Service Level Agreement
Basic Service: WS Directory
Version 2

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eHealth platform

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Service Level Agreement

WS Directory

Between

Service provider

   eHealth Platform

   Quai de Willebroek, 38

   1000 BRUSSELS

Service customer

   User Community

To the attention of: the user community

Author:	Service Management
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Confidentiality:	/
Language:	English
Exhibit of:	MSA

Table of content

1. Document management

1.1. Document history

Version	Date	Author	Description of changes / remarks
1	March, 2018	eHealth platform	Initial version
2	August, 2022	eHealth platform	Update KPI

1.2. Document references

ID	Title	Version	Date	Author
	Master Service Agreement	1.0	22/11/2012	SLA Admin

1.3. Purpose of the document

The objective of this document is to define the Service Level Agreement for the set of services included in the WS Directory, proposed by the eHealth-platform.

The Directory is a generic database where information about a person, the actor, the link (role / type) and the period can be stored. This database is populated using the WS directory and accessed via the DAAS (DAta Attribute Service).

In addition, this document contains a short description of

•   some of the dependencies on technical and/or functional components needed and used by the Web Services;

•   some technical and/or functional components the Services depend on;

•   measurements and KPIs intended to account for a certain number of performance indicators;

or a link to a location where such a description can be found:

This document is a complement to the **Master Service Agreement** (MSA). The information in this version takes precedence over the data regarding the same subject treated in former versions and in the MSA.
Items described in the MSA include, for instance:

•   a broad description of the business services offered by the eHealth platform to the applications which may want to make use of them;

•   description of cross-sectional services offered on the eHealth platform;

•   description of support services, including registering, managing and solving possible incidents with the DAAS suite of services, managing changes;

•   performance indicators related to those services.

1.4. Validity of the agreement

This document is valid as long as the *WS Directory* is part of the eHealth-platform offering services.

Once a year, the levels of service proposed will be reviewed and confirmed for the next year.

1.5. Service and maintenance window

1.5.1. Service window

The time frame during which the eHealth services are offered to the client applications, is defined in terms of days and hours. Standard working days are all days of the year, except during the biannual maintenance periods and Bank Holidays.

The following table summarises the eHealth Service Window.

Service Window							
		Day of the week (closing days of Service Provider = Sunday)					
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Day period	00:00 – 07:00							
	07:00 – 08:00							
	08:00 – 16:30							
	16:30 – 19:00							
	19:00 – 20:00							
	20:00 – 24:00							

Legend	
	Timeslots where the service must be available according to the SLA and where corrective actions will be taken to resolve detected Incidents.
	Timeslots where the service will be available provided there are no blocking Incidents. If these incidents do appear, no corrective action will be taken.
	Timeslots where unavailability can occur.

1.5.2. Support Window

Support Window							
		Day of the week (Closing days of Service Provider = Sunday)					
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Day period	00:00 – 07:00							
	07:00 – 08:00							
	08:00 – 16:30							
	16:30 – 19:00							
	19:00 – 20:00							
	20:00 – 24:00							

Legend	
	Timeslots for which the eHealth Call Center is available for the End-Users with a second line support for Infrastructure (HW, OS, Middleware and DB)
	Timeslots for which the eHealth Call Center is available for the End-Users with a second line support, including Application Support
	Timeslots for which the eHealth Call Center is unavailable for the End-Users. The End-User will have the possibility to record a voice message that will be treated on the next Workday.

1.5.3.   Maintenance Windows & Planned Interventions

The eHealth platform will strive for limiting as much as possible the impact and duration of the planned interventions. Today, eHealth is committed to make efforts so planned unavailability's do not exceed one to a few hours per year. In case of maintenance requiring support from users, or impacting them, eHealth will notify them at least one week ahead.

Portal, Network interventions and Application releases take place 2 times a year.

1.5.4.   Unplanned Interventions

Under exceptional circumstances, unplanned interventions may be needed in order to restore the service.

2. Service scope

2.1. eHealth service

2.1.1. Architecture overview

The DIRECTORY was built to separate access to the application from data access (By example: routing information). This service's sole purpose is to return data.
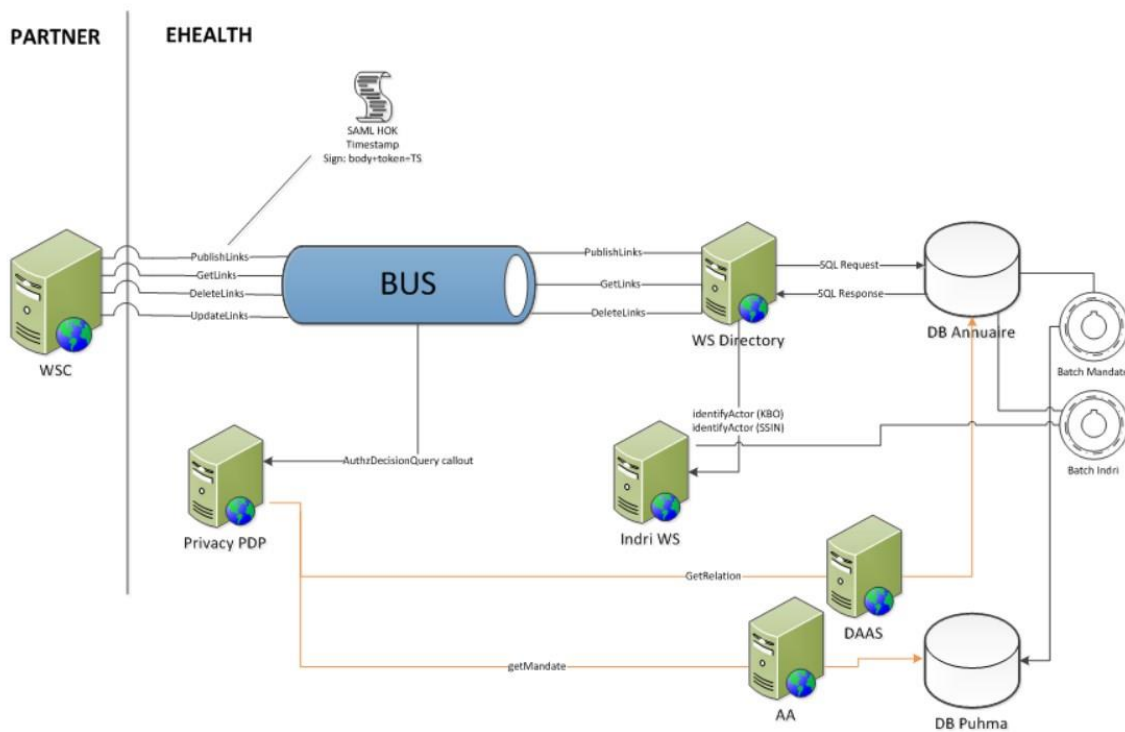

Figure 1

After the default verifications such as XSD compliance and UAM a callout to the Privacy PDP is done..

The directory WS is composed by 5 operations:

- publishLinks: This operation allows to publish links between some actors in the DB Annuaire
- getLinks: This operation allows an actor to consult links that he has published in the DB Annuaire.
- deleteLinks: This operation allows an actor to delete some links
- updateLinks: This operation allows an actor to update a link previously created.
- aliveCheck: This operation allows monitoring through X509 security.

The requests of each operation are sent by the partner through the eHealth bus. The eHealth bus performs the UAM check and forwards the request without transformation to the backend of the WS Directory. The WS Directory performs its business check, interacts with the DB Annuaire (insert, update, select, delete request) and returns a response through the bus to the partner.

2.1.2. Scope of the SLA
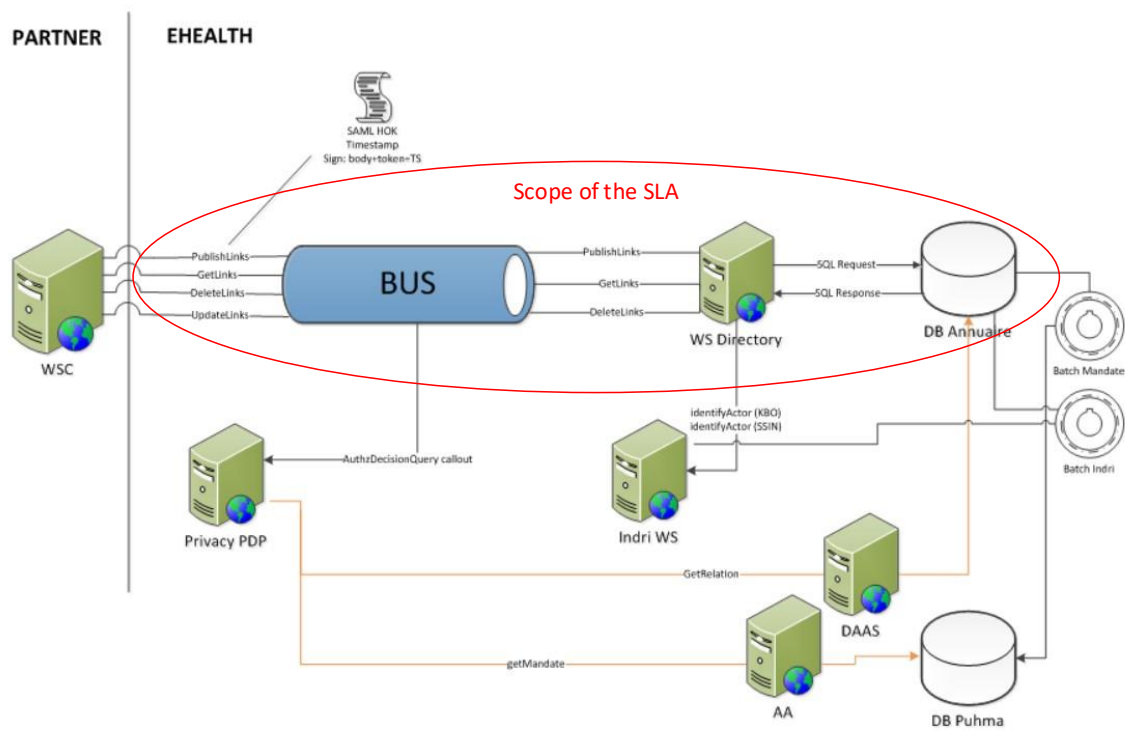
2.2. Business criticality

The Service Level Criticality (as described in the MSA) for this on-line Basic Service is **GOLD** Interdependencies

3. List of service levels

Service	KPI	SL ID	Condition	Measure based on	Limit	Service Window	Objective Committed %	Objective Target %
	Directory web Service		Transaction passes (availability)	Real transactions		Mo – Su 0:00 – 24:00	99,5	99,9
Service Directory	PublishLink request		Response time < 2 sec	Real transactions	Dependences on WS Indri	Mo – Su 0:00 – 24:00	N/A	95
	GetLInks request		Response time < 1 sec	Real transactions		Mo – Su 0:00 – 24:00	98	99
	DeleteLInks request		Response time < 2sec	Real transactions		Mo – Su 0:00 – 24:00	98	99
	UpdateLinks request		Response time < 1 sec	Real transactions		Mo – Su 0:00 – 24:00	98	99

Table 1: List of key performance indicators (KPI) per service

4. Detailed service level per service

4.1. Interactive Directory Services: End-to-End Availability

4.1.1. Availability Directory WebService.

<table>
<tr><th colspan="5">Objectives</th></tr>
<tr>
<td>Definition</td>
<td colspan="4">

The Service Directory is considered being available when the following test is correctly executed:
Send an AliveCheckRequest at the /Directory/Monitoring/v1 endpoint for SOAPAction: "urn:be:fgov:ehealth:monitoring:protocol:v2:aliveCheck"
The monitoring asserts that the Service="DB DIR CHECK" with StatusMessage="OK"
Planned interventions executed within the Maintenance Window are not recorded as unavailable time.

</td>
</tr>
<tr>
<td>Measuring method</td>
<td colspan="4">

The availability of the different functionalities is measured by executing the test scripts every 5 minutes. When the script is executed with as result a Status "OK", the test "passed".
When the script is executed with another result, the test "failed"
Measuring is always done on test scenarios

</td>
</tr>
<tr>
<td>Calculation</td>
<td colspan="4">

$$Availability = \frac{\sum Passed\ Tests\ x\ 100}{\sum Total\ Tests}\%$$

Total Tests = Total number of tests launched within corrected timeframe
Passed Tests = Total number of tests that resulted in a status "OK" within the same timeframe
Corrections are applicable on tests that are not taken into account because they were caused:

by a Validated Authentic Source or partner application out of scope of this SLA
by a failing monitoring tool

</td>
</tr>
<tr>
<td>Reporting and evaluation period</td>
<td colspan="4">

The availability is calculated and reported monthly. Corrective interventions are initiated when appropriate.
The formal evaluation however is done on a yearly basis.

</td>
</tr>
<tr>
<td rowspan="3">Service Level Objectives</td>
<td rowspan="2">Functionality</td>
<td rowspan="2">Service Window</td>
<td colspan="2">Service Level Objective</td>
</tr>
<tr>
<td>Committed %</td>
<td>Target %</td>
</tr>
<tr>
<td>Availability
Directory WS</td>
<td>Mo – Su
0:00 – 24:00</td>
<td>99,5</td>
<td>99,9</td>
</tr>
</table>

4.1.2. Performance Directory Web Service

<table>
<tr>
<th colspan="5">Objectives</th>
</tr>
<tr>
<td>Definition</td>
<td colspan="4">

- The performance of the eHealth Directory web service refers to its response time. Response time meaning the time needed to execute a request.
- Attention: The response time does not include:
  - The time needed to deliver the information over the Internet
- The time needed to process the information at the End Users premises.

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<tr>
<td>Measuring method</td>
<td colspan="4">

- This response time is measured on the Reverse Proxies. Both start time (request received) and stop time (answer sent to the End User) are measured and stored in a database.
- Measuring is done on real transactions, and only on those having a "stop time" within the measuring period.

</td>
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<tr>
<td>Calculation</td>
<td colspan="4">

- All response times are calculated: Stop time – Start time for every request.
- The percentage that meets the target is calculated based on following formula:

$$Performance = \frac{\sum Tests\ meeting\ the\ target\ x\ 100}{\sum Total\ Tests}\%$$

</td>
</tr>
<tr>
<td>Reporting and evaluation period</td>
<td colspan="4">

- The performance is calculated and reported monthly. Corrective interventions are initiated when appropriate.
- The formal evaluation however is done on a yearly basis.

</td>
</tr>
<tr>
<td rowspan="6">Service Level Objectives</td>
<td rowspan="2">Functionality</td>
<td rowspan="2">Service Window</td>
<td colspan="2">Service Level Objective</td>
</tr>
<tr>
<td>Committed %</td>
<td>Target %</td>
</tr>
<tr>
<td>PublishLinks request <2sec</td>
<td rowspan="4">Mo – Su
0:00 – 24:00</td>
<td>N/A</td>
<td>95</td>
</tr>
<tr>
<td>GetLinks request <1sec</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>DeleteLinks request <2 sec</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>UpdateLinks request < 1sec</td>
<td>98</td>
<td>99</td>
</tr>
</table>