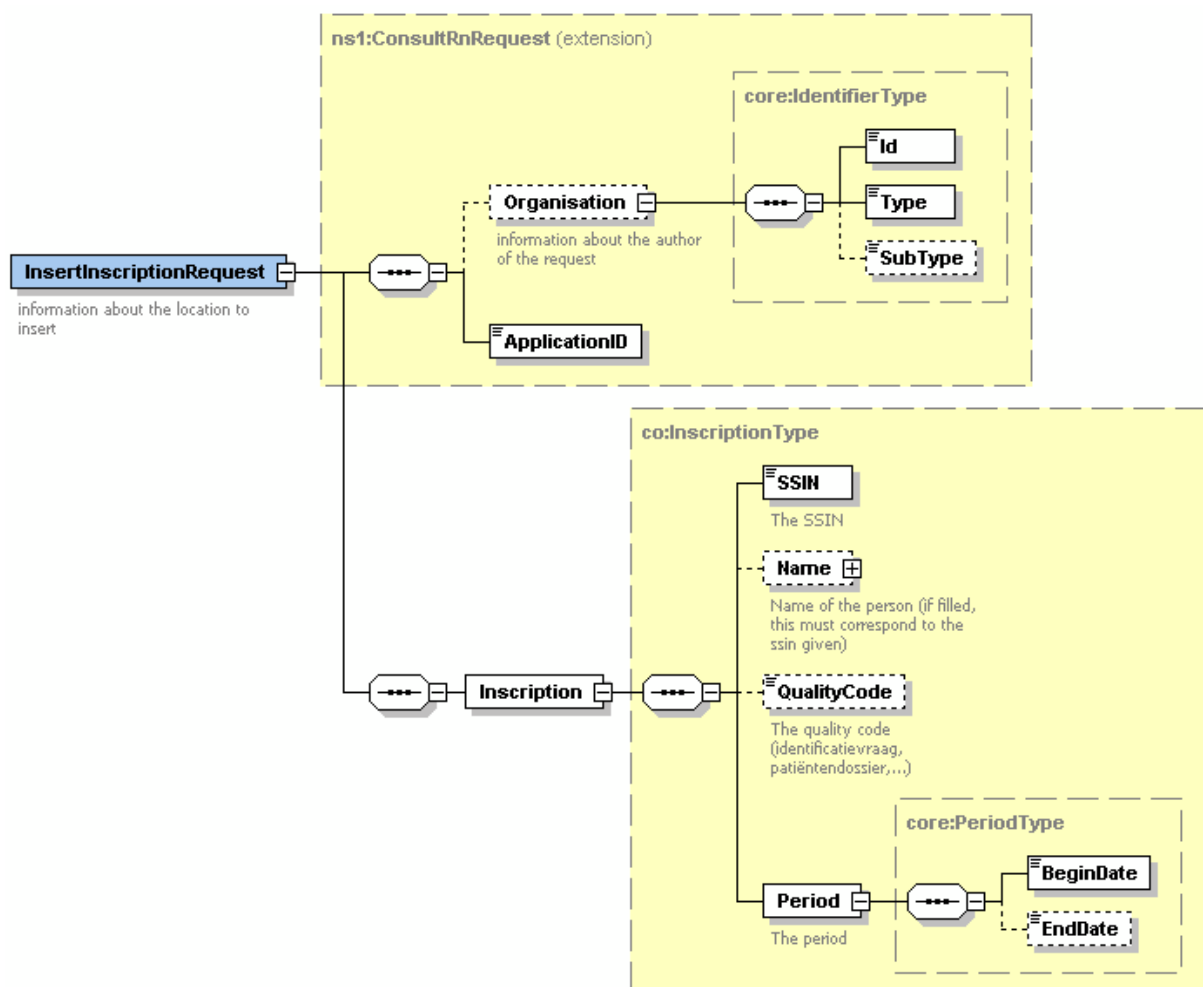
Once in production, the partner in the Health sector who is using the web service for one of its applications will always test firstly in acceptance before releasing any adaptations of its application. In addition, the partner will inform eHealth on the changes and test period.

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.

## 3 Method insertInscription

### Formulating a Request

We discuss below the request which must be sent to have an inscription created in the mutation of the national register's subscription.



The first part, common to all web services consulting the National Register, contains:

Field name	Descriptions
Organisation	The organization block contains information about the organisation having mandated the end user to make the request. This block is optional (also see section 5). <i>Now, mandates are not allowed. So if this information is mentioned, It must be the same information as the information existing in the certificate.</i>
ApplicationID	The ApplicationID contains a number given by eHealth identifying the organization and the authorization given for a certain purpose to this organization. (same format as an SSIN)

The second part (Inscription) contains data about the person to look for, but also information about the link between the patient and the organization.

Field name	Descriptions
SSIN	The SSIN field contains the INSS number of the individual to be registered (patient. ...)
Name	Name containing the last name, the firstname and the middle name of the individual. If given it must match the SSIN. Not used actually
QualityCode (Optional)	A position code is shown in QualityCode. The possible values have been defined by eHealth an this value must be 1 (= identification). If not given, eHealth assumed it must be 1
Period	The Period indicates how long the inscription is valid. In principle, this corresponds to the period during which the organisation keeps an active file about the individual. While the start date (BeginDate) is always mandatory, the end date (EndDate) is optional.

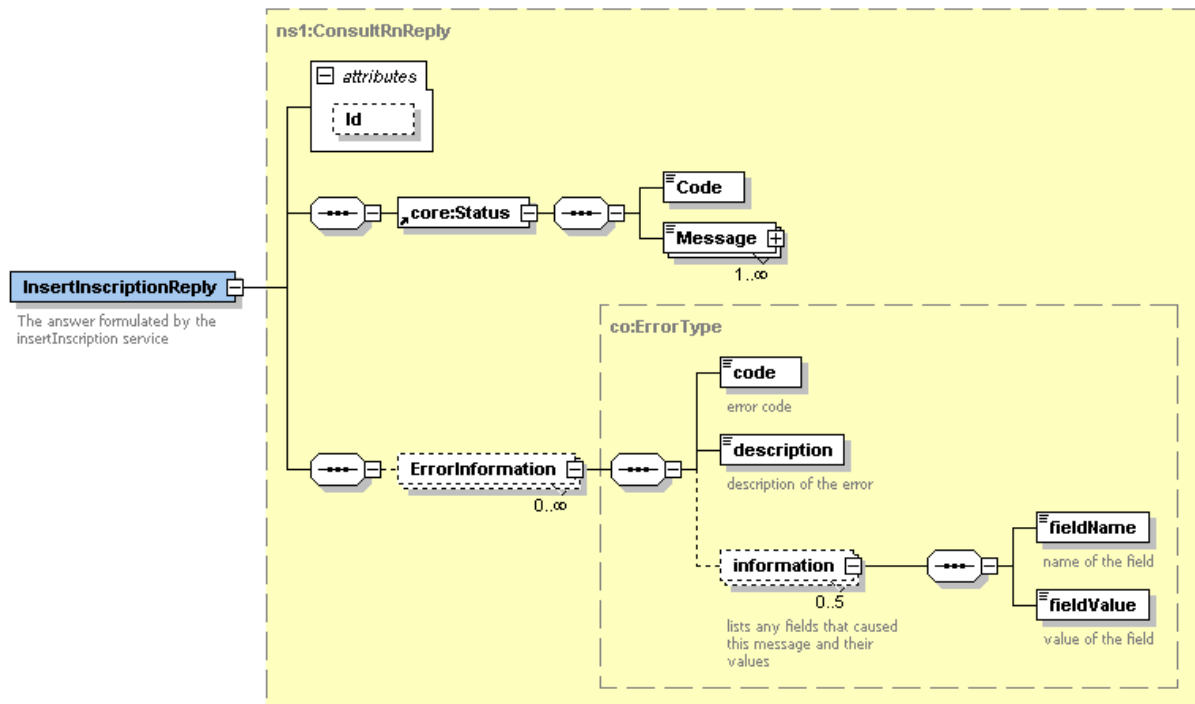
For example:

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:InsertInscriptionRequest
xsi:schemaLocation="urn:be:fgov:ehealth:consultRN:1_0:protocol
manageInscription-1-0.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:ns1="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <Organisation>
    <Id>71099911</Id>
    <Type>NIHII</Type>
    <SubType>HOSPITAL</SubType>
  </Organisation>
  <ApplicationID>xxxxxxxxxxxx</ApplicationID>
  <Inscription>
    <SSIN> xxxxxxxxxxxx </SSIN>
    <QualityCode>1</QualityCode>
    <Period>
      <BeginDate>2009-04-20</BeginDate>
      <EndDate>2009-06-20</EndDate>
    </Period>
  </Inscription>
</ns1:InsertInscriptionRequest>
```



## Interpretation of the Reply

The parts of the reply sent back in response to a request for inscription are discussed below.



Field name	Descriptions
Id	The number attributed to the request/reply by the eHealth platform.
Status	The <i>Status</i> block will contain a code and a message. If no error has occurred during the transaction, the <i>Code</i> will be '100' and the <i>Message</i> 'SUCCESS'. Otherwise: <ul style="list-style-type: none"> <li>The <i>Code</i> will be an error code which unequivocally identifies the problem (see section 6 for the possible values). A problem can be related to the infrastructure (availability of the web service ...) or content of the request.</li> <li>The <i>Message</i> will be a description of the error.</li> </ul>
<i>Error Information</i>	This indicated more information about the reason of the failure (if known) Not used for the moment

For example:

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:InsertInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:ehealth:consultRN:1_0:protocol
manageInscription-1-0.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:ns3="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns1="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <ns3:Status>
```

```

        <Code>80</Code>
        <Message>business error : unknown quality</Message>
    </ns3:Status>
</ns1:InsertInscriptionReply>

```

### ¾ review of some error code

When the organization doing the request is not authorized (the applicationId is not linked with the correct organization,...), the following reply will be send :

f o until 10 Business Problem : invalid author

```

<?xml version="1.0" encoding="UTF-8"?>
<ns1:InsertInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:health:consultRN:1_0:protocol
manageInscription-1-0.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:ns3="urn:be:fgov:health:commons:1_0:core"
xmlns:ns1="urn:be:fgov:health:consultRN:1_0:protocol">
    <eH:Status>
        <Code>00</Code>
        <Message>Business Problem : invalid author</Message>
    </eH:Status>
</ns1:InsertInscriptionReply>

```

When the request is not correct written (some fields are missing, the data are not the ones expected), the following reply will be send :

```

<?xml version="1.0" encoding="UTF-8"?>
<ns1:InsertInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:health:consultRN:1_0:protocol
manageInscription-1-0.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:ns3="urn:be:fgov:health:commons:1_0:core"
xmlns:ns1="urn:be:fgov:health:consultRN:1_0:protocol">
    <eH:Status>
        <Code>62</Code>
        <Message>business error : invalid request</Message>
    </eH:Status>
</ns1:InsertInscriptionReply>

```

You should check your request message.

When the request contains an unknown qualitycode, the following reply will be send :

```

<?xml version="1.0" encoding="UTF-8"?>
<ns1:InsertInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:health:consultRN:1_0:protocol
manageInscription-1-0.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:ns3="urn:be:fgov:health:commons:1_0:core"
xmlns:ns1="urn:be:fgov:health:consultRN:1_0:protocol">
    <eH:Status>
        <Code>80</Code>
        <Message>business error : unknown quality</Message>
    </eH:Status>
</ns1:InsertInscriptionReply>

```



You should check your request message.

When BCSS encounters some problems, the following reply will be send :

11 until 40      Technical Error: While Delegating To Subsystem

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:InsertInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:ehhealth:consultRN:1_0:protocol
manageInscription-1-0.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:ns3="urn:be:fgov:ehhealth:commons:1_0:core"
xmlns:ns1="urn:be:fgov:ehhealth:consultRN:1_0:protocol">
  <eH:Status>
    <Code>11</Code>
    <Message> Technical Error: While Delegating To Subsystem
</Message>
  </eH:Status>
</ns1:InsertInscriptionReply>
```

If they persists, please contact our contact center.

When eHealth encounters some problems, the following reply will be send :

f 41 until 60      Technical Error: Problem With System

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:InsertInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:ehhealth:consultRN:1_0:protocol
manageInscription-1-0.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:ns3="urn:be:fgov:ehhealth:commons:1_0:core"
xmlns:ns1="urn:be:fgov:ehhealth:consultRN:1_0:protocol">
  <eH:Status>
    <Code>41</Code>
    <Message> Technical Error: Problem With System </Message>
  </eH:Status>
</ns1:InsertInscriptionReply>
```

If they persists, please contact our contact center.

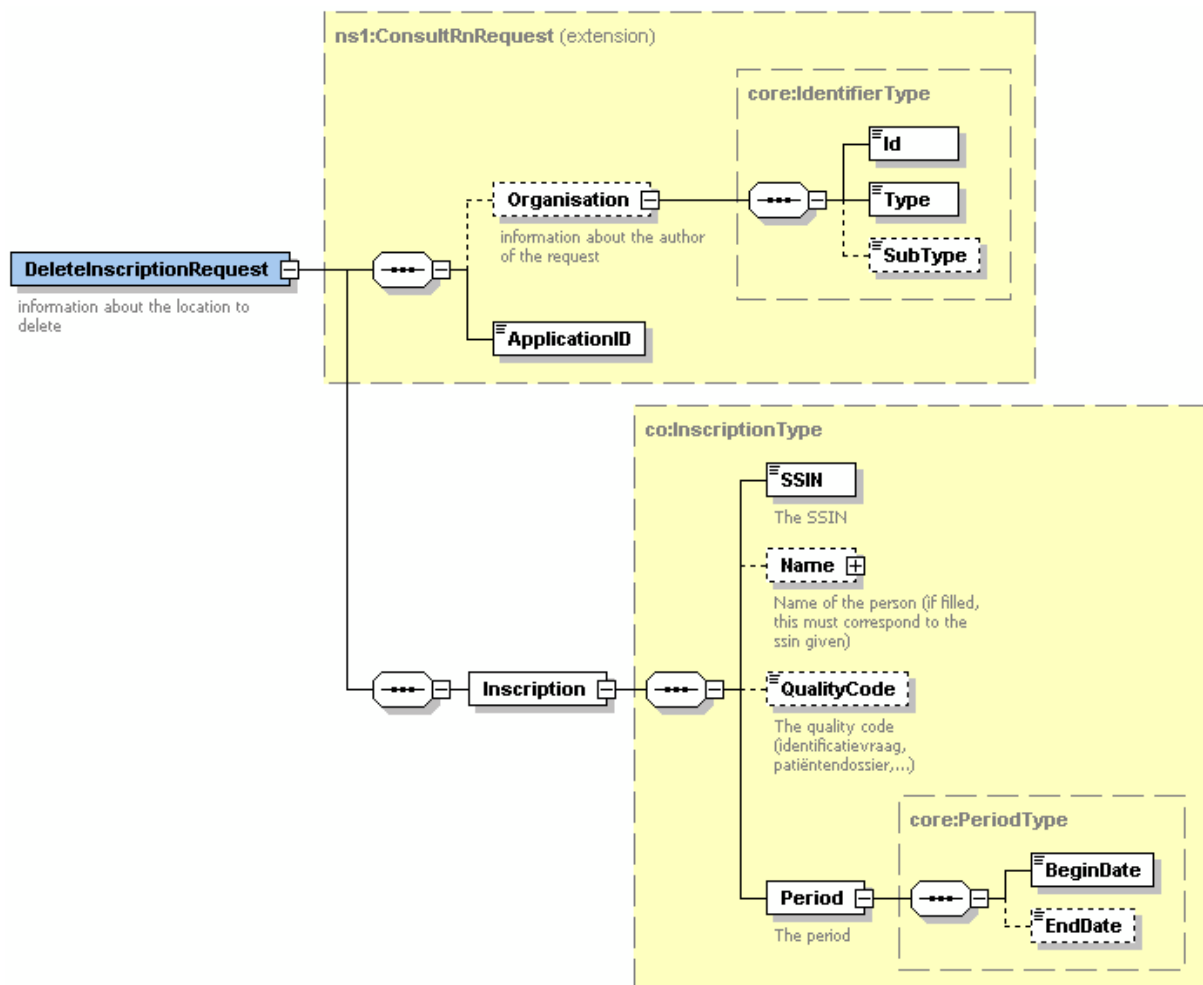


## 4 Method deleteInscription

This service allows unsubscribing a person for a given period.

### Formulating a Request

A request to delete an existing inscription looks as follows:



The first part, common to all web services consulting the National Register, contains:

Field name	Descriptions
Organisation	The organization block contains information about the organisation having mandated the end user to make the request. This block is optional (also see section 5). <i>Now, mandate are not allowed. So if this information is mentioned, It must be the same information as the information existing in the certificate.</i>
ApplicationID	The ApplicationID contains a number given by eHealth identifying the organization and the authorization given for a certain purpose to this organization. (same format as an SSIN)

The second part (Inscription) contains data about the person to look for, but also information about the link between the patient and the organization.

Field name	Descriptions
SSIN	The SSIN field contains the INSS number of the individual to be registered (patient. ...)
Name	Name containing the last name, the firstname and the middle name of the individual. If given it must match the SSIN. Not used actually
QualityCode (Optional)	A position code is shown in QualityCode. The possible values have been defined by eHealth an this value must be 1 (= identification). If not given, eHealth assumed it must be 1
Period	The Period indicates how long the inscription has to be deleted. While the start date (BeginDate) is always mandatory, the end date (EndDate) is optional.  If a DeleteInscriptionRequest shows a period (Period) which does not completely correspond to the period in the existing inscription(s), only the overlapping part of the period will be deleted.

For example:

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:DeleteInscriptionRequest
xsi:schemaLocation="urn:be:fgov:ehealth:consultRN:1_0:protocol
manageInscription-1-0.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:ns1="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <Organisation>
    <Id>71099911</Id>
    <Type>NIHII</Type>
    <SubType>HOSPITAL</SubType>
  </Organisation>
  <ApplicationID>xxxxxxxxxxxx</ApplicationID>
  <Inscription>
    <SSIN>xxxxxxxxxxxx</SSIN>
    <QualityCode>1</QualityCode>
```

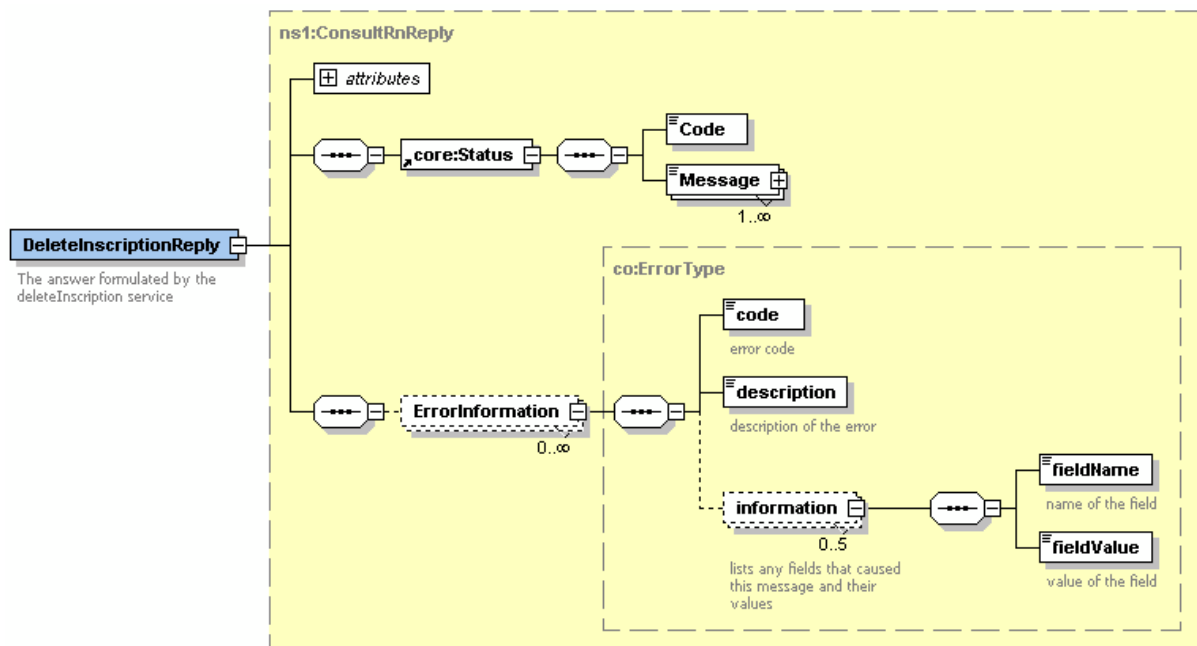
```

<Period>
  <BeginDate>2009-04-20</BeginDate>
  <EndDate>2009-06-20</EndDate>
</Period>
</Inscription>
</ns1:DeleteInscriptionRequest>

```

## Interpretation of the Reply

The response to a deletion of an inscription (DeleteInscriptionReply) is the same as to a creation of an inscription:



Field name	Descriptions
Id	The number attributed to the request/reply by the eHealth platform.
Status	The <i>Status</i> block will contain a code and a message. If no error has occurred during the transaction, the <i>Code</i> will be '100' and the <i>Message</i> 'SUCCESS'. Otherwise: <ul style="list-style-type: none"> <li>The <i>Code</i> will be an error code which unequivocally identifies the problem (see section 6 for the possible values). A problem can be related to the infrastructure (availability of the webservice, ...) or content of the request.</li> <li>The <i>Message</i> will be a description of the error.</li> </ul>
<i>Error Information</i>	This indicated more information about the reason of the failure (if known) Not used for the moment

For example:

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:DeleteInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:ehealth:consultRN:1_0:protocol
manageInscription-1-0.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:ns3="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns1="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <ns3:Status>
    <Code>100</Code>
    <Message>Success</Message>
  </ns3:Status>
</ns1:DeleteInscriptionReply>
```

**¾ review of some error code**

When the organization doing the request is not authorized (the applicationId is not linked with the correct organization,...), the following reply will be send :

f 0 until 10 Business Problem : invalid author

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:DeleteInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:ehealth:consultRN:1_0:protocol
manageInscription-1-0.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:ns3="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns1="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <eH:Status>
    <Code>00</Code>
    <Message>Business Problem : invalid author</Message>
  </eH:Status>
</ns1: DeleteInscriptionReply>
```

When the request is not correct written (some fields are missing, the data are not the ones expected), the following reply will be sent :

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:DeleteInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:ehealth:consultRN:1_0:protocol
manageInscription-1-0.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:ns3="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns1="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <eH:Status>
    <Code>62</Code>
    <Message>business error : invalid request</Message>
  </eH:Status>
</ns1:DeleteInscriptionReply>
```

You should check your request message.



When the request contains an unknown qualitycode, the following reply will be sent :

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:DeleteInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:ehealth:consultRN:1_0:protocol
manageInscription-1-0.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:ns3="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns1="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <eH:Status>
    <Code>80</Code>
    <Message>business error : unknown quality</Message>
  </eH:Status>
</ns1:DeleteInscriptionReply>
```

You should check your request message.

When BCSS encounters some problems, the following reply will be sent:

f 11 until 40 Technical Error: While Delegating To Subsystem

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:DeleteInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:ehealth:consultRN:1_0:protocol
manageInscription-1-0.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:ns3="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns1="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <eH:Status>
    <Code>11</Code>
    <Message> Technical Error: While Delegating To Subsystem
</Message>
  </eH:Status>
</ns1:DeleteInscriptionReply>
```

If they persists, please contact our contact center.

When eHealth encounters some problems, the following reply will be sent:

f 41 until 60 Technical Error: Problem With System

```
<?xml version="1.0" encoding="UTF-8"?>
<ns1:DeleteInscriptionReply Id="1234567890123"
xsi:schemaLocation="urn:be:fgov:ehealth:consultRN:1_0:protocol
manageInscription-1-0.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:ns3="urn:be:fgov:ehealth:commons:1_0:core"
xmlns:ns1="urn:be:fgov:ehealth:consultRN:1_0:protocol">
  <eH:Status>
    <Code>41</Code>
    <Message> Technical Error: Problem With System </Message>
  </eH:Status>
</ns1:DeleteInscriptionReply>
```

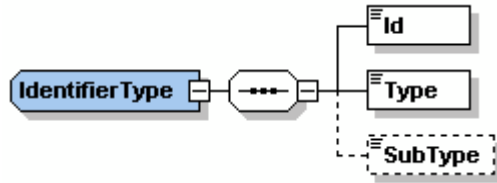
If they persists, please contact our contact center.



## 5 General Structure

### Identifier

An identifier is schematized as follows:



Field name	Descriptions
Id	The identification number (Id)
Type	The Type field identifies the type of identification number based on its origin. For RIZIV-INAMI number, use type NIHII. For company number use type "CBE". More information, see glossary
<i>Subtype (Optional)</i>	The Subtype field provides further specification on the organization requesting information. For example, a hospital is represented using a NIHII number with TYPE NIHII and subtype HOSPITAL. More information, see glossary.

## 6 Overview of error codes

### Error codes originating from the eHealth platform:

These error codes first indicate a problem in the arguments sent, or a technical error.

Error code	Description
00 - 10	Business Problem : invalid author
11 - 40	Technical Error: While Delegating To Subsystem
41 - 60	Technical Error: Problem With System
61 - 99	Business Problem

## 7 Security

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

- ¾ SSL one way
- ¾ An X.509 certificate. This will contain the identifiers of the caller: NIHI number or enterprise number. More information on the contents of the certificate, see section 5. More information on how to obtain such a certificate:  
[https://www.ehealth.fgov.be/fr/page\\_menu/website/home/platform/basicservices/certificates.html](https://www.ehealth.fgov.be/fr/page_menu/website/home/platform/basicservices/certificates.html)
- ¾ Time to live of the message: one minute.
- ¾ Signature of the timestamp, body and binary security token. This will allow eHealth to verify the integrity of the message and the identity of the message author.
- ¾ 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.