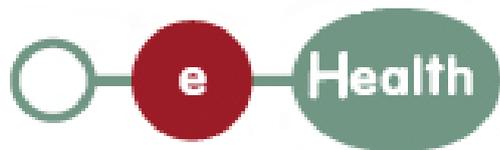




eBirth

eBirth hospital web services
Technical user guide

Final version - 1.6 - 12/05/2016



Document revision history

Revision history

Version	Date	Comments
1.0	September 2009	Initial (draft) version.
1.1	15/01/2010	Update of references to appendix documents (lookup tables).
1.2	04/04/2010	Limited update of sections 7.1, 7.4 and 7.5.
1.3	22/12/2010	Update of sections 2.1.1, 2.4.2.5.10, 5.1, 7.1.1, 7.1.1.1 and 7.1.1.4.
1.4	28/02/2012	<ul style="list-style-type: none"> ▪ Update of sections 2.4.2.4.2, 2.4.2.4.3 and 2.4.2.5.8. ▪ Added print-screens from web application.
1.5	14/06/2012	<ul style="list-style-type: none"> ▪ Updated typo 2.4.3.1.4 ▪ Updated 7.1.1.4
1.6	12/05/2016	<ul style="list-style-type: none"> ▪ Updated section 2.4.2.1.5 Pregnancy origin special value 'noanswer' ▪ Added new comments field for the communities "2.4 Submit a medical form" in "2.4.3 baby folder" :: section "2.4.3.1.7 Comments for the community"

Revision details between version 1.5 and this current version

Document Section	Page	Description
2.4.2.1.5 Pregnancy origin	35	Added a more detailed explanation + example, in case of <i>'no answer has been given by the patient to this question'</i> , the special value <i>'noanswer'</i> must be used.
2.4.3.1.7 Comments for the community	48	Added new comments field for the communities at folder level by using the "text" xml tag.



Table of contents

1	DOCUMENT OBJECTIVES	6
2	DESCRIPTION OF THE WEB SERVICES	7
2.1	GENERAL INFORMATION	8
2.1.1	<i>The Web Services</i>	8
2.2	SUBMIT A BIRTH NOTIFICATION (REQUEST)	9
2.2.1	<i>Header</i>	11
2.2.2	<i>Folder ‘mother’</i>	11
2.2.3	<i>Folder ‘baby’</i>	17
2.3	SUBMIT A BIRTH NOTIFICATION (RESPONSE)	24
2.3.1	<i>Successful request</i>	24
2.3.2	<i>Incorrect request</i>	26
2.4	SUBMIT A MEDICAL FORM (REQUEST)	28
2.4.1	<i>Header</i>	29
2.4.2	<i>Folder ‘mother’</i>	29
2.4.3	<i>Folder ‘baby’</i>	45
2.5	SUBMIT A MEDICAL FORM (RESPONSE)	50
2.5.1	<i>Successful request</i>	50
2.5.2	<i>Incorrect request</i>	52
3	SERVICES INTERFACE	55
4	KMEHR MESSAGE EXAMPLES	56
5	ERROR MESSAGES	57
5.1	SUBMIT BIRTH NOTIFICATION	58
5.2	SUBMIT MEDICAL FORM	59
6	SERVICE INTERACTION MODEL	60
7	APPENDIX	61
7.1	APPENDIX 1: VALIDATION RULES	61
7.1.1	<i>Notification</i>	62
7.1.2	<i>Medical form</i>	67
7.2	APPENDIX 2: LIST WITH MUNICIPALITY NIS-CODES	77
7.3	APPENDIX 3: LIST WITH DISTRICT CODES	77
7.4	APPENDIX 4: LIST OF COUNTRY CODES	77
7.5	APPENDIX 5: TRANSLATION OF THE ANSWERS (CHOICES)	77
7.6	APPENDIX 6: TRANSLATION OF THE HELP FIELDS	77
7.7	PRINTSCREENS WEB APPLICATION - DUTCH VERSION	78
7.7.1	<i>Notification: Parent Identification</i>	78
7.7.2	<i>Notification: Birth</i>	79



7.7.3	<i>Medical Form Part I: Previous births</i>	80
7.7.4	<i>Medical Form Part II: Current Pregnancy</i>	81
7.7.5	<i>Medical Form Part III: Current Delivery</i>	82
7.7.6	<i>Medical Form Part IV: Condition at birth</i>	83
7.8	PRINTSCREENS WEB APPLICATION - FRENCH VERSION.....	84
7.8.1	<i>Notification: Parent Identification</i>	84
7.8.2	<i>Notification: Birth</i>	85
7.8.3	<i>Medical Form Part I: Previous births</i>	86
7.8.4	<i>Medical Form Part II: Current Pregnancy</i>	87
7.8.5	<i>Medical Form Part III: Current Delivery</i>	88
7.8.6	<i>Medical Form Part IV: Condition at birth</i>	89

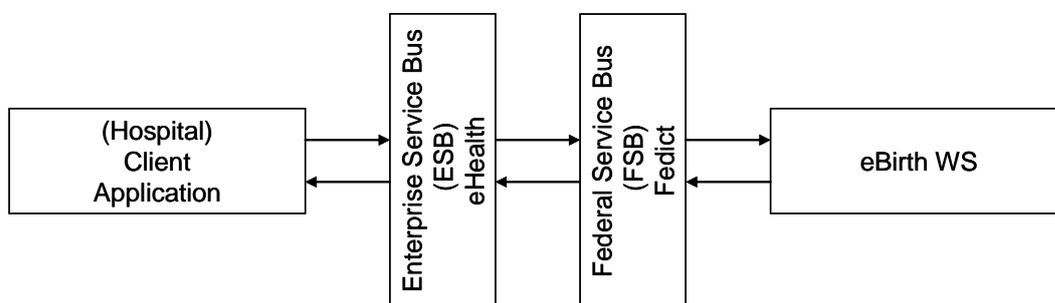
1 Document objectives

Medical practitioners and hospitals play an important role in the birth notification process. When a baby is born at a hospital, different administrative tasks have to be performed. First the health care professional has to notify this birth to the civil agents of the city of birth. In addition multiple paper based forms (including Model I, part A and B) have to be completed. Moreover, a medical form has also to be filled in, which will be sent to the Communities (form C of Model I or the SPE / Cepip form).

As to optimize the different birth data transfers between all actors involved in the birth notification process, the eBirth project has been created to digitalize this data transfer, to reduce the overall time these tasks take, to achieve a higher level of data quality and more general to reduce the administrative burden.

As to make the most of the digitalization of the data transfer, the project has developed web services that will allow hospitals (who treat a large amount of data) to integrate directly in their applications the possibility to send those birth notifications to the cities and to send the medical forms to the Communities using the eBirth application.

The objective of this document is to allow hospitals to understand and develop the interaction between the eBirth application and their own applications using the web services made available by Fedict.



As illustrated above the client application at the hospital will first communicate with the ESB of eHealth. The ESB will on his turn communicate with the Federal Service Bus (FSB) of Fedict. The main purpose of the FSB is to assure on a homogeneous basis the security of data exchange and authenticate formally the application who desires to access the eBirth application.

The client applications will have first to satisfy some technical and legal standards before using the federal government's web services. This document was created as to give a first overview of the standards that have to be fulfilled for a correct integration of the hospital applications with the web services made available by Fedict.



- This document focuses on the structure of the KMEHR message that will be send to the eHealth ESB. The complete interface of the web service that is exposed through eHealth to the hospitals will not be analyzed in this document.
- We also would like to stress that this guide is not a development or programming guide for client applications. The only objective is to explain the structure of the request and response messages.
- Please note that these web services exposed by the eBirth application are only accessible by hospitals.

2 Description of the web services

It is important to note that these web services are exclusively reserved for the hospitals that will express their wish to interact with eBirth with this particular interface. This web service will thus not be accessible for other clients. These web services are strictly secured and the access and usage is controlled.

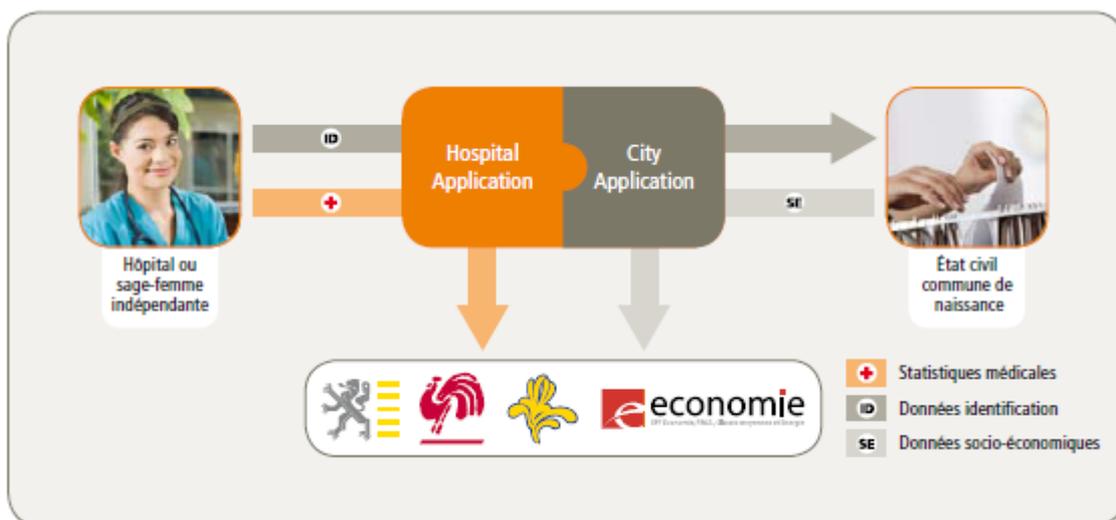
Furthermore, it is also important to consider the global view in which those web services will be operating.

Within the framework of a birth notification, two actors are mainly involved : the health care professionals and the civil agents of cities. When a baby is born, a health care professional (working for a hospital or not) has to fill in a birth notification form (which contains the information from the notification of the birth¹, the declaration of the birth² and the data of sections A and B of Model I) and a statistical medical form (section C of Model I, SPE form or Cepip form).

1. The birth notification form is send, legally required within 24 hours after the birth of the baby, to the civil agents of the city of birth, via the eBirth platform.
2. The statistical medical form will be send, at the latest 40 days after the birth of the baby, via the eBirth platform to the Communities. It is strongly encouraged to send the medical form as soon as all information is available.

The agents of the registry office also have to complete a form with socio-economic information (section D of Model I). This data will be send via the eBirth platform to the Communities as well.

The figure below provides a graphical overview of the process described above.



¹ Notification of the birth: Kennisgeving van de geboorte / Notification de naissance (Article 56 §1, part 2, and §2, part 2 of the Civil Code)

² Declaration of the birth: Vaststelling van de geboorte / L'avis d'accouchement (Article 56 §4 of the Civil Code)

2.1 General information

2.1.1 The Web Services

The hospitals can use web services to integrate their application with the eBirth solution to provide the legally required information. Each of the two web services (operations) stand for a functionality that has to be executed by the hospitals application at a specific moment.

1. Submit a birth notification

This web service allows the submission of a completely filled and valid birth notification to the eBirth platform which will make sure the required information is provided to the necessary government administrations (e.g. city of birth). The Birth notification contains the following information:

- Identification of the mother
- Details of the baby (e.g. gender, first name)
- Birth details (e.g. date and time of birth)
- Identification of the father (optional)



As a reminder, to be compliant with the legal requirements a birth notification has to be send within 24 hours after the birth of the baby.



To prevent the submission of an already registered birth by a hospital, a “double detection validation mechanism” is observed by this web service operation.

If a birth notification with identical data was already successfully submitted by a hospital, error code 208 is returned as response (full list of error codes available in section 5.1). At this time, the notification is not submitted successfully.

The following parameters are taken into account to detect a double submission (within the same hospital):

- Last name of the mother
- First name of the mother
- Birth date of the newborn
- Gender of the newborn
- Rank of the newborn

2. Submit a medical form

This web service allows the submission of a medical form for a particular birth notification (submitted successfully beforehand). The medical form consists of 4 parts. The 3 first parts are related to information of the mother (e.g. partus number, medical risks). Part 4 is related to the birth of the baby (e.g. weight, Apgar score)



As a reminder, the medical form should be send at the latest 45 days after the birth of the baby, via the eBirth platform to the Communities. It is strongly encouraged to send the medical form as soon as all information is available. After this deadline, a medical form will be rejected.

Both web services are based on the standards and guidelines of the eHealth platform. The business message of each web service request message as well as the response message is based on the KMEHR standards and specifications.

2.2 Submit a birth notification (Request)

The KMEHR message created to submit a birth notification is composed of three main parts: the header and two folders. The header contains information about the sender and receiver systems. Each folder will contain exactly one transaction distinguished by their types.

The first folder is dedicated to the mother. This folder contains a transaction of type “ebirth-mother-notification”. The second folder is dedicated to the newborn baby. This folder contains a transaction of type “ebirth-baby-notification”.

Information related to the father will be added to the folder of the baby as a separate item.

The KMEHR message is represented by the following xml:

```

<kmehrmessage>
  <header>
    ...
  </header>
  <!-- Folder dedicated to the mother-->
  <folder>
    <id SV="1.0" S="ID-KMEHR">1</id>
    <!-- Mother identification -->
    <patient>
      ...
    </patient>
    <transaction>
      <id SV="1.0" S="ID-KMEHR">1</id>
      <cd SV="1.0" S="CD-TRANSACTION">ebirth-mother-notification</cd>
      ...
    </transaction>
  </folder>
  <!-- Folder dedicated to the baby -->
  <folder>
    <id SV="1.0" S="ID-KMEHR">2</id>
    <!-- Baby identification -->
    <patient>
      ...
    </patient>
    <transaction>
      <id SV="1.0" S="ID-KMEHR">1</id>
      <cd SV="1.0" S="CD-TRANSACTION">ebirth-baby-notification</cd>
      ...
    </transaction>
    <lnk TYPE="isachildof" URL="//folder[position()=1]"></lnk>
  </folder>
</kmehrmessage>

```

The folder corresponding to the mother must contain the following data:

- the identification data of the mother;
- the author of the transaction (that is the health care professional responsible for the notification);
- the redactor of the transaction (optionally);
- the required information for a multiple pregnancy (except the rank of the baby).

These data will be further analyzed in the following sections (see section 0)

The folder corresponding to the baby will contain the following data:

- the identification data of the baby;
- the identification data of the father;
- the birth date;
- the birthplace;
- the author;
- the redactor (optionally);
- the rank of the baby in the case of a multiple pregnancy.

These data will be further analyzed in the following sections (see section 2.2.3)

2.2.1 Header

As mentioned above, the KMEHR message is composed of a header. This header of the message must contain the following information:

- the KMEHR version used;
- the id of the KMEHR message composed here of the NIHL number of the sender hospital followed by a dot and an identifier of the message within the hospital system;
- the date and time of the emission of the message;
- the NIHL number of the sender hospital (sender);
- the name of the target application (recipient).

Other elements are possible but not required, such as the name of the hospital or additional information about the sender system.

The header is represented by the following xml:

```
<header>
  <standard>
    <cd SV="1.0" S="CD-STANDARD">20090101</cd>
  </standard>
  <id SV="1.0" S="ID-KMEHR">71004394.123456789</id>
  <date>2009-04-15</date>
  <time>16:00:00</time>
  <!-- System sender -->
  <sender>
    <hcparty>
      <id SV="1.0" S="ID-HCPARTY">71004394</id>
      <cd SV="1.0" S="CD-HCPARTY">orghospital</cd>
    </hcparty>
  </sender>
  <!-- System recipient-->
  <recipient>
    <hcparty>
      <cd SV="1.0" S="CD-HCPARTY">application</cd>
      <name>ebirth</name>
    </hcparty>
  </recipient>
</header>
```

2.2.2 Folder 'mother'

The folder 'mother' is composed of a patient element that contains the identification data of the mother and the body of the transaction that contains the following elements: Responsible health care professional, Auxiliary redactor and Multiple pregnancy.

7.1.1.4 Mother identification

The 'patient element' contains all the identification data of the mother. The example below provides a full mother identification data set.

```
<patient>
  <id SV="1.0" S="ID-PATIENT">62052914729</id>
  <firstname>Jeanne</firstname>
  <familyname>Dupont</familyname>
  <birthdate>
    <date>1978-05-25</date>
  </birthdate>
  <birthlocation>
    <city>Waregem</city>
    <country>
      <cd SV="1.0" S="CD-FED-COUNTRY">be</cd>
    </country>
  </birthlocation>
  <sex>
    <cd SV="1.0" S="CD-SEX">female</cd>
  </sex>
  <nationality>
    <cd SV="1.0" S="CD-FED-COUNTRY">de</cd>
  </nationality>
  <address>
    <cd SV="1.0" S="CD-ADDRESS">home</cd>
    <country>
      <cd SV="1.0" S="CD-FED-COUNTRY">be</cd>
    </country>
    <zip>5000</zip>
    <city>City of living</city>
    <street>Name of street</street>
    <houzenumber>237</houzenumber>
  </address>
</patient>
```



The different identification data are detailed in the following table:



Name	Description
id S=ID-PATIENT	Person number / Identification number of the Social Security (INSS) (National Registry Number or Number of the Crossroads Bank). If no INSS is available, the 'id' element will be empty.
firstname	First name of the mother
familyname	Last name of the mother. However 'familyname' is the only mandatory element, we encourage practitioners to put as many information as possible in the other elements so the data are as accurate and complete as possible.
birthdate	<p>Birth date of the mother. A complete birth date must be provided in the following format: yyyy-mm-dd. The birth date can also be unknown or incomplete:</p> <ul style="list-style-type: none"> • unknown : in this case, the element <birthdate> will not be present • incomplete : 2 possibilities <ul style="list-style-type: none"> - birth year and birth month are known <pre><birthdate> <yearmonth>yyyy-mm</yearmonth> <birthdate></pre> - only the birth year is known <pre><birthdate> <year>yyyy</year> <birthdate></pre> <p>Please note that the birth date is a very important element and it is strongly encouraged to provide this information.</p>
birthlocation	<p>Birth location of the mother. The birth location can be a city and/or a country (the CD-FED-COUNTRY codification has to be used for countries).</p> <p>Refer to the description of the 'nationality' element for more details related to the used country codes (CD-FED-COUNTRY codification).</p>
nationality	<p>Nationality of the mother. The CD-FED-COUNTRY codification has to be used. The codification to use is a variant of ISO-3166-1. The same codification table will be used for the nationality and country (address).</p> <p>The variant contains the additional following values:</p> <ul style="list-style-type: none"> • CS: Servië en Montenegro (ex-Joegoslavië) • XA: Staatlozen • XE: Onbepaald • XI: Tsjecho-Slovakije (ex) • XK: Kosovo • XR: Vluchteling • XS: Unie d. Socialist. Sovjetrep. (ex) <p>The list of supported codes (CD-FED-COUNTRY) is documented in the cd.xsd, part of the KMEHR schemas. In addition, a complete list is available in annex 7.4 of this document including the translation of the countries to French, Dutch and German.</p>

Name	Description
address	Complete address of the mother which contains the street, house number, postbox number, city, zip and country. For the latest, as for the nationality, the CD-FED-COUNTRY codification has to be used.

7.1.1.5 Responsible health care professional

The medical practitioner witnessing the birth of the baby and responsible of the delivery is represented as the author of the transaction. This person plays a legal role in the birth notification process and should be a doctor, midwife or nurse. The author must be the same for the two transactions (in the folder 'mother' and 'baby').

The author is represented by the following xml:

```
<author>
  <hparty>
    <id SV="1.0" S="ID-HCPARTY">NIHII number</id>
    <id SV="1.0" S="LOCAL" SL="ID-PATIENT">INSS number</id>
    <cd SV="1.0" S="CD-HCPARTY">persphysician</cd>
    <firstname>Jan</firstname>
    <familyname>Modaal</familyname>
  </hparty>
</author>
```

The different data are detailed in the following table:

Name	Description
Id S=ID-HCPARTY	The RIZIV/INAMI-number of the author (medical practitioner taking the legal responsibility for the notification of the birth of the newborn baby).
Id S=LOCAL	Person number / Identification number of the Social Security (INSS) (National Registry Number or Number of the Crossroads Bank) of the author. This is mandatory.
cd S=CD-HCParty	Type of health care professional. The values that are allowed for the 'HCParty' type: <ul style="list-style-type: none"> • persphysician • persnurse • persmidwife
firstname	First name of the author.
familyname	Last name of the author.

7.1.1.6 Auxiliary redactor

If the notification has been written by another actor such as an administrative collaborator, the transaction will contain a specific additional element 'redactor' to identify this actor. This element is optional. However, the reactor can also be a medical practitioner (doctor, midwife or nurse).

The redactor is represented by the following xml:

```
<redactor>
  <hcparty>
    <id SV="1.0" S="ID-HCPARTY">NIHII number</id>
    <id SV="1.0" S="LOCAL" SL="ID-PATIENT">inss</id>
    <cd SV="1.0" S="CD-HCPARTY">persmidwife</cd>
    <firstname>redactorfirstname</firstname>
    <familyname>redactorname</familyname>
  </hcparty>
</redactor>
```

The different data are detailed in the following table:

Name	Description
Id S=LOCAL	Person number / Identification number of the Social Security (INSS) (National Registry Number or Number of the Crossroads Bank) of the redactor. This is mandatory.
id S=ID-HCPARTY	The RIZIV/INAMI-number of the redactor. Only to be provided for a medical practitioner (doctor, midwife or nurse), if available.
cd S=CD-HCParty	Type of profession of the redactor. Four values are allowed: <ul style="list-style-type: none"> • persphysician • persnurse • persmidwife • persadministrative
firstname	First name of the redactor.
familyname	Last name of the redactor.

7.1.1.7 Multiple pregnancy

In case of a multiple pregnancy, the transaction must contain the three specific items: multiparity, samesex and stillborn. If only one baby is born during the delivery, these items must not be added.

In the next xml example, there are two babies born of the same sex. One is stillborn (dead at birth).

```
<item>
  <id SV="1.0" S="ID-KMEHR">1</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">multiparity</cd>
  <content>
    <unsignedInt>2</unsignedInt>
  </content>
</item>
<item>
  <id SV="1.0" S="ID-KMEHR">2</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">samesex</cd>
  <content>
    <boolean>true</boolean>
  </content>
</item>
```

```

<item>
  <id SV="1.0" S="ID-KMEHR">3</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">stillborn</cd>
  <content>
    <unsignedInt>1</unsignedInt>
  </content>
</item>

```

The different data of the multiple pregnancies are detailed in the following table:

Name	Description
multiparity	The total number of babies born in this delivery, stillborn included.
samesex	Indicates if all the babies are of the same sex or not. Its content is necessarily a Boolean. Values for this element are 'true' or 'false'.
stillborn	The number of stillborn babies in this multiple pregnancy. Its content will necessarily be an integer.

7.1.1.8 Comment for the municipality

An informal comment about the notification may be put at the folder level by using the "text" xml tag. This field is optional and may be used to provide additional information to the city of birth related to the parents, birth, etc.

Only the "text" tag in the folder of the mother (first folder) will be taken into account. Only one "text"-tag may be added to the folder of the mother. Any information available in a "text" tag in the folder of the baby (second folder) will be discarded.

```

<folder>
  <patient>
    ...
  </patient>
  <transaction>
    <id SV="1.0" S="ID-KMEHR">1</id>
    <cd SV="1.0" S="CD-TRANSACTION">ebirth-mother-notification</cd>
    ...
  </transaction>
  <text L="EN">General comment about the birth notification</text>
</folder>

```

2.2.3 Folder 'baby'

The folder 'baby' consists of a 'patient' element and the body of the transaction. This is the 2nd, and last, folder available in the KMEHR message send to the eBirth application.

The 'patient' element contains the identification data of the baby as well as the birth date of the baby.

The body of the transaction contains the identification of the father (if there is a known father), the birthplace and the birth rank (in the case of a multiple pregnancy) as separate items.

7.1.1.9 Baby identification and birth date



- The identification of the baby follows the same principles as the ones for the mother, but
- the birth date is not allowed to be partial and a time must be provide;
 - the acceptable values for the 'sex' elements are : 'female', 'male' and 'unknown'.

The 'patient' element is represented by the following xml:

```
<patient>
  <id SV="1.0" S="ID-PATIENT"/>
  <id SV="1.0" S="LOCAL" SL="ISPPC-PATIENT-CPO">1345689</id>
  <id SV="1.0" S="LOCAL" SL="ISPPC-PATIENT-ID">987654</id>
  <firstname>BabyFirstname</firstname>
  <familyname>BabyFamilyname</familyname>
  <birthdate>
    <date>2009-04-15</date>
    <time>10:00:00</time>
  </birthdate>
  <sex>
    <cd SV="1.0" S="CD-SEX">female</cd>
  </sex>
</patient>
```

The different data of the 'patient' element are explained in the following table:

Name	Description
firstname	First name of the baby
familyname	Family name of the baby
birthdate	The birthdate is composed of the date of birth (format: "yyyy-mm-dd") and the time of birth (format: "hh:mm:ss"). The birth date is not allowed to be partial and a time must be given.
cd S=CD-SEX	<p>Identify the sex of the baby. Three values are possible:</p> <ul style="list-style-type: none"> • female • male • unknown <p><u>Please note that the KMEHR standard allows the value 'changed'. However, this value is not supported by the eBirth application.</u></p>

7.1.1.10 Father identification

The father identification is set in a special item whose content must be of the KMEHR type 'personType'. This special item is contained in the body of the transaction as a separate item.

This identification follows the same rules as the mother identification. This item is optional. However, we encourage providing as many information as possible to facilitate the work of the city of birth. Please note that it is the legal obligation of the civil agent of the city of birth to determine the official father of the newborn. The information provided in the birth notification by a medical practitioner is only provided as information.

The father identification is represented in the following xml:

```

<item>
  <id SV="1.0" S="ID-KMEHR">1</id>
  <cd SV="1.0" S="CD-ITEM">contactperson</cd>
  <cd SV="1.0" S="CD-CONTACT-PERSON">father</cd>
  <content>
    <person>
      <id SV="1.0" S="LOCAL" SL="ID-PATIENT">INSS</id>
      <firstname>FatherFirstname</firstname>
      <familyname>FatherFamilyname</familyname>
      <sex>
        <cd SV="1.0" S="CD-SEX">male</cd>
      </sex>
      <birthdate>
        <date>1978-05-25</date>
      </birthdate>
      <birthlocation>
        <city>Evergem</city>
      </birthlocation>
      <nationality>
        <cd SV="1.0" S="CD-FED-COUNTRY">de</cd>
      </nationality>
      <address>
        <cd SV="1.0" S="CD-ADDRESS">home</cd>
        <country>
          <cd SV="1.0" S="CD-FED-COUNTRY">be</cd>
        </country>
        <zip>9000</zip>
        <city>City of living</city>
        <street>Name of street</street>
        <houzenumber>27</houzenumber>
      </address>
    </person>
  </content>
</item>

```



The different data of the father identification element are detailed in the following table:



Name	Description
id S=LOCAL	Person number / Identification number of the Social Security (INSS) (National Registry Number or Number of the Crossroads Bank). If no INSS is available, the 'id' element will be empty.
firstname	First name of the father
familyname	Last name of the father.
birthdate	<p>Birth date of the father. A complete birth date must be provided in the following format: yyyy-mm-dd. The birth date can also be unknown or incomplete:</p> <ul style="list-style-type: none"> • unknown : in this case, the element <birthdate> will not be present • incomplete : 2 possibilities <ul style="list-style-type: none"> - birth year and birth month are known <pre><birthdate> <yearmonth>yyyy-mm</yearmonth> <birthdate></pre> - only the birth year is known <pre><birthdate> <year>yyyy</year> <birthdate></pre> <p>Please note that the birth date is a very important element and it is strongly encouraged to provide this information.</p>
birthlocation	<p>Birth location of the father. The birth location can be a city and/or a country (the CD-FED-COUNTRY codification has to be used for countries).</p> <p>Refer to the description of the 'nationality' element for more details related to the used country codes (CD-FED-COUNTRY codification).</p>
nationality	<p>Nationality of the father. The CD-FED-COUNTRY codification has to be used. The codification to use is a variant of ISO-3166-1. The same codification table will be used for the nationality and country (address).</p> <p>The variant contains the additional following values:</p> <ul style="list-style-type: none"> • CS: Servië en Montenegro (ex-Joegoslavië) • XA: Staatlozen • XE: Onbepaald • XI: Tsjecho-Slovakije (ex) • XK: Kosovo • XR: Vluchteling • XS: Unie d. Socialist. Sovjetrep. (ex) <p>The list of supported codes (CD-FED-COUNTRY) is documented in the cd.xsd, part of the KMEHR schemas. In addition, a complete list is available in annex 7.4 of this document including the translation of the countries to French, Dutch and German.</p>

Name	Description
address	Complete address of the father which contains the street, house number, postbox number, city, zip and country. For the latest, as for the nationality, the CD-FED-COUNTRY codification has to be used.

7.1.1.11 Birthplace

The birthplace is represented through one specific item whose type is a location. It includes the type of birthplace (cd) and actual address where the baby is born. This address is required and must be provided completely, only the postbox number is optional.

Furthermore, for Antwerp and Tournai, a 'district code' must be provided.



The birthplace is one of the most important elements available within the birth notification. Based on this information, the responsible municipality will be determined and the birth notification provided to it. In general, the birthplace address corresponds with the address of the hospital campus.

The Birth place is represented by the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">2</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">birthplace</cd>
  <content>
    <location>
      <cd SV="1.0" S="CD-EBIRTH-PLACE">other</cd>
      <text L="en">The baby is born in the ambulance.</text>
      <address>
        <cd SV="1.0" S="CD-ADDRESS">other</cd>
        <country>
          <cd SV="1.0" S="CD-FED-COUNTRY">be</cd>
        </country>
        <zip>2000</zip>
        <nis>11002</nis>
        <city>Antwerp</city>
        <district>A</district>
        <street>Street name</street>
        <houzenumber>100</houzenumber>
      </address>
    </location>
  </content>
</item>
```

The different data of the birth place element are explained in the following table:



Name	Description
cd S=CD-EBIRTH-PLACE	<p>Type of the place where the baby is born. Three values are possible :</p> <ul style="list-style-type: none"> • Home • Hospital • Other <p>Those values are located in CD-EBIRTH-PLACE of the cd.xsd. If 'other' is chosen, a supplementary field ("text") has to be filled in with the explanation of the birthplace.</p>
text	Description of the type of birth place. Required if the type of birthplace (cd) is 'other', otherwise this field must not be provided.
address	<p>Complete address of the birthplace (generally this is the address of the hospital campus) which contains the street, house number, postbox number (optional), city, zip, nis code, district code (optional) and country (BE). For the latest, the CD-FED-COUNTRY codification has to be used.</p> <p>Remarks:</p> <ul style="list-style-type: none"> • For <u>country</u> only "BE" may be used as only babies born in Belgium have to be notified. The birth location is therefore always Belgium. • The <u>NIS-code</u> is the official number attributed to each municipality in Belgium. The complete list is available in annex 7.2. • The <u>district code</u> is only applicable for Antwerp and Tournai. The list of district codes for both cities is available in annex 7.3.

2.5.4 Birth rank

In case of a multiple pregnancy, the rank of the baby being notified must be present.

The Birth rank is represented by the following xml. In this example, the baby being notified has rank 2 and was therefore born as second baby during the delivery.

```
<item>
  <id SV="1.0" S="ID-KMEHR">3</id>
  <cd SV="1.0" S="CD-EBIRTH-ITEM">birthrank</cd>
  <content>
    <unsignedInt>2</unsignedInt>
  </content>
</item>
```

The data of the birth rank element is explained in the following table:

Name	Description
birthrank	Rank number of the baby in case of multiple births.

2.3 Submit a birth notification (response)

For each notification that is send, a notification response message will be send back as to notify if the notification is successfully send or if some errors have occurred. The submitted KMEHR message is validated completely by the eBirth application, which might result in validation errors which prevent the successful submission. All potential errors that can be returned are detailed in section 5.1.

In both cases, the response type 'kmehrresponseType' will be used.

2.3.1 Successful request

When a notification is successfully send to the eBirth platform, eBirth will return a response message with the following information

- Response: indicating the author of the message, the time and date of the message and the number of the request message with which the response message is linked.
- Acknowledge: indicating the success of the request.
- Header: indicating the sender and the recipient, date and time of message submission, unique identification number of the birth notification and a unique sequence id.

A successful response message will indicate that the birth notification was valid and correctly submitted. As confirmation, a uniquely generated birth notification ID will be supplied together with the submission timestamp. This birth notification ID is required to be used when submitting the medical form associated to this newborn later on.

This response message can be represented with the following xml:

```

<ws:puttransactionresponse>
<ws:response>
  <ws:id SV="1.0" S="ID-KMEHR">ebirth.2789</ws:id>
  <ws:author>
    <kmehr:hcparty
      xmlns:kmehr="http://www.health.fgov.be/telematics/kmehr/schema">
      <kmehr:cd SV="1.0" S="CD-HCPARTY">application</kmehr:cd>
      <kmehr:name>ebirth</kmehr:name>
    </kmehr:hcparty>
  </ws:author>
  <ws:date>
    2009-12-21
  </ws:date>
  <ws:time>
    12:00:00
  </ws:time>
  <ws:request>
    <ws:id SV="1.0" S="ID-KMEHR">71004394.123456789</ws:id>
  </ws:request>
</ws:response>
<ws:acknowledge>
  <ws:iscomplete>true</ws:iscomplete>
</ws:acknowledge>
<ws:kmehrheader xsi:nil="false">
<km:header>
  <km:standard>
    <km:cd SV="1.0" S="CD-STANDARD">20090101</km:cd>
  </km:standard>
  <km:id SV="1.0" S="ID-KMEHR">eBirth.20095754734665563</km:id>
  <km:id SV="1.0" S="LOCAL" SL="ID-EBIRTH-SEQ">2009000001</km:id>
  <km:date>2009-12-21</km:date>
  <km:time>12:00:00</km:time>
  <km:sender>
    <km:hcparty>
      <km:cd SV="1.0" S="CD-HCPARTY">application</km:cd>
      <km:name>ebirth</km:name>
    </km:hcparty>
  </km:sender>
  <km:recipient>
    <km:hcparty>
      <km:id SV="1.0" S="ID-HCPARTY">71000494</km:id>
      <km:cd SV="1.0" S="CD-HCPARTY">orghospital</km:cd>
    </km:hcparty>
  </km:recipient>
</km:header>
</ws:kmehrheader>
</ws:puttransactionresponse>

```

The data of the response message are explained in the following table:

Name	Description
response	
id S= ID-KMEHR	A unique id which is assigned by eBirth to this response message.
author - HCPARTY	Identifies the author who sends the response message. In this case it will always be the eBirth application.
date	Creation date of the response.
time	Creation time of the response.
id S=ID-KMEHR request	The number of the request message with which this response message is linked.
acknowledge	
iscomplete	Indicates if the request message was successfully processed by the eBirth application. The value 'true' indicates the request was submitted successfully. 'False' indicates one or more errors occurred.
header	
id S = ID-KMEHR	Indicates the unique identification number of the birth notification as assigned by the eBirth application. It must be used when sending the medical form associated with this birth notification.
id S = LOCAL SL=ID-EBIRTH-SEQ	This unique sequence id is generated by the eBirth application. It consists of the year of birth and a unique serial number.
date	Submission date of the birth notification.
time	Submission time of the birth notification.
sender - HCPARTY	Identifies the sender of the response message. In this context it will always be the eBirth application.
recipient - HCPARTY	Identifies the recipient of the response message. In this context it will always consist of the RIZIV number of the hospital and the type 'orghospital'.

2.3.2 Incorrect request

When a birth notification which contains one or more incorrect values or which is incomplete is sent to the eBirth platform, eBirth will return a response message with the following information:

- Response: indicating the author of the message, the time and date of the message and the number of the request message with which the response message is linked.
- Acknowledge : indicating the failure of the request and a list of all errors that have been noticed.

This KMEHR compliant response message can be represented with the following xml:



```

<ws:puttransactionresponse>
<ws:response>
  <!-- identification of the message -->
  <ws:id SV="1.0" S="ID-KMEHR">ebirth.2789</ws:id>
  <ws:author>
    <kmehr:hcparty">
      <kmehr:cd SV="1.0" S="CD-HCPARTY">application</kmehr:cd>
      <kmehr:name>ebirth</kmehr:name>
    </kmehr:hcparty">
  </ws:author>
  <ws:date>
    2009-12-21
  </ws:date>
  <ws:time>
    12:00:00
  </ws:time>
  <ws:request>
    <ws:id SV="1.0" S="ID-KMEHR">71004394.123456789</ws:id>
  </ws:request>
</ws:response>
<ws:acknowledge>
  <ws:iscomplete>>false</ws:iscomplete>
  <kmehr:error>
    <kmehr:cd SV="1.0" S="LOCAL" SL="CD-EBIRTH-STATUS">200</kmehr:cd>
    <kmehr:cd SV="1.0" S="LOCAL" SL="CD-EBIRTH-LEVEL">2</kmehr:cd>
    <kmehr:description L="EN">One or more validation exceptions
    occured</kmehr:description>
  </kmehr:error>
  <kmehr:error>
    <kmehr:cd SV="1.0" S="LOCAL" SL="CD-EBIRTH-
    FIELD">baby.birthplace</kmehr:cd>
    <kmehr:description L="EN">Incompatible NIS and ZIP</kmehr:description>
  </kmehr:error>
  <kmehr:error>
    <kmehr:cd SV="1.0" S="LOCAL" SL="CD-EBIRTHFIELD">
    mother.multipregnancy</kmehr:cd>
    <kmehr:description L="EN">Incomplete information</kmehr:description>
  </kmehr:error>
</ws:acknowledge>
</ws:puttransactionresponse>

```

The data of the response message are explained in the following table:

Name	Description
response	
id S= ID-KMEHR	A unique id which is assigned by eBirth to this response message.
author - HCPARTY	Identifies the author who sends the response message. In this case it will always be the eBirth application.
date	Creation date of the response.
time	Creation time of the response.
id S=ID-KMEHR	The number of the request message with which this response message is linked.
acknowledge	
iscomplete	Indicates if the request message was successfully processed by the eBirth application or not. The value 'true' indicates the request was submitted successfully. 'False' indicates one or more errors occurred.
error	<p>A description of the error that occurred. A complete list of possible errors returned by this application is available in section 5.1.</p> <p>In general, 2 types of errors can be returned:</p> <ul style="list-style-type: none"> • A general error message: a description will be available to provide a clear explanation of the problem. • One or more validation errors: the submitted birth notification is completely validated against a set of pre-defined rules (described in section 7.1). If one or more validation rules fail, the birth notification can't be further processed and a list of the erroneous fields together with a meaningful description is provided to the sending application. When validation errors occur, at least 2 error tags will be available in the response message. The first error tag will include a general error description. The other error tags provide details related to the individual fields that caused the problem.

2.4 Submit a medical form (Request)

After submission of the birth notification, a medical form has also to be completed and provided to the Communities. This medical form matches the part C of model I, the SPE form or Cepip form. This administrative task also has to be completed via the eBirth application.

As for the notification, the medical form message will be composed of one header and two folders (one for the mother and one for the baby). Each folder will contain exactly one transaction distinguished by their types.

One folder is dedicated to the mother and contains the parts 1, 2 and 3 of the medical form. This folder contains a transaction of type 'eBirth-mother-medicalform'. The second folder is dedicated to the 'baby' and contains part 4 of the medical form. This folder contains a transaction of type 'eBirth-baby-medicalform'.

Each transaction will refer to the submission id delivered by eBirth through a 'lnk' element. Please note that it is assumed that both folders are linked to the same birth notification and the provided submission id is identical.

```
<kmehrmessage>
  <header>
    ...
  </header>
  <!-- Folder dedicated to the mother-->
  <folder>
    <id SV="1.0" S="ID-KMEHR">1</id>
    <!-- Mother identification -->
    <patient>
      ...
    </patient>
    <transaction>
      <id SV="1.0" S="ID-KMEHR">1</id>
      <cd SV="1.0" S="CD-TRANSACTION">ebirth-mother-
        medicalform</cd>
      ...
      <lnk TYPE="isaconsequenceof"
        URL="ebirth.20095754734665563"></lnk>
    </transaction>
  </folder>
  <!-- Folder dedicated to the baby -->
  <folder>
    <id SV="1.0" S="ID-KMEHR">2</id>
    <!-- Baby identification -->
    <patient>
      ...
    </patient>
    <transaction>
      <id SV="1.0" S="ID-KMEHR">1</id>
      <cd SV="1.0" S="CD-TRANSACTION">ebirth-baby-
        medicalform</cd>
      ...
      <lnk TYPE="isaconsequenceof"
        URL="ebirth.20095754734665563"></lnk>
    </transaction>
    <lnk TYPE="isachildof" URL="//folder[position()=1]"></lnk>
  </folder>
</kmehrmessage>
```

2.4.1 Header

The header has the same structure as the one for the birth notification (for further information see section 2.2.1).

2.4.2 Folder 'mother'

The folder 'mother' is composed of a patient element that contains the identification data of the mother and the body of the transaction that contains the following elements: Responsible health care professional and the medical form dedicated to the mother (parts 1, 2 and 3).

7.1.1.12 *Mother identification data*

The 'patient element' contains all the identification data of the mother. While those data should be the same as for the notification, they are not required in the eBirth medical form.

7.1.1.13 *Responsible health care professional*

The medical practitioner witnessing the birth of the baby and responsible of the delivery is represented as the author of the transaction. This person plays a legal role in the birth notification process and should be a doctor, midwife or nurse. The author must be the same for the two transactions (in the folder 'mother' and 'baby').

The author element is represented with the following xml:

```
<author>
  <hcparty>
    <id SV="1.0" S="ID-HCPARTY">NIHII number</id>
    <id SV="1.0" S="LOCAL" SL="ID-PATIENT">INSS number</id>
    <cd SV="1.0" S="CD-HCPARTY">persphysician</cd>
    <firstname>Jan</firstname>
    <familyname>Modaal</familyname>
  </hcparty>
</author>
```

The different data are detailed in the following table:

Name	Description
Id S=ID-HCPARTY	Is the RIZIV/INAMI-number of the author (medical practitioner taking the legal responsibility for the notification of the birth of the newborn baby).
Id S=LOCAL	Person number / Identification number of the Social Security (INSS) (National Registry Number or Number of the Crossroads Bank) of the author. This is mandatory.
Cd S=CD-HPARTY	Type of health care professional. The values that are allowed for the 'HCParty' type: <ul style="list-style-type: none"> • persphysician • persnurse • persmidwife
firstname	First name of the author
familyname	Last name of the author

In the following sections, the medical data related to the mother will be explained. As mentioned above, the mother's medical data is divided in three parts.

7.1.1.14 Part 1

Part 1 of the medical form contains the following elements:

- Partus number
- Weights and height of the mother
- Previous childbirths

2.4.2.1.1 Partus number

The partus number is a number allocated to every birth in a hospital.

The partus number is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">1</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">partusnumber</cd>
  <content>
    <id SV="1.0" S="LOCAL" SL="ID-PARTUSNUMBER">090005A</id>
  </content>
</item>
```

The data of the partus number is detailed in the following table:

Name	Description
partusnumber	<p>The partus number is the birth number that is allocated to every birth in a hospital. This number is composed of 6 or 7 characters. The partus number is divided in 3 parts :</p> <ul style="list-style-type: none"> • Partus number - Year : represents the year of birth; it is made up of 2 digits (e.g. 09 or 10 for 2009 and 2010) • Partus number - Sequence : represents the sequential number of the delivery given by the hospital; made up of 4 digits (e.g. 0001) • Partus number - Rank : represents the rank of each baby in case of a multiple birth; made of one character (e.g. A). This field is mandatory in case of multiple births.



2.4.2.1.2 Weights and height of the mother

This element provides information about the weights and height of the mother.

The 'Weights and height of the mother' is represented with the following xml:

```

<item>
  <id SV="1.0" S="ID-KMEHR">2</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH"> beforepregnancyweight </cd>
  <content>
    <unsignedInt>53</unsignedInt>
    <unit>
      <cd SV="1.0" S="CD-UNIT">kg</cd>
    </unit>
  </content>
</item>
<item>
  <id SV="1.0" S="ID-KMEHR">3</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">atdeliveryweight</cd>
  <content>
    <unsignedInt>65</unsignedInt>
    <unit>
      <cd SV="1.0" S="CD-UNIT">kg</cd>
    </unit>
  </content>
</item>
<item>
  <id SV="1.0" S="ID-KMEHR">4</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">height</cd>
  <content>
    <unsignedInt>153</unsignedInt>
    <unit>
      <cd SV="1.0" S="CD-UNIT">cm</cd>
    </unit>
  </content>
</item>

```

The different data are detailed in the following table:

Name	Description
beforepregnancyweight	Weight of the mother before the current pregnancy in kg (number with maximum 3 digits).
atdeliveryweight	Weight of the mother at the entrance in the delivery room in kg (number with maximum 3 digits).
height	Height of the mother in cm (number with maximum 3 digits).

Those three items are mandatory. Nevertheless, in case of 'no answer has been given by the patient to this question', the special value 'noanswer' must be used.

```
<item>
  <id SV="1.0" S="ID-KMEHR">2</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">beforepregnancyweight</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-SPECIALVALUES">noanswer</cd>
  </content>
</item>
```

2.4.2.1.3 Previous childbirths

If the mother has previously given birth to a baby (stillborn or alive), the following items are required:

- Number of babies born alive from the previous pregnancies
- Birth date of the last baby (delivery)
- Did the mother deliver a stillborn baby since the last delivery
- Caesarean section on a previous pregnancy

In the next example, the mother has previously given birth to 2 children. One of them was born alive the 21/06/2005 and, since this date, the mother has got no stillborn baby. Furthermore, for those two deliveries there was no caesarean operation.

The 'Previous childbirths' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">5</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">previouschildbirth</cd>
  <content>
    <boolean>>true</boolean>
  </content>
</item>
<item>
  <id SV="1.0" S="ID-KMEHR">6</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">previousbornalive</cd>
  <content>
    <unsignedInt>1</unsignedInt>
  </content>
</item>
<item>
  <id SV="1.0" S="ID-KMEHR">7</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">lastbabybirthdate</cd>
  <content>
    <date>2005-06-21</date>
  </content>
</item>
<item>
  <id SV="1.0" S="ID-KMEHR">8</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">intermediatestillborndelivery</cd>
  <content>
    <boolean>>false</boolean>
  </content>
</item>
<item>
  <id SV="1.0" S="ID-KMEHR">9</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">previouscaesarean</cd>
  <content>
    <boolean>>false</boolean>
  </content>
</item>
```



The first item 'previouschildbirth' is mandatory. If the value of the first value (previouschildbirth) is 'false', the other items must not be present.

The different data are detailed in the following table:

Name	Description
previouschildbirth	Indicates if the mother has previously given birth to a baby (born-alive or stillborn). Two values are possible (true or false).
previousbornalive	Indicates the total number of born-alive baby(s) from all previous pregnancies. This field is mandatory if 'true' has been answered to 'previouschildbirth'. The special value 'unknown' must be used if no answer can be given to this question.
lastbabybirthdate	Date of birth of the last born alive baby. This field is mandatory if 'true' has been answer to 'previouschildbirth'. The special value 'unknown' must be used if no answer is given to this question.
intermediatestillborndelivery	Indicates if the mother did deliver a stillborn baby since the last delivery of a born alive baby. This field is not mandatory if the value of previousbornalive is '0' or 'unknown'.
previouscaesarean	Indicates if a previous delivery happened by a caesarean section. This field is mandatory if 'true' has been answer to 'previouschildbirth'.

7.1.1.15 Part 2

The second part of the medical form provides information about the current pregnancy. This part contains the following elements:

- Parity of the delivery
- Pregnancy origin
- Medical risks

2.4.2.1.4 Parity

The parity indicates the total number of childbirths of the mother, the current delivery included.

This element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">10</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">parity</cd>
  <content>
    <unsignedInt>4</unsignedInt>
  </content>
</item>
```



The data is detailed in the following table:

Name	Description
parity	The parity provides the total number of childbirths (the current delivery included). Important notice: the multiple pregnancies do not impact the parity.

2.4.2.1.5 Pregnancy origin

The 'Pregnancy origin' element is represented with the following xml :

```
<item>
  <id SV="1.0" S="ID-KMEHR">11</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">pregnancyorigin</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-PREGNANCYORIGIN">spontaneous</cd>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
pregnancyorigin	Identifies the origin of the pregnancy. Four values are possible : <ul style="list-style-type: none"> • spontaneous • hormonal • IVF • ICSI

In case of 'no answer has been given by the patient to this question', the special value 'noanswer' must be used.

```
<item>
  <id SV="1.0" S="ID-KMEHR">11</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">pregnancyorigin</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-SPECIALVALUES">noanswer</cd>
  </content>
</item>
```

2.4.2.1.6 Medical risks

The 'medical risks' consists of three items:

- Hypertension
- Diabetes
- HIV

These items are mandatory.

The medical risk element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">12</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">hypertensiondiagnose</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-SPECIALVALUES">unknown</cd>
  </content>
</item>
<item>
  <id SV="1.0" S="ID-KMEHR">13</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">diabetesdiagnose</cd>
  <content>
    <boolean>>true</boolean>
  </content>
</item>
<item>
  <id SV="1.0" S="ID-KMEHR">14</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">HIVdiagnose</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-SPECIALVALUES">nottested</cd>
  </content>
</item>
```

The different data are explained in the following table:

Name	Description
hypertension	Indicates if hypertension was diagnosed. Two values are possible : <ul style="list-style-type: none"> • true • false The special value 'unknown' can be used.
diabetes	Indicates if diabetes was diagnosed. Two values are possible : <ul style="list-style-type: none"> • true • false The special value 'unknown' can be used.
HIV	Indicates if HIV was diagnosed or tested. Two values are possible : <ul style="list-style-type: none"> • true • false Two special values can be used 'unknown' or 'nottested'

7.1.1.16 Part 3

Part 3 of the medical form provides information about the delivery. This part contains the following elements:

- Pregnancy duration
- Position at birth
- Induction of the delivery
- Epidural analgesia and/or rachi
- Monitoring (control) foetal
- Colonization of streptococcus of B group
- Intrapartal operation of SBG prophylaxis (peni, ampi)
- Way of delivery
- Episiotomy
- Indication(s) for caesarean section
- Breast feeding



All the above mentioned elements are mandatory, except the 'Monitoring (control) foetal' element.



2.4.2.1.7 Pregnancy duration

The pregnancy duration element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">15</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">pregnancyduration</cd>
  <content>
    <unsignedInt>44</unsignedInt>
    <unit>
      <cd SV="1.0" S="CD-UNIT">week</cd>
    </unit>
  </content>
  <certainty>
    <cd SV="1.0" S="CD-CERTAINTY">proven</cd>
  </certainty>
</item>
```

The different data are detailed in the following table:

Name	Description
pregnancyduration	The length of the current pregnancy in full weeks (e.g. 35 weeks and 1 day = 35 weeks, 35 weeks and 6 days = 35 weeks).
certainty	<p>To determine the confidence with the duration filled. Two values are allowed:</p> <ul style="list-style-type: none"> Proven: sure about the duration Proven should be chosen if the duration is based on: <ul style="list-style-type: none"> - regular cycle with a difference of maximum 7 days between the shortest and the longest cycle and when no oral contraceptives have been taken during the cycle preceding this pregnancy - the basic temperature curve - ovulation-induction - when the length of the skull and of the trunk have been determined during the 12th weeks scan Probable: estimation of the duration Probable should be chosen if the duration is not based on the above criteria but well on anamnesis, on fundus height, on a pregnancy test, on a puncture of the amniotic fluid,...

2.4.2.1.8 Position at birth

The 'position at birth' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">16</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">childposition</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-CHILDPOSITION">transverse</cd>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
childposition	<p>To determine the position of the child at time of birth. Four values are possible:</p> <ul style="list-style-type: none"> • head-down • other-head • breech • transverse <p>The special value 'unknown' can be used.</p>

2.4.2.1.9 Induction of the delivery

The 'Induction of the delivery' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">17</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">inductiondelivery</cd>
  <content>
    <boolean>>false</boolean>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
inductiondelivery	<p>To determine whether the delivery process was started in an artificial way. Two values are possible:</p> <ul style="list-style-type: none"> • true • false



2.4.2.1.10 Epidural analgesia and/or rachi

The 'Epidural analgesia and/or rachi' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">18</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">epiduralanalgesia</cd>
  <content>
    <boolean>>false</boolean>
  </content>
</item>
<item>
  <id SV="1.0" S="ID-KMEHR">19</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">rachianalgesia</cd>
  <content>
    <boolean>>true</boolean>
  </content>
</item>
```

The different data are detailed in the following table:

Name	Description
epiduralanalgesia	Indicates if epidural analgesia has been administered. Two values are possible: <ul style="list-style-type: none"> • true (yes) • false (no)
rachianalgesia	Indicates if rachi analgesia has been administered. Two values are possible: <ul style="list-style-type: none"> • true (yes) • false (no)

2.4.2.1.11 Monitoring (control) foetal

The 'Monitoring (control) foetal' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">20</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">foetalmonitoring</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-FOETALMONITORING">CTG</cd>
  </content>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-FOETALMONITORING">MBE</cd>
  </content>
</item>
```

The data is detailed in the following table:



Name	Description
foetalmonitoring	<p>In case of foetal monitoring, the type of monitoring used must be specified. Multiple values are allowed. Four values are possible :</p> <ul style="list-style-type: none"> • CTG • STAN • MBE • intermittent-auscultation

2.4.2.1.12 Colonization of streptococcus of B group

The 'Colonization of streptococcus of B group' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">21</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">streptococcusbcolinization</cd>
  <content>
    <boolean>>false</boolean>
  </content>
</item>
```

The data of the 'Colonization of streptococcus of B group' is explained in the following table:

Name	Description
streptococcusbcolinization	<p>Indicates if there is Colonization of streptococcus of B group. Two values are possible :</p> <ul style="list-style-type: none"> • true (yes) • false (no) <p>The special value 'nottested' can be used.</p>

2.4.2.1.13 Intrapartal operation of SBG prophylaxis (peni, ampi)

The 'intrapartalsbgprophylaxis' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">22</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">intrapartalsbgprophylaxis</cd>
  <content>
    <boolean>>false</boolean>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
intrapartalsbgprophylaxis	To determine if there is Intrapartal operation of SBG prophylaxis (peni, ampi). Two values are possible : <ul style="list-style-type: none"> • true (yes) • false (no)

2.4.2.1.14 Way of delivery

The 'deliveryway' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">23</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">deliveryway</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-DELIVERYWAY">forceps</cd>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
deliveryway	Indicates how the delivery occurred. Only one value is allowed. Six values are possible : <ul style="list-style-type: none"> • spontaneous • vacuum-extraction • forceps • primary-caesarean • secondary-caesarean • vaginal breech

2.4.2.1.15 Episiotomy

The 'Episiotomy' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">24</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">episiotomy</cd>
  <content>
    <boolean>>false</boolean>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
Episiotomy	To determine if there was an episiotomy. Two values are possible : <ul style="list-style-type: none"> • true (Yes) • false (No)

2.4.2.1.16 Indication(s) for caesarean section

This element is mandatory if primary-caesarean or secondary-caesarean has been indicated as way of the delivery.

This element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">25</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">caesareanindication</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-CAESEREANINDICATION">other</cd>
  </content>
  <content>
    <text L="EN">Other caesarean reason</text>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
caesareanindication	In case of caesarean section, several reasons can be possible : <ul style="list-style-type: none"> • previouscaesareansection • breechpresentation • transversepresentation • foetaldistress • dystocienotinlabour • dystocieinlabourinsufficientdilatation • dystocieinlabourinsufficientexpulsion • maternalindication • abruptioplacentae • requestedbypatient • multiplepregnancy • other Mutliple values are allowed. If other is chosen, a supplementary field ('text') has to be filled in with the explanation of the reason.
text	Description of the reason for the caesarean section. Required if the type of caesareanindication (cd) is 'other', otherwise this field must not be provided.

2.4.2.1.17 Breast feeding

The 'breastfeeding' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">26</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">breastfeeding</cd>
  <content>
    <boolean>>false</boolean>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
breastfeeding	Indicates if the mother thinks to breast-feed her baby (babies). Two values are possible : <ul style="list-style-type: none"> • true (Yes) • false (No)

2.4.3 Folder 'baby'

The folder 'baby' consists of a 'patient' element and the body of the transaction. This is the 2nd, and last, folder available in the KMEHR message send to the eBirth application.

The 'patient' element contains the identification data of the baby. Nevertheless those data are not required in the eBirth medical form.

The body of the transaction contains the medical data dedicated to the baby (Part 4 of the medical form).

7.1.1.17 Part 4

Part 4 of the medical form provides information about the state at birth. This part contains the following elements:

- Weight at birth
- Apgar score: after 1 min
- Apgar score: after 5 min
- Artificial respiration to the newborn baby
- Transfer to neonatal department
- Major congenital malformation (detected at birth)



All the elements mentioned above are mandatory, except the following. They only have to be provided when applicable.

- Artificial respiration to the newborn baby
- Transfer to neonatal department
- Major congenital malformation (detected at birth)

2.4.3.1.1 Weight at birth

The 'atbirthweight' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">1</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">atbirthweight</cd>
  <content>
    <unsignedInt>2500</unsignedInt>
    <unit>
      <cd SV="1.0" S="CD-UNIT">gr</cd>
    </unit>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
atbirthweight	The weight of the baby at birth in grams (number with maximum 4 digits).

2.4.3.1.2 Apgar score: after 1 min

The 'apgarscore1' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">2</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">apgarscore1</cd>
  <content>
    <unsignedInt>2</unsignedInt>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
apgarscore1	The Apgar score after 1 minute. The Apgar score is composed of a number with maximum 2 digits (1 to 10). The special value 'unknown' can only be used if the birth has taken place outside the hospital.

2.4.3.1.3 Apgar score: after 5 min

The 'apgarscore5' element is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">3</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">apgarscore5</cd>
  <content>
    <unsignedInt>5</unsignedInt>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
apgarscore5	The Apgar score after 5 minutes. The Apgar score is composed of a number with maximum 2 digits (0 to 10). The special value 'unknown' can only be used if the birth has taken place outside the hospital.

2.4.3.1.4 Artificial respiration to the newborn baby

The item 'artificial respiration' is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">4</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">artificialrespiration</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-ARTIFICIALRESPIRATIONTYPE"
      >intubation</cd>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
artificialrespiration	To identify if artificial respiration has been given to the newborn baby, the type of artificial respiration must be provided. Two values are possible : <ul style="list-style-type: none"> • intubation • balloon-mask



If there is no artificial respiration given to the newborn baby, the item 'artificialrespiration' must not be added to the KMEHR message.

2.4.3.1.5 Transfer to neonatal department

The item 'neonatal department' is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">5</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">neonataldept</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-NEONATALDEPTTYPE">nic</cd>
  </content>
</item>
```

The data is detailed in the following table:

Name	Description
neonataldept	<p>Indicates whether the baby has been transferred to a neonatal department within the 7 days following the birth. The type of neonatal department must be provided. Two values are possible :</p> <ul style="list-style-type: none"> • nstar • nic



If the baby was not transferred to a neonatal department, the item 'neonataldept' must not be added to the KMEHR message.

2.4.3.1.6 Major congenital malformation (detected at birth)

The item 'Major congenital malformation' is represented with the following xml:

```
<item>
  <id SV="1.0" S="ID-KMEHR">6</id>
  <cd SV="1.0" S="CD-ITEM-EBIRTH">congenitalmalformation</cd>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-CONGENITALMALFORMATION">trisomie21</cd>
  </content>
  <content>
    <cd SV="1.0" S="CD-EBIRTH-CONGENITALMALFORMATION">
      membersreduction
    </cd>
  </content>
</item>
```



The data is detailed in the following table:

Name	Description
congenitalmalformation	<p>If the baby suffers of one or more congenital malformations (detected at birth), the malformations have to be provided. Multiple values are allowed :</p> <ul style="list-style-type: none"> • anencephalia • spinabifida • hydrocephalia • splitlippalate • analatresia • membersreduction • diaphragmatichernia • omphalocele • gastroschisis • transpositiegrotevaten • afwijkinglong • atresiedundarm • nieragenese • craniosynostosis • turnersyndrom • obstructievedefecten • tetralogiefallot • oesofagaleatresie • atresieanus • twintotwintransfusionsyndrome • skeletdysplasie • hydropsfoetalis • polymultikystischenierdysplasie • VSD • atresiegalwegen • hypospadias • cystischhygroma • trisomie21 • trisomie18 • trisomie13



If there is no major congenital malformation detected at birth, the item 'congenitalmalformation' must not be added to the KMEHR message.

2.4.3.1.7 Comments for the community

An informal comment about the medical form may be put at the folder level by using the "text" xml tag. This field is optional and may be used to provide additional information for the community.

Only the "text" tag in the folder of the baby (second folder) will be taken into account and only one "text"-tag may be added to the folder of the baby. Any other information available in other "text" tags will be discarded.

```
<folder>
  <patient>
    ...
  </patient>
  <transaction>
    <id SV="1.0" S="ID-KMEHR">1</id>
    <cd SV="1.0" S="CD-TRANSACTION">ebirth-baby-medicalform</cd>
    ...
  </transaction>
  <text L="EN">Comment for communities</text>
</folder>
```

2.5 Submit a medical form (Response)

For each medical form that is submitted, a medical form response message will be send back as to notify if the medical form is successfully send or if some errors have occurred. The submitted KMEHR message is validated completely by the eBirth application, which might result in validation errors which prevent the successful submission. All potential errors that can be returned are detailed in section 5.2.

In both cases, the response type 'kmehrresponseType' will be used.

2.5.1 Successful request

When a medical form is successfully submitted to the eBirth platform, eBirth will return a response message with the following information

- Response: indicating the author of the message, the time and date of the message and the number of the request message with which the response message is linked.
- Acknowledge: indicating the success of the request.
- Header: indicating the sender and the recipient, date and time of message submission and the unique identification number of the birth notification / medical form.

A successful response message will indicate that the medical form was valid and correctly submitted. As confirmation, the submission timestamp will be provided.

This response message can be represented with the following xml:

```

<ws:puttransactionresponse>
<ws:response>
  <ws:id SV="1.0" S="ID-KMEHR">ebirth.2789</ws:id>
  <ws:author>
    <kmehr:hcparty
      xmlns:kmehr="http://www.health.fgov.be/telematics/kmehr/schema">
      <kmehr:cd SV="1.0" S="CD-HCPARTY">application</kmehr:cd>
      <kmehr:name>ebirth</kmehr:name>
    </kmehr:hcparty>
  </ws:author>
  <ws:date>
    2009-12-21
  </ws:date>
  <ws:time>
    12:00:00
  </ws:time>
  <ws:request>
    <ws:id SV="1.0" S="ID-KMEHR">71004394.123456789</ws:id>
  </ws:request>
</ws:response>
<ws:acknowledge>
  <ws:iscomplete>true</ws:iscomplete>
</ws:acknowledge>
<ws:kmehrheader xsi:nil="false">
<km:header>
  <km:standard>
    <km:cd SV="1.0" S="CD-STANDARD">20090101</km:cd>
  </km:standard>
  <km:id SV="1.0" S="ID-KMEHR">eBirth.20095754734665563</km:id>
  <km:date>2009-12-21</km:date>
  <km:time>12:00:00</km:time>
  <km:sender>
    <km:hcparty>
      <km:cd SV="1.0" S="CD-HCPARTY">application</km:cd>
      <km:name>ebirth</km:name>
    </km:hcparty>
  </km:sender>
  <km:recipient>
    <km:hcparty>
      <km:id SV="1.0" S="ID-HCPARTY">71000494</km:id>
      <km:cd SV="1.0" S="CD-HCPARTY">orghospital</km:cd>
    </km:hcparty>
  </km:recipient>
</km:header>
</ws:kmehrheader>
</ws:puttransactionresponse>

```



The data of the response message are explained in the following table:

Name	Description
response	
id S= ID-KMEHR	A unique id which is assigned by eBirth to this response message.
author - HCPARTY	Identifies the author who sends the response message. In this case it will always be the eBirth application.
date	Creation date of the response.
time	Creation time of the response.
id S=ID-KMEHR request	The number of the request message with which this response message is linked.
acknowledge	
iscomplete	Indicates if the request message was successfully processed by the eBirth application. The value 'true' indicates the request was submitted successfully. 'False' indicates one or more errors occurred.
header	
id S = ID-KMEHR	Indicates the unique identification number of the birth notification / medical form as assigned by the eBirth application. This number is identical to the birth notification available in the request KMEHR message.
date	Submission date of the medical form.
time	Submission time of the medical form.
sender - HCPARTY	Identifies the sender of the response message. In this context it will always be the eBirth application.
recipient - HCPARTY	Identifies the recipient of the response message. In this context it will always consist of the RIZIV number of the hospital and the type 'orghospital'.

2.5.2 Incorrect request

When a medical form which contains one or more incorrect values or which is incomplete is submitted to the eBirth platform, eBirth will return a response message with the following information:

- Response: indicating the author of the message, the time and date of the message and the number of the request message with which the response message is linked.
- Acknowledge: indicating the failure of the request and a list of all errors that have been noticed.

This KMEHR compliant response message can be represented with the following xml:



```

<ws:puttransactionresponse>
<ws:response>
  <!-- identification of the message -->
  <ws:id SV="1.0" S="ID-KMEHR">ebirth.2789</ws:id>
  <ws:author>
    <kmehr:hcparty">
      <kmehr:cd SV="1.0" S="CD-HCPARTY">application</kmehr:cd>
      <kmehr:name>ebirth</kmehr:name>
    </kmehr:hcparty">
  </ws:author>
  <ws:date>
    2009-12-21
  </ws:date>
  <ws:time>
    12:00:00
  </ws:time>
  <ws:request>
    <ws:id SV="1.0" S="ID-KMEHR">71004394.123456789</ws:id>
  </ws:request>
</ws:response>
<ws:acknowledge>
  <ws:iscomplete>>false</ws:iscomplete>
  <kmehr:error>
    <kmehr:cd SV="1.0" S="LOCAL" SL="CD-EBIRTH-STATUS">200</kmehr:cd>
    <kmehr:cd SV="1.0" S="LOCAL" SL="CD-EBIRTH-LEVEL">2</kmehr:cd>
    <kmehr:description L="EN">One or more validation exceptions
    occured</kmehr:description>
  </kmehr:error>
  <kmehr:error>
    <kmehr:cd SV="1.0" S="LOCAL" SL="CD-EBIRTH-
    FIELD">baby.birthplace</kmehr:cd>
    <kmehr:description L="EN">Incompatible NIS and ZIP</kmehr:description>
  </kmehr:error>
  <kmehr:error>
    <kmehr:cd SV="1.0" S="LOCAL" SL="CD-EBIRTHFIELD">
    mother.multipregnancy</kmehr:cd>
    <kmehr:description L="EN">Incomplete information</kmehr:description>
  </kmehr:error>
</ws:acknowledge>
</ws:puttransactionresponse>

```

The data of the response message are detailed in the following table:



Name	Description
response	
id S= ID-KMEHR	A unique id which is assigned by eBirth to this response message.
author - HCPARTY	Identifies the author who sends the response message. In this case it will always be the eBirth application.
date	Creation date of the response.
time	Creation time of the response.
id S=ID-KMEHR	The number of the request message with which this response message is linked.
acknowledge	
iscomplete	Indicates if the request message was successfully processed by the eBirth application or not. The value 'true' indicates the request was submitted successfully. 'False' indicates one or more errors occurred.
error	<p>A description of the error that occurred. A complete list of possible errors returned by this application is available in section 5.2.</p> <p>In general, 2 types of errors can be returned:</p> <ul style="list-style-type: none"> • A general error message: a description will be available to provide a clear explanation of the problem. • One or more validation errors: the submitted medical form is completely validated against a set of pre-defined rules (described in section 7.1). If one or more validation rules fail, the medical form can't be further processed and a list of the erroneous fields together with a meaningful description is provided to the sending application. When validation errors occur, at least 2 error tags will be available in the response message. The first error tag will include a general error description. The other error tags provide details related to the individual fields that caused the problem.

3 Services Interface

The WSDL and XML schemas will be available in a separate archive file.

4 KMEHR message examples

In addition to this Web service user guide, an archive file is available with multiple examples of entry and exit messages.

A KMEHR request and response message is provided per operation in the following table:

Submit birth notification	
KMEHR request message	KMEHR response message
Correct request	Validation error (300)
	Success (100)
	Error (204)

Submit medical form	
KMEHR request message	KMEHR response message
Correct request	Validation error (300)
	Success (110)
	Error (204)
	Error (205)

5 Error messages

For every submission of a birth notification or medical form, the eBirth platform will return a response message. This message can either contain info about the successful transmission of the notification and medical form or contain an error message. Generally, 2 types of errors can be returned:

- A general error message: a description will be available to provide a clear explanation of the problem.
- One or more validation errors: the submitted medical form is completely validated against a set of pre-defined rules (described in section 7.1). If one or more validation rules fail, the medical form can't be further processed and a list of the erroneous fields together with a meaningful description is provided to the sending application. When validation errors occur, at least 2 error tags will be available in the response message. The first error tag will include a general error description. The other error tags provide details related to the individual fields that caused the problem.

At any time a general exception can occur. In this case, a SOAP Fault will be returned.



5.1 Submit birth notification

Status	Level	Description	Cause
100	1 (Info)	Operation executed successfully. Birth notification submitted.	
200	3 (Error)	Not all required information found in eHealthData.	
201	3 (Error)	Error in decrypting business payload.	
202	3 (Error)	Error validating the KMEHR message against the XML schema.	
203	3 (Error)	Invalid recipient identifier.	The recipient identified in the KMEHR message does not correspond to the recipient in the eBirth application.
204	3 (Error)	One or more validation errors occurred while converting the KMEHR message.	One or more conversion rules were not followed.
206	3 (Error)	Invalid KMEHR message for the eBirth application.	
207	3 (Error)	Error validation the NIS-code of the birth location. Only births with a birth location the same city as the hospital can be notified at this time.	NIS code of the birth location is not identical to the information available in the eHealthSubject.
208	3 (Error)	The birth notification has not been submitted as a birth notification with identical data already exists. The number of this identical birth notification is: <ID>.	A birth notification with identical data has already been submitted by this hospital. Please ensure the data is correct and/or this isn't a 2 nd attempt to submitted a birth notification that passed successfully previously (see remark in section 7.1.1).
300	3 (Error)	One or more validation errors occurred.	One of the validation rules have not been followed (see section 7.1)

Note: errors 200, 201 and 202 will be returned as a SOAP Fault instead of a normal SOAP request message.



5.2 Submit medical form

Status	Level	Description	Cause
110	1 (Info)	Operation executed successfully. Medical form submitted.	
200	3 (Error)	Not all required information found in eHealthData.	
201	3 (Error)	Error in decrypting business payload.	
202	3 (Error)	Error validating the KMEHR message against the XML schema.	
203	3 (Error)	Invalid recipient identifier.	The recipient identified in the KMEHR message does not correspond to the recipient in the eBirth application.
204	3 (Error)	One or more validation errors occurred while converting the KMEHR message.	One or more conversion rules were not followed.
205	3 (Error)	Error validating the provided Birth Notification ID.	<ul style="list-style-type: none"> • Birth notification ID is not known by the eBirth Solution • The birth notification does not correspond to the hospital that send the request • The status of the Medical Form with this ID is closed
206	3 (Error)	Invalid KMEHR message for the eBirth application.	
300	3 (Error)	One or more validation errors occurred.	One of the validation rules have not been followed (see section 7.1)

Note: errors 200, 201 and 202 will be returned as a SOAP Fault instead of a normal SOAP request message.

6 Service interaction model

All services and operations are only available in the following interaction model « Synchrone consumer - synchrone FSB service ».

7 Appendix

7.1 Appendix 1: Validation rules

As to ensure the quality of the data, the birth notification and medical form are completely validated against a set of pre-defined rules at time of submission. If one or more validation rules fail, the birth notification and medical form can't be further processed and a list of the erroneous fields together with a meaningful description is provided to the sending application. When validation errors occur, at least 2 error tags will be available in the response message. The first error tag will include a general error description. The other error tags provide details related to the individual fields that caused the problem.

Two types of validation errors are distinguished:

- **Blocking errors:** those errors will block the submission of the birth notification and the medical form. As long as those errors are not corrected, those two forms can't be further processed.
- **Non-blocking errors:** those errors do not prevent the submission of the two forms. Nevertheless, we strongly recommend to integrate those complementary rules in the local hospital application as to ensure a higher data quality in the birth notification and medical form.



- It is required for a client application integrating with the eBirth application to validate each birth notification and medical form against the provided list of validation rules before sending it to the eBirth application.
- The eBirth web services only verify blocking validation rules. However, it is suggested that a client application verifies both.

Bellow, all the validation errors enforced by the eBirth application are detailed.

7.1.1 Notification



To prevent the submission of an already registered birth by a hospital, a “double detection validation mechanism” is observed by this web service operation.

If a birth notification with identical data was already successfully submitted by a hospital, error code 208 is returned as response (full list of error codes available in section 5.1). At this time, the notification is not submitted successfully.

The following parameters are taken into account to detect a double submission (within the same hospital):

- Last name of the mother
- First name of the mother
- Birth date of the newborn
- Gender of the newborn
- Rank of the newborn

7.1.1.18 Folder Mother - Patient element

The validation rules for the mother identification are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
id S=ID-PATIENT	National number of the mother coming from the National Register or from the bis Register (based on an ID card or a passport document)	B	Valid NISS	NISS validation (modulo 97) Length (11 numbers)
firstname	First name of the mother	B	Length	Max length 95 characters.
lastname	Family name of the mother	B	Length	Max length 90 characters.
		B	Required	The name is required (> 1 character)
birthdate	Mother's date of birth	B	Incomplete date validation	Valid year (required) Valid month (optional) Valid day (optional)
		B	Date comparison	Baby's date of birth - Mother's date of birth >= 10 years
		NB	Date comparison	Now - Mother's date of birth < 53 years
Street, housnumber and Postbox	Address where the mother lives (based on an ID card or a passport) - Street, Street number and box	B	Length	Total max length 100 characters of the 3 combined fields.
zip		B	Length	Max length 10 characters.



	Address where the mother lives (based on her ID card or passport) - Zipcode	B	Belgian postal code	If country = Belgium, the postal code should consist of 4 digits (and > 999).
city	Address where the mother lives (based on her ID card or passport) - City	B	Length	Max length 50 characters.
country	Country where the mother lives	B	Valid country code	Validation based on the ISO-3166-1 codification (see appendix 7.4)
nationality	Nationality of the mother	B	Valid country code	Validation based on the ISO-3166-1 codification (see appendix 7.4)
birthlocation	Mother's place of birth	B	Length	Max length 80 characters.

7.1.1.19 Folder mother - Multiple pregnancy

The validation rules for the multiple pregnancy are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
mutiparity	Total of baby's born in this delivery, stillborn included	B	Required	fields must be provided in case of multiple pregnancy
		B	Number	> 1 & <= 9
samesex	Indication if the babies are of the same sex	B	Required	fields must be provided in case of multiple pregnancy
		B	Boolean value	valid response : True or false
stillborn	Number of stillborn children in this multiple pregnancy	B	Required	fields must be provided in case of multiple pregnancy
		B	Number	>= 0 & <= 9
		B	Number	<= (multiparity - 1)

7.1.1.20 Folder Baby - Patient element

The validation rules for the newborn are the following:



Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
firstname	First name of the baby	B	Length	Max length 95 characters.
familyname	Family name of the baby	B		Max length 90 characters.
date	Baby's date of birth	B	Required	
		B	Date validation	Logical correct date
		B	Date comparison	<= now
		B	Date comparison	> birth date mother
time	Baby's time of birth	B	Required	
		B	Time validation	Logical correct time
		B	Time comparison	<= now
sex	Sex of the baby	B	Required	
		B	Text	valid response : male, female or unknown

7.1.1.21 Folder Baby - Father identification

The validation rules for the father identification are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
id S=ID-PATIENT	National number of the father coming from the National Register or from the bis Register (based on an ID card or a passport document)	B	Valid NISS	NISS validation (modulo 97) Length (11 numbers)
firstname	First name of the father	B	Length	Max length 95 characters.
lastname	Family name of the father	B	Length	Max length 90 characters.
birthdate	Father's date of birth	B	Incomplete date validation	Valid year (required) Valid month (optional) Valid day (optional)
		NB	Date comparison	Baby's date of birth - Father's date of birth >= 10 years
		B	Date comparison	Father's date of birth < Baby's date of birth
Street, house number and Postbox	Address where the father lives (based on an ID card or a passport) - Street, Street number and box	B	Length	Total max length 100 characters of the 3 combined fields.
zip		B	Length	Max length 10 characters.



	Address where the father lives (based on her ID card or passport) - Zipcode	B	Belgian postal code	If country = Belgium, the postal code should consist of 4 digits (and > 999).
city	Address where the father lives (based on her ID card or passport) - City	B	Length	Max length 50 characters.
country	Country where the father lives	B	Valid country code	Validation based on the ISO-3166-1 codification (see appendix 7.4)
nationality	Nationality of the father	B	Valid country code	Validation based on the ISO-3166-1 codification (see appendix 7.4)
birthlocation	Father's place of birth	B	Length	Max length 80 characters.



7.1.1.22 Folder Baby - Birthplace

The validation rules for the birthplace are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
cd S=CD-EBIRTH-PLACE	Type of place where the baby is born	B	Required	
		B	Number	valid response : home, hospital or other
text	Description where the baby is born if it is not in a hospital or at home	B	Required	Required if cd S=CD-EBIRTH-PLACE is other
		B	Length	Max length 80 characters.
Street, house number and Postbox	Address where the baby is born - Street, house number and postbox	B	Required	
		B	Length	Total max length 100 characters of the 3 combined fields.
zip	Address where the baby is born - Zipcode	B	Required	
		B	Belgian postal code	The postal code must consist of 4 digits (and > 999). The postal code of the birth location must be a valid Belgian postal code. Only babies born in Belgium are notified via eBirth.
city	Address where the baby is born - Municipality name	B	Required	
		B	Length	Max length 50 characters.
country	Will be determine automatically when the user specify the country where the father lives	B	Allowed value	Only 'BE' may be used as country for the birth location.
nis	Municipality code (NIS) of the city of birth	B	Required	
		B	Number	>9999 & <99999
		B	Valid municipality code	Valid municipality code
district	District code of the city of birth (only applicable for Antwerp and Tournai).	B	Required	If the city of birth is Antwerp or Tournai.
		B	Valid municipality code	Valid municipality and district code combination.



7.1.1.23 Folder Baby - Birth rank

The validation rules for the birthplace are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
cd S=CD-EBIRTH-ITEM	Rank of the baby in question regard to the other baby's coming from the same delivery	B	Required	In case of multiple pregnancy
		B	Number	> 0 & <= 9
		B	Number	<= total babies born (multiparity)

7.1.2 Medical form

The medical form is divided in 4 parts. Part 1, 2 and 3 are dedicated to the mother and part 4 is dedicated to the baby.

7.1.1.24 Part 1 - Partus number

The validation rules for the birthplace are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
cd S=CD-ITEM-EBIRTH	Partus number; Identification number attributed by the hospital to every births of alive baby	B	Required	
		B	Length	Length is 6 or 7 characters
		B	Valid year	The first two characters should correspond to the birth year of the newborn.
		B	Number	Sequence number --> length = 4
		B	Number	Sequence number > 1
		B	Required	Rank required, if multiple birth
		B	Length	Rank (optional) --> 1 character

7.1.1.25 Part 1 - weights and height mother

The validation rules for the 'weights and height mother' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
beforepregnancyweight	Weight of the mother before the current pregnancy in kg	B	Required	
		NB	Number	> 40 (or special value 'noanswer')
		NB	Number	< 400 (or special value 'noanswer')
atdeliveryweight	Weight of the mother at her entrance in the delivery room in kg	B	Required	
		NB	Number	> 40 (or special value 'noanswer')
		NB	Number	< 400 (or special value 'noanswer')
height	Height of the mother in cm.	B	Required	
		NB	Number	> 100 (or special value 'noanswer')
		NB	Number	< 300 (or special value 'noanswer')



7.1.1.26 Part 1 - previous childbirths

The validation rules for the 'previous childbirths' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
previouschildbirth	To know if previous deliveries happen before the pregnancy in question	B	Required	
		B	boolean type / number	valid response : true or false
		NB	Cross validation	If previouschildbirth = True, previousbornalive must be > 1
previousbornalive	number of born-alive baby(s) from all previous pregnancies	B	Required	if previouschildbirth = True The special value 'unknown' is allowed.
		B	Number	<=99
lastbabybirthdate	Date of birth of the last baby born alive	B	Required	if previouschildbirth = True and previousbornalive is not 'unknown' The special value 'unknown' is allowed.
		B	Incomplete date validation	Valid year (required) Valid month (optional, 00) Valid day (optional, 00) The special value 'unknown' is allowed.
		B	Date validation	Only a date in the past is allowed.
intermediatestillborn ndelivery	Did the mother deliver a stillborn baby since this date?	B	Required	if previouschildbirth = True and previousbornalive is not 'unknown'
		B	Boolean type / Number	Valid response: True, False
previouscaesarean	To know if a previous delivery happened by a caesarian sectio	B	Required	if previouschildbirth = True
		B	Number	Valid response: True, False

7.1.1.27 Part 2 - Parity

The validation rules for the 'previous childbirths' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
Parity	Number of deliveries where baby's born with a weight \geq 500g with this delivery included.	B	Required	
		B	Cross validation	if previouschildbirth = false, parity must be 1
		B	Number	>0 & ≤ 99

7.1.1.28 Part 2 - Pregnancy origin

The validation rules for the 'Pregnancy origin' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
pregnancyorigin	The origin of this pregnancy. Several fields may be chosen.	B	Required	
		B	Text / number	Valid response : Spontaneous, Hormonal, IVF, ICSI Special value 'noanswer' is allowed
		B	Number	>0 & ≤ 99



7.1.1.29 Part 2 - medical risks

The validation rules for the 'medical risks' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
hypertension	To know if hypertension was diagnosed during the pregnancy	B	Required	
		B	Text / number	Valid response : true, false Special value 'unknown' is allowed
diabetes	To know if diabetes was diagnosed during the pregnancy	B	Required	
		B	Text / number	Valid response : true, false Special value 'unknown' is allowed
hIV	To know if HIV was diagnosed or tested during the pregnancy	B	Required	
		B	Text / number	Valid response : true, false Special value 'unknown' or 'nottested' are allowed

7.1.1.30 Part 3 - Pregnancy duration

The validation rules for the 'Pregnancy duration' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
pregnancyduration	To determine the length of the pregnancy in full weeks	B	Required	
		B	number	>20 and <45
cd S=CD-CERTAINTY	To determine the confidence with the duration filled.	B	Required	
		B	text/number	Valid response : proven or probable



7.1.1.31 Part 3 - Position at birth

The validation rules for the 'Position at birth' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
childposition	To determine the position at the childbirth	B	Required	
		B	text/number	valid response : head-down, other-head, breech, transverse Special value 'unknown' is allowed.

7.1.1.32 Part 3 - Induction of delivery

The validation rules for the 'Induction of delivery' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
Inductiondelivery	To determine which artificial way start the delivery process (use of medicines or by breaking the membranes).	B	Required	
		B	boolean type	valid response : true or false

7.1.1.33 Part 3 - Epidural analgesia and/or rachi

The validation rules for the 'Epidural analgesia and/or rachi' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
Epidural analgesia	To determine whether there is Epidural analgesia	B	Required	
		B	boolean type	valid response : true or false
rachi analgesia	To determine whether there is rachi analgesia.	B	Required	
		B	boolean type	valid response : true or false



7.1.1.34 Part 3 - Colonization of streptococcus of B group

The validation rules for the 'Colonization of streptococcus of B group' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
streptococcuscolonization	To determine if there is Colonization of streptococcus of B group.	B	Required	
		B	allowed values	<ul style="list-style-type: none"> Boolean character : true or false Special value: 'nottested'

7.1.1.35 Part 3 - Intrapartal operation of SBG prophylaxis (peni, ampi)

The validation rules for the 'Intrapartal operation of SBG prophylaxis (peni, ampi)' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
intrapartalsbgprophylaxis	To determine if there is Intrapartal operation of SBG prophylaxis (peni, ampi).	B	Required	
		B	boolean type	Valid response : true or false

7.1.1.36 Part 3 - Way of delivery

The validation rules for the 'Way of delivery' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
deliveryway	To determine how the delivery happened.	B	Required	
		B	allowed values	<ul style="list-style-type: none"> Spontaneous vacuum-extraction forceps primary-caesarean secondary-caesarean vaginal Breech



7.1.1.37 Part 3 - Episiotomy

The validation rules for the 'Episiotomy' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
episiotomy	To determine if there was an episiotomy.	B	Required	
		B	boolean type	Valid response : true or false

7.1.1.38 Part 3 - Indication(s) for caesarean section

The validation rules for the 'Indication(s) for caesarean section' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
caesareanindication	To determine the type of caesarean section.	B	Required	if deliveryway = primary-caesarean or secondary-caesarean
		B	allowed values	<ul style="list-style-type: none"> • previouscaesareansection • breechpresentation • transversepresentation • foetaldistress • dystocienotinlabour • dystocieinlabourinsufficient dilatation • dystocieinlabourinsufficient expulsion • maternalindication • abruptioplacentae • requestedbypatient • multiplepregnancy • other
text		B	required	if caesareanindication = other
		B	length	<= 80 characters

7.1.1.39 Part 3 - Breast feeding

The validation rules for the 'Breast feeding' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
breastfeeding	To determine if the mother thinks to breast-feed her baby (babies).	B	Required	
		B	boolean type	Valid response : true or false

7.1.1.40 Part 4 - Weight at birth

The validation rules for the 'Weight at birth' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
atbirthweight	Determine the weight of the baby at birth in grams	B	Required	
		B	number	>1 & <=9999
		NB	Number	<=100 & >= 7000 or 9999

7.1.1.41 Part 4 - Apgar score : after 1 min

The validation rules for the 'apgarscore1' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
apgarscore1	Determine the Apgar score after 1 minute.	B	Required	
		B	allowed values	<ul style="list-style-type: none"> >= 0 & <= 10 Special value: 'unknown'

7.1.1.42 Part 4 - Apgar score : after 5 min

The validation rules for the 'apgarscore5' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
apgarscore5	Determine the Apgar score after 5 minute.	B	Required	
		B	allowed values	<ul style="list-style-type: none"> >= 0 & <= 10 Special value: 'unknown'

7.1.1.43 Part 4 - Artificial respiration to the newborn baby

The validation rules for the 'Artificial respiration to the newborn baby' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
artificialrespiration	Identify the kind of artificial respiration given to the newborn baby	B	allowed values	<ul style="list-style-type: none"> Intubation Balloon-mask

7.1.1.44 Part 4 - Transfer to neonatal department

The validation rules for the 'neonataldept' are the following:



Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
neonataldept	type of neonatal department that has been chosen.	B	allowed values	<ul style="list-style-type: none"> nstar nic

7.1.1.45 Part 4 - Major congenital malformation (detected at birth)

The validation rules for the 'Major congenital malformation' are the following:

Field Name	Description	Blocking (B) or non-blocking (NB)	Validation Type	Description Validation Type
congenitalmalformation	Identify if the baby suffers of congenital malformation (detected at birth)	B	allowed values	<ul style="list-style-type: none"> anencephalia spinabifida hydrocephalia splitlippalate analatresia membersreduction diaphragmatichernia omphalocele gastroschisis transpositiegrotevaten afwijkinglong atresiedundarm nieragenese craniosynostosis turnersyndrom obstructievedefecten tetralogiefallot oesofagaleatresie atresieanus twintotwintransfusionsyndrome skeletdysplasie hydropsfoetalis polymultikystischenierdysplasie VSD atresiegalwegen hypospadias cystischhygroma trisomie21 trisomie18 trisomie13

7.2 Appendix 2: List with municipality NIS-codes

The file '*EB_municipality_1.0.xls*' contains the NIS-codes for municipalities in Belgium.

7.3 Appendix 3: List with district codes

The file '*EB_district_1.0.xls*' contains the district codes for the cities of Antwerp and Tournai.

7.4 Appendix 4: List of country codes

The file '*EB_countries_1.2.xls*' contains the complete list of countries supported by the eBirth applications. This is based on the ISO-3166-1 codification with a limited number of additions.

7.5 Appendix 5: Translation of the answers (choices)

Some fields use drop down menus in the application as to help hospitals. The file '*EB_Responsefields_1.1.xls*', contains all the answers of the drop down menu as well as their adequate translations.

7.6 Appendix 6: Translation of the help fields

The file '*EB_helpfields_1.0.xls*' contains all help fields as well as their translations.

7.7 Printscreens web application - Dutch version

7.7.1 Notification: Parent Identification

Gegevens moeder

Rijksregister nummer ? - -

Naam ? Voornaam ?

Straat ?

Gemeente ? Postcode ?

Land ? ▼

Nationaliteit ? ▼

Geboortedatum ? / / onbekend
(dd/mm/yyyy)

Geboorteplaats ?

Gegevens vader

Rijksregister nummer ? - -

Naam ? Voornaam ?

Adres vader identiek aan moeder

Straat ?

Gemeente ? Postcode ?

Land ? ▼

Nationaliteit ? ▼

Geboortedatum ? / / onbekend
(dd/mm/yyyy)

Geboorteplaats ?

7.7.2 Notification: Birth

Pasgeborene

Naam Voornaam

Geboorteplaats

De geboorte vond plaats in het ziekenhuis

Straat

Postcode Gemeente (57081 - 0)

Type Ziekenhuis Andere Thuis

Medische vaststelling van de geboorte

Geslacht Mannelijk Vrouwelijk Onbepaald

Geboortedatum / / (dd/mm/yyyy) Geboortetijdstip : (uu:mm)

Zwangerschaps- en geboortegegevens

Kind geboren uit een meervoudige zwangerschap ja nee

Indien meervoudige zwangerschap

Totaal aantal geboortes, doodgeborenen inbegrepen onbekend

Rangnummer van het kennisgegeven kind

Structuur volgens geslacht Hetzelfde geslacht Verschillend geslacht

Aantal doodgeboren kinderen in deze meervoudige zwangerschap

Handtekening voor de medische vaststelling van de geboorte van een levend geboren kind. Medisch akkoord voor verzending

Informatie voor Burgerlijke Stand

7.7.3 Medical Form Part I: Previous births

Partus nummer / /

Gewicht van de moeder voor de zwangerschap kg onbekend
Gewicht van de moeder bij aankomst in het verloskwartier kg onbekend
Lengte van de moeder cm onbekend

Waren er geboorten voor deze zwangerschap? ja nee

Zo ja, Aantal levendgeboren kinderen

Geboortedatum van het laatste levendgeboren kindje / / onbekend

Beviel de moeder sindsdien van een niet levendgeboren kind? ja nee

Was er een keizersnede bij een vorige zwangerschap? ja nee

7.7.4 Medical Form Part II: Current Pregnancy

Pariteit (deze bevalling inbegrepen)	? <input type="text"/> <input type="checkbox"/> onbekend
Ontstaan zwangerschap	? <input type="text"/> <input type="button" value="v"/>
Medische risicofactoren	
Hypertensie (>= 140 / >= 90 mm Hg) in deze zwangerschap	? <input type="radio"/> ja <input type="radio"/> nee <input type="radio"/> onbekend
Diabetes	? <input type="radio"/> ja <input type="radio"/> nee <input type="radio"/> onbekend
HIV	? <input type="text"/> <input type="button" value="v"/>

Ontstaan zwangerschap :

Spontaan
Hormonaal
IVF
ICSI
Niet gevraagd

HIV :

Positief
Negatief
Niet getest
Onbekend

7.7.5 Medical Form Part III: Current Delivery

Zwangerschapsduur bij de bevalling (volle weken)	? <input type="text"/>
Zekerheid omtrent deze duur	? <input type="radio"/> ja (zeker) <input type="radio"/> neen (schatting)
Ligging van het kind bij de geboorte	? <input type="text" value="v"/> ▼
Inductie van de baring	? <input type="radio"/> ja <input type="radio"/> nee
Epidurale analgesie en/of rachi	? <input type="radio"/> ja <input type="radio"/> nee
Foetale bewaking	? <input type="radio"/> ja <input type="radio"/> nee
CTG (cardiotocogram)	<input type="radio"/> ja <input type="radio"/> nee
STAN-monitor	<input type="radio"/> ja <input type="radio"/> nee
MBO (microbloedonderzoek)	<input type="radio"/> ja <input type="radio"/> nee
Intermittente auscultatie	<input type="radio"/> ja <input type="radio"/> nee
Groep B streptokokken kolonisatie	? <input type="radio"/> Positief <input type="radio"/> Negatief <input type="radio"/> Niet getest
Intrapartale toediening van GBS profylaxe (peni, ampi)	? <input type="radio"/> ja <input type="radio"/> nee
Episiotomie	? <input type="radio"/> ja <input type="radio"/> nee
Wijze van verlossing	? <input type="text" value="v"/> ▼
Overweegt de moeder borstvoeding?	? <input type="radio"/> ja <input type="radio"/> nee

Ligging van het kind bij de geboorte :

Achterhoofd (OA)
Andere hoofdligging
Stuitligging
Dwarsligging
Onbekend

Wijze van verlossing :

Spontaan
Vacuüm-extractie
Forceps
Primaire sectio
Secundaire sectio
Stuit vaginaal

7.7.6 Medical Form Part IV: Condition at birth

Geboortegewicht		<input type="text"/>	g	<input type="checkbox"/> onbekend
Apgar-score	na 1 minuut	<input type="text"/>		<input type="checkbox"/> onbekend
	na 5 minuten	<input type="text"/>		<input type="checkbox"/> onbekend
Beademing van pasgeborene (onmiddellijke zorgen)		<input type="radio"/> ja <input type="radio"/> nee		
Zo ja, preciseer		<input type="text"/>		
Transfer naar neonatale afdeling		<input type="radio"/> ja <input type="radio"/> nee		
Indien ja,		<input type="radio"/> N*-dienst		
		<input type="radio"/> NIC-dienst		
Majeure misvormingen (gedetecteerd bij de geboorte) - Beschrijving		<input type="radio"/> ja <input type="radio"/> nee		
<input type="checkbox"/> Anencephalie		<input type="checkbox"/> Spina bifida		
<input type="checkbox"/> Hydrocephalie		<input type="checkbox"/> Gespleten lip/verhemelte		
<input type="checkbox"/> Anale imperforatie		<input type="checkbox"/> Reductie ledematen		
<input type="checkbox"/> Hernia diafragmatica		<input type="checkbox"/> Omfalocele		
<input type="checkbox"/> Gastroschisis		<input type="checkbox"/> Transpositie grote vaten		
<input type="checkbox"/> Afwijking long (CALM)		<input type="checkbox"/> Atresie dundarm		
<input type="checkbox"/> Nier agenese		<input type="checkbox"/> Craniosynostosis		
<input type="checkbox"/> Turner syndroom (XO)		<input type="checkbox"/> Obstructieve defecten nierbekken en ureter		
<input type="checkbox"/> Tetralogie Fallot		<input type="checkbox"/> Oesofagale atresie		
<input type="checkbox"/> Atresie anus		<input type="checkbox"/> Twin-to-twin transfusiesyndroom		
<input type="checkbox"/> Skeletdysplasie/dwerggroei		<input type="checkbox"/> Hydrops foetalis		
<input type="checkbox"/> Poly/multikystische nierdysplasie		<input type="checkbox"/> VSD		
<input type="checkbox"/> Atresie galwegen		<input type="checkbox"/> Hypospadias		
<input type="checkbox"/> Cystisch hygroma		<input type="checkbox"/> Trisomie 21		
<input type="checkbox"/> Trisomie 18		<input type="checkbox"/> Trisomie 13		

Beademing van pasgeborene (Zo ja)

Beademing met ballon en masker

Beademing met intubatie

7.8 Printscreens web application - French version

7.8.1 Notification: Parent Identification

Données de la mère

Numéro de Registre national ? - -

Nom ? Prénom ?

Rue ?

Commune ? Code postal ?

Pays ?

Nationalité ?

Date de naissance ? / / inconnu
(jj/mm/aaaa)

Lieu de naissance ?

Données du père

Numéro de Registre national ? - -

Nom ? Prénom ?

Adresse du père identique à celle de la mère

Rue ?

Commune ? Code postal ?

Pays ?

Nationalité ?

Date de naissance ? / / inconnu
(jj/mm/aaaa)

Lieu de naissance ?

7.8.2 Notification: Birth

Lieu de naissance

La naissance a eu lieu à l'institution hospitalière

Rue

Code postal Commune (57081 - 0)

Type Institution hospitalière Autre Maison privée

Constatation médicale de la naissance

Sexe Masculin Féminin Indéterminé

Date de naissance / / (jj/mm/aaaa) Heure de naissance : (hh:mm)

Données de grossesse et de naissance

Enfant issu d'une grossesse multiple oui non

Si grossesse multiple

Nombre total de naissances, mort-nés inclus inconnu

Numéro d'ordre de l'enfant notifié

Structure par sexe Mêmes sexes Sexes différents

Nombre de mort-nés dans cette grossesse multiple

Signature pour la constatation médicale de la naissance d'un enfant né-vivant Accord médical pour envoi

Informations pour l'Etat civil

7.8.3 Medical Form Part I: Previous births

Classification de l'accouchement	? 10		
Poids de la mère avant la grossesse	? <input type="text"/>	kg	<input type="checkbox"/> inconnu
Poids de la mère à l'entrée en salle d'accouchement	? <input type="text"/>	kg	<input type="checkbox"/> inconnu
Taille de la mère	? <input type="text"/>	cm	<input type="checkbox"/> inconnu
Y a-t-il eu une (des) naissance(s) avant cette grossesse ?	? <input type="radio"/> oui <input type="radio"/> non		
Si oui, Nombre total d'enfants nés vivants	? <input type="text"/>		
Date de naissance du dernier enfant né vivant	? <input type="text"/>	/ <input type="text"/>	/ <input type="text"/> <input type="checkbox"/> inconnu
La mère a-t-elle accouché entre-temps d'un enfant/foetus mort-né?	? <input type="radio"/> oui <input type="radio"/> non		
Y a-t-il eu une césarienne pour une précédente grossesse ?	? <input type="radio"/> oui <input type="radio"/> non		

7.8.4 Medical Form Part II: Current Pregnancy

Parité (cet accouchement inclus)	? <input type="text"/> <input type="checkbox"/> inconnu
Conception de la grossesse	? <input type="text"/> ▼
Facteurs de risques médicaux	
Hypertension ($\geq 140 / \geq 90$ mm Hg) durant cette grossesse	? <input type="radio"/> oui <input type="radio"/> non <input type="radio"/> inconnu
Diabète	? <input type="radio"/> oui <input type="radio"/> non <input type="radio"/> inconnu
VIH	? <input type="text"/> ▼

Conception à la grossesse :

Spontanée
 Traitement hormonal
 FIV
 ICSI
 Pas demandé

VIH :

Positif
 Négatif
 Non testé
 Inconnu

7.8.5 Medical Form Part III: Current Delivery

Durée de la grossesse jusqu'à l'accouchement (en semaines achevées)	? <input type="text"/>
Certitude de cette durée	? <input type="radio"/> oui (certain) <input type="radio"/> non (estimation)
Présentation de l'enfant à la naissance	? <input type="text" value=""/> ▼
Induction de l'accouchement	? <input type="radio"/> oui <input type="radio"/> non
Analgésie péridurale et/ou rachianesthésie	? <input type="radio"/> oui <input type="radio"/> non
Surveillance foetale pendant le travail	? <input type="radio"/> oui <input type="radio"/> non
CTG (cardio(toco)gramme)	<input type="radio"/> oui <input type="radio"/> non
STAN	<input type="radio"/> oui <input type="radio"/> non
pH au scalp	<input type="radio"/> oui <input type="radio"/> non
Auscultation intermittente	<input type="radio"/> oui <input type="radio"/> non
Colonisation par le streptocoque du groupe B	? <input type="radio"/> Positif <input type="radio"/> Négatif <input type="radio"/> Non testé
Antibioprophylaxie intrapartale du streptocoque B	? <input type="radio"/> oui <input type="radio"/> non
Episiotomie	? <input type="radio"/> oui <input type="radio"/> non
Mode d'accouchement	? <input type="text" value=""/> ▼
La mère envisage-t-elle l'allaitement de l'enfant?	? <input type="radio"/> oui <input type="radio"/> non

Présentation de l'enfant à la naissance :

Sommet fléchi en occipito-antérieur
Autre présentation céphalique
Siège
Transverse
Inconnu

Mode d'accouchement :

Spontané en sommet
Ventouse
Forceps
Césarienne élektive
Césarienne non programmée
Siège par voie vaginale

7.8.6 Medical Form Part IV: Condition at birth

Poids à la naissance	<input type="text"/>	g	<input type="checkbox"/> inconnu
Indice d'Apgar	après 1 min	<input type="text"/>	<input type="checkbox"/> inconnu
	après 5 min	<input type="text"/>	<input type="checkbox"/> inconnu
Ventilation du nouveau-né (soins immédiats)	<input type="radio"/> oui <input type="radio"/> non		
Si oui, précisez	<input type="text"/>		
Transfert vers un département néonatal	<input type="radio"/> oui <input type="radio"/> non		
Si oui,	<input type="radio"/> département-N* (petit n) <input type="radio"/> département-NIC (grand N)		
Malformations congénitales majeures (lors de la naissance) - Explications	<input type="radio"/> oui <input type="radio"/> non		
<input type="checkbox"/> Anencéphalie	<input type="checkbox"/> Spina bifida		
<input type="checkbox"/> Hydrocéphalie	<input type="checkbox"/> Fente labiale / palatine		
<input type="checkbox"/> Imperforation anale	<input type="checkbox"/> Anomalie réductionnelle membres		
<input type="checkbox"/> Hernie diaphragmatique	<input type="checkbox"/> Omphalocèle		
<input type="checkbox"/> Gastroschisis	<input type="checkbox"/> Transposition des gros vaisseaux		
<input type="checkbox"/> Malformation adénomatoïde du poumon	<input type="checkbox"/> Atrésie intestin grêle		
<input type="checkbox"/> Agénésie rénale	<input type="checkbox"/> Craniosténose		
<input type="checkbox"/> Syndrome de Turner (Xo)	<input type="checkbox"/> Anomalie obstructive bassin/uretère		
<input type="checkbox"/> Tétralogie de Fallot	<input type="checkbox"/> Atrésie de l'oesophage		
<input type="checkbox"/> Atrésie anale	<input type="checkbox"/> Syndrome transfuseur-transfusé (STT)		
<input type="checkbox"/> Dysplasie squelettique/nanisme	<input type="checkbox"/> Hydrops foetal		
<input type="checkbox"/> Dysplasie rénale poly/multikystique	<input type="checkbox"/> Communication interventriculaire (CIV)		
<input type="checkbox"/> Atrésie des voies biliaires	<input type="checkbox"/> Hypospade		
<input type="checkbox"/> Hygroma kystique	<input type="checkbox"/> Trisomie 21		
<input type="checkbox"/> Trisomie 18	<input type="checkbox"/> Trisomie 13		

Ventilation du nouveau né (Si oui) :

Ventilation ballon et masque
Intubation