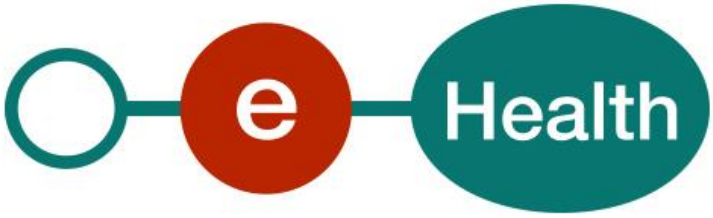

Service Level Agreement
Base Service: MetaHub
Version v1.3

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eHealth platform

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Service Level Agreement

Base Service: MetaHub

Between

Service provider

eHealth Platform

Quai de Willebroeck, 38

1000 BRUSSELS

To the attention of: the user community

Service customer

User Community

Author:	Service Management
Date:	01th June 2022
Version:	*1.3*
Status:	Final
Type:	Public
Confidentiality:	
Language:	English
Exhibit of:	MSA

1. Table of content

2. Document management

2.1. Document history

Version	Date	Author	Description of changes / remarks
2015.01	June 2015	eHealth Service Management	Update
2016.01	July 2016	eHealth Service Management	Update for split services and additional dependency of CBSS ID Support service.
1.0	January 2018	eHealth Service Management	Add performance KPI
1.1	July 2018	eHealth Service Management	Update
1.2	24/07/2018	eHealth Service Management	Correction
1.3	01/06/2022	eHealth Service Management	Update KPI

2.2. Document references

ID	Title	Version	Date	Author
	Master Service Agreement	2022.01	15/03/2022	SLA Admin

2.3. Purpose of the document

The objective of this document is to define the Service Level Agreement for the set of services included in the *Base Service MetaHub* proposed by the eHealth-platform. It defines the minimum level of service offered on the eHealth-platform, and provides eHealth's own understanding of service level offering, its measurement methods and its objectives in the long run.

The purpose of the portal eHealth is to offer a central entry point for dedicated information and access to healthcare related applications.

2.4. Features

The MetaHub Basic Service of the eHealth platform ensures, with the authorisation of the concerned patient, the interconnection between local and regional systems (Hub) for medical information exchange to allow care provider to find and consult available electronic medical documents of a patient independently from the location of the document storage and the location of the care provider.

MetaHub is a referential repository keeping information on the patient consent to share some medical files as the patient summary and the link between a patient and a hub.

Only authorised Hubs may access to the MetaHub. They need to have a valid token from the eHealth STS to get access to the MetaHub. Hubs are made of cluster of health organisation as hospitals.

It is composed of two major set of services. The first set of services ensures the management of the patient links. The second one ensures the management of the access to these links: the informed patient consent or "Consentement éclairé du patient/Geïnformeerde toestemming", the therapeutic links and exclusions or "liens thérapeutiques et exclusions/Therapeutische relaties en uitsluitingen" and access audits.

The first set of services covers the **patient links** management. It allows a hub to know where it can find information about a patient outside of its network. MetaHub simply provides the list of hubs that have information about a patient. It is not the MetaHub's role to know where, within a (sub) regional health network, the information is stored.

It is thus more a "locator service" than a "routing component": there are no "document" exchanges that transit throughout the component. It consists of

- *Get the patient links [GetPatientLinksRequest]:* retrieval of information about which other hubs have a link to a certain patient
- *Declare or revoke a patient link [DeclarePatientLinkRequest – RevokePatientLinkRequest]:* declares/revokes a link between the patient and the hub (request sender). The link declaration indicates that the hub has at least a transaction about the patient.

The second set covers the access to the patient links and is divided in 4 parts:

- The informed patient consents: When a patient consent is active at the MetaHub level, the transactions about the patient can be shared between hubs. A link to a patient can only be consulted if the patient has provided his consent to the system.
  - *Get the patient consent [GetPatientConsentRequest]:* allows a hub to check the existence of an informed patient consent.
  - *Declare or revoke patient consent [DeclarePatientConsentRequest – RevokePatientConsentRequest]:* declares/revokes an informed consent of a patient.

    Note: the validity of the SSIN and support card numbers is checked through the ID Support Webservice which relays the request to a CBSS webservice at the declaration and the revocation of the patient consent.

- The Therapeutic links: If a patient consent is active at the MetaHub level, healthcare professionals can access the medical documents of a patient only when a therapeutic link that justifies this consultation exists.
  - Get Therapeutic links [GetTherapeuticLinkRequest]: allows for verification whether a therapeutic link exists between a healthcare professional and a patient. This service relays all the requests to the Therlink webservice which relays them to a CIN webservice that has this information. The response of this service will then be relayed back.
- If a Therapeutic exclusion exists between a patient and a healthcare professional, then this healthcare professional will not have access to the documents even if he fulfils all the requirements.
  - Get Therapeutic exclusions [GetTherapeuticExclusionRequest]: allows the verification whether for a certain healthcare professional-patient combination, exclusion exists in the MetaHub.
  - Declare or revoke Therapeutic exclusion [PutTherapeuticExclusionRequest – RevokeTherapeuticExclusionRequest]: declares/revokes a Therapeutic exclusion of a healthcare professional for a certain patient. Call is made to CoBRHA for validation of the healthcare professional data.

    Note: the validity of the SSIN and support card numbers is checked through the ID Support Webservice which relays the request to a CBSS webservice at the declaration and the revocation of the therapeutic exclusion,
- The audits:
  - Get Patient Audit Trail [GetPatientAuditTrailRequest]: allows a patient to check the history of actions hubs have taken concerning him. It only concerns actions taken within the scope of the MetaHub service.
  - Get MetaHub Delta [GetMetahubDeltaRequest]: provides the caller with a delta list of all the changes that have been made regarding consents, therapeutic exclusions and patient links within a certain time period (used as a local cache of the eHealth DB's).

2.5. Validity of the agreement

This document is valid as long as the *Base Service MetaHub* 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.

2.6. Service and maintenance window

2.6.1. 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.

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.

2.6.2. 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.

2.6.3. Maintenance Windows & Planned Interventions

During the Major Releases, a downtime of maximum 30 minutes is authorised. This downtime will not be taken into account when calculating the Availability of the different Services. Other periods can be agreed between the Constituent and the Service Provider.

Interventions authorized on the Active environment are Corrective actions intended to enhance the availability or stability of the Service. Unavailability caused by these interventions will be recorded as downtime.

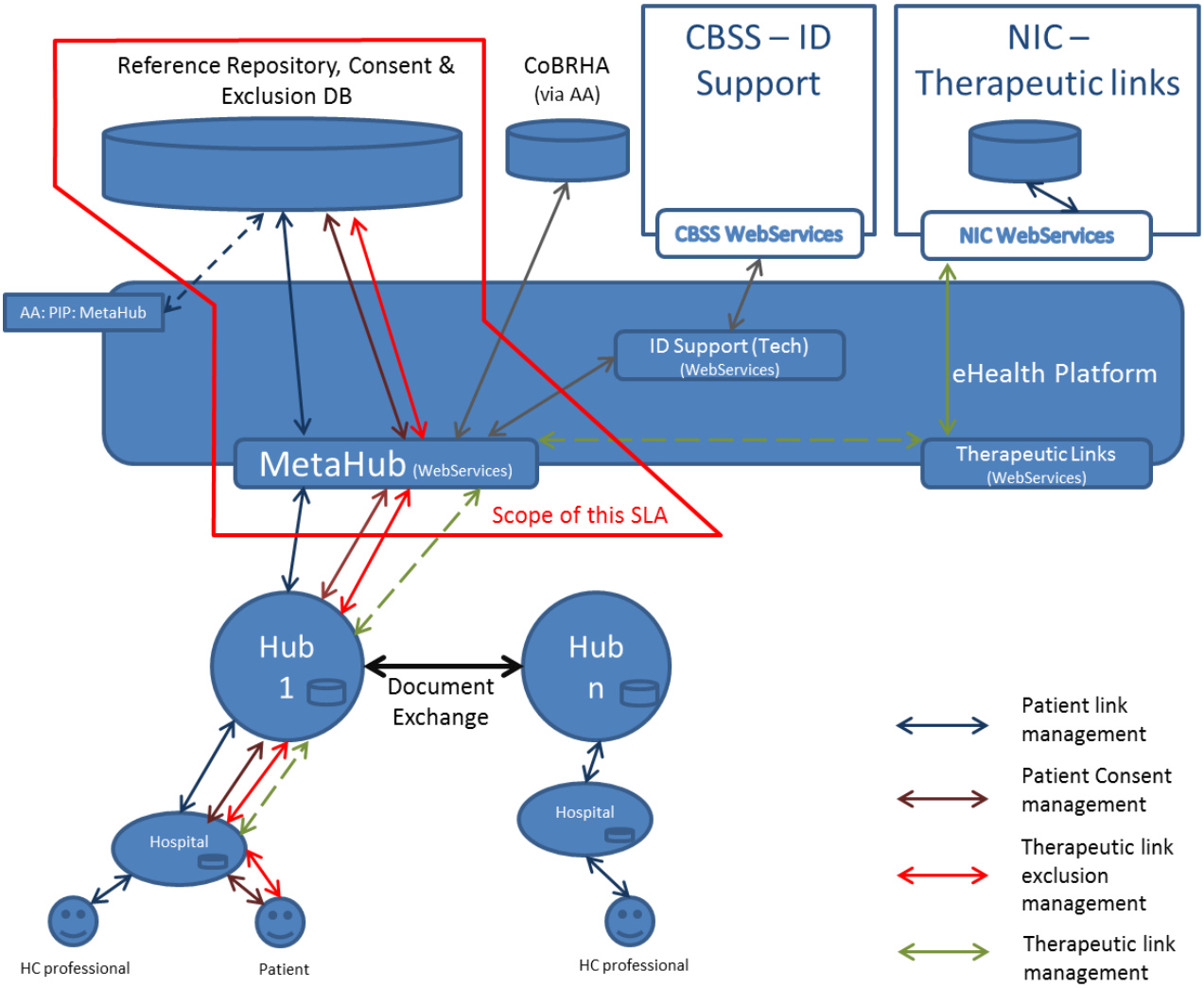
2.6.4. Unplanned Interventions

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

3. Service scope

3.1. eHealth service

3.1.1. General



The main components included in this SLA are:

- MetaHub DB (Reference Repository), Consent and Exclusion DB
- eHealth MetaHub Webservices (used by the Hubs, after Access Rights checks):
  - Patient link management (Get/Declare/Revoke)
  - Informed Patient Consent management (Get/Declare/Revoke)
  - Therapeutic Exclusion management (Get/Declare/Revoke)
  - Therapeutic Links Request (Get only, for GMD therapeutic links only)
  - Get Patient Audit Trail
  - Get MetaHub Delta

3.1.2. Abbreviations

AA	Attribute Authority
CBSS	Crossroads Bank for Social Security
CIN (NIC)	Collège Intermutualiste National
CoBRHA	Common Base Registry for Healthcare Actors
GMD	Global Medical Dossier
HC	Health Care
STS	Secure Token Service
SSIN	Social Security Identification Number
UAM	User and Access Management

3.2. Business criticality

The business criticality of MetaHub service is **Gold** as it supports mandatory business processes that should be processed synchronously and within some legal periods.

3.3. Interdependencies

N/A

4. List of service levels

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

Service	KPI	SL ID	Condition	Measure based on	Limit	Service Window	Objective Committed	Objective Target
MetaHub	Availability MetaHub WS		Test script passes	Fictitious request		Mo – Su 0:00 – 24:00	99,5%	99,9%
	Performance MetaHub WS - DeclarePatientLink		Response time < 1 sec	Real transactions		Mo – Su 0:00 – 24:00	98,0%.	99,0%
	Performance MetaHub WS - GetPatientLink		Response time < 1 sec	Real transactions		Mo – Su 0:00 – 24:00	98,0%.	99,0%
	Performance MetaHub WS - RevokePatientLink		Response time < 4 sec	Real transactions		Mo – Su 0:00 – 24:00	98,0%.	99,0%
	Performance MetaHub WS – GetPatientConsent		Response time < 1 sec	Real transactions		Mo – Su 0:00 – 24:00	98,0%.	99,0%
	Performance MetaHub WS – DeclarePatienConsent		Response time < 1 sec	Real transactions		Mo – Su 0:00 – 24:00	98,0%.	99,0%
	Performance MetaHub WS – RevokePatienConsent		Response time < 1 sec	Real transactions		Mo – Su 0:00 – 24:00	98,0%.	99,0%
	Performance MetaHub WS – GetTherapeuticExclusion		Response time < 1 sec	Real transactions		Mo – Su 0:00 – 24:00	98,0%.	99,0%
	Performance MetaHub WS – GetTherapeuticLinks		Response time < 4 sec	Real transactions		Mo – Su 0:00 – 24:00	N-A	98,0%

Service	KPI	SL ID	Condition	Measure based on	Limit	Service Window	Objective Committed	Objective Target
	Performance MetaHub WS - PutTherapeuticLink		Response time < 4 sec	Real transactions		Mo – Su 0:00 – 24:00	N-A	98,0%
	Performance MetaHub WS – GetMetahubdelta		Response time < 4 sec	Real transactions		Mo – Su 0:00 – 24:00	N-A	99,0%
	Performance MetaHub ws – RevokeTherapeuticLink		Response time < 4 sec	Real transactions		Mo – Su 0:00 – 24:00	N-A	98,0%
	Performance MetaHub WS – GetPätientAuditTrail		Response time < 1 sec	Real transactions		Mo – Su 0:00 – 24:00	N-A	99,0%

5. Detailed service level per service

5.1.1. Availability MetaHub WS – Get Patient Link

<table>
<tr><th colspan="4">Objectives</th></tr>
<tr><td>Definition</td><td colspan="3">• The eHealth MetaHub ws is considered to be available when:
○ The MetaHub ws can be accessed and respond (keep Alive test)
• Planned interventions executed within the Maintenance Window are not recorded as unavailable time.</td></tr>
<tr><td>Measuring method</td><td colspan="3">• 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 an other result, the test “failed”
• Measuring is always done on test scenarios</td></tr>
<tr><td>Calculation</td><td colspan="3">$$Availability = \frac{\sum Passed\ Tests\ x\ 100}{\sum Total\ Tests}\%$$
○ 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="3">• 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="2">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 MetaHub ws</td><td>Mo – Su 0:00 – 24:00</td><td>99,5%</td><td>99,9%</td></tr>
</table>

5.1.2. Performance MetaHub WS

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

The performance of the eHealth MetaHub webservice refers to its response time. Response time meaning the time needed to execute a request. This request can be:

Get Patient links
Declare/Revoke Patient link
Get Patient Consent (for information)
Declare/Revoke Patient Consent (depends on CBSS) (for information)
Get Therapeutic exclusions (for information)
Declare/Revoke Therapeutic exclusions (depends on CBSS) (for information)
Get Therapeutic links (for GMD only), depends on CIN (for information)
Get Patient Audit Trail (for information)
Get MetaHub Delta (for information)

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.

</td></tr>
<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></tr>
<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:

$$Performanæ = \frac{\sum Tests\ meeting\ the\ target\ x\ 100}{\sum Total\ Tests}\%$$
</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="7">Service Level Objectives</td><td rowspan="2">Functionality</td><td rowspan="2">Target</td><td colspan="2">Service Level Objective</td></tr>
<tr><td>Committed</td><td>Target</td></tr>
<tr><td>Performance MetaHub WS:
• DeclarePatientLink</td><td>< 1 sec</td><td>98,0%</td><td>99,0%</td></tr>
<tr><td>Performance MetaHub WS:
• GetPatientLink</td><td>< 1 sec</td><td>98,0%</td><td>99,0%</td></tr>
<tr><td>Performance MetaHub WS:
• RevokePatientLink</td><td>< 4 sec</td><td>98,0%</td><td>99,0%</td></tr>
<tr><td>Performance MetaHub WS:
• GetPatientConsent</td><td>< 1 sec</td><td>98,0%</td><td>99,0%</td></tr>
<tr><td>Performance MetaHub WS:</td><td>< 1 sec</td><td>98,0%</td><td>99,0%</td></tr>
</table>

	• DeclarePatienConsent			
	Performance MetaHub WS: • RevokePatienConsent	< 1 sec	98,0%	99,0%
	Performance MetaHub WS: • GetTherapeuticExclusion	< 1 sec	98,0%	99,0%
	Performance MetaHub WS – • GetTherapeuticLinks	<4 sec	N-A	98,0%
	Performance MetaHub WS • PutTherapeuticLink	< 4 sec	N/A	98,0%
	Performance MetaHub WS • RevokeTherapeuticLink	< 4 sec	N/A	98,0%
	Performance MetaHub WS; • GetMetahubdelta	< 4 sec	N-A	99,0%
	Performance MetaHub WS: • GetPatientAuditTrail	< 1 sec	N-A	99,0%