



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Departement des Innern EDI

Bundesamt für Gesundheit BAG

Abteilung Digitale Transformation

Swiss Interoperability Conformity Assessment Scheme (SIAS)

Edition 1.9: 1. June 2024

1.	Introduction	5
1.1	Purpose of this document.....	5
1.2	Document life cycle	5
1.3	Contact for inquiries about SIA and SIAS	5
2.	References.....	6
2.1	Legislative texts (German version).....	6
2.2	Specifications	6
3.	Scope of the SIA	7
4.	Resources	7
4.1	Execution test reports.....	7
4.2	Testing tools	7
5.	SIA actors and responsibilities.....	9
6.	Requirements.....	10
6.1	Requirements for the FOPH.....	10
6.2	Requirements for the certification body.....	10
6.3	Requirements for test laboratories	11
6.4	Requirements for the communities and reference communities	11
6.4.1	Context reminder	12
6.4.2	Preparation before the assessment.....	12
6.4.3	Test plan	13
6.4.4	Test cases description and related tools	20
7.	Annexes	34
7.1	Certification Test System and Test Tools	34
7.2	Execution test report summary (sample)	35
7.3	Detailed test report (Template example).....	41
8.	Changelog.....	43

Glossary

Term	Abbr.	Definition	Source
Certificate		Third-party attestation related to products, processes, systems or persons. A certificate is delivered to the communities that meet the criteria set out in articles 9 to 13 of the EPRO and to the reference communities that meet the criteria set out in articles 9 to 21 of the EPRO.	ISO/IEC 17000 Art. 30 ff. EPRA (SR 816.11)
Certification		Communities and reference communities are subject to certification.	Art. 11 a EPRA (SR 816.1)
Certification Body	CB	“Certification body” is defined as an accredited external body issuing written assurance (the “certificate”) that it has audited and verified that the product or software conforms to the requirements of the EPRA and its ordinances. Requirements for the certification body in the context of the EPR are specified in Art. 28 and 29 EPRO (SR 816.11).	ISO 9001:2008 ISO 14001:2004 Art. 11 a EPRA (SR 816.1) Art. 28 and 29 EPRO (SR 816.11)
Certification Test System	CTS	Test system provided by the FOPH to examine the transfer of data between and inside communities or reference communities during an SIA.	Art. 28 para. 4 EPRO (SR 016.11)
Community		Organisational unit of health professionals and their institutions.	Art. 2 d EPRA (SR 816.1)
Conformity		Demonstration that specified requirements relating to a product, process, system, person or body are fulfilled.	ISO/IEC 17000
Conformity Assessment Scheme	CAS	Conformity assessment system related to specified objects of conformity assessment to which the same specified requirements, specific rules and procedures apply.	ISO/IEC 17000
Electronic Patient Record	EPR	A remotely archived virtual record which allows data from a patient’s medical history relevant to their treatment or data that the patient has recorded themselves to be retrieved in the event that the patient requires treatment.	EPRA (SR 816.1)
EPR Platform		Central IT infrastructure of a community or reference community.	
Exchange format		Exchange formats enable the simple exchange of data between different IT systems (machine-to-machine communication) without special agreements (automatically). Annex 4 EPRO-FDHA defines the technical and semantic standards of the exchange formats.	Art. 10 para. 3 b EPRA (SR 816.1) Annex 4 EPRO-FDHA (SR 816.111)
Execution Test Report		Document recording the test execution conditions and the final test results performed by an EPR platform of a specific community.	
FDHA Ordinance on the Electronic Patient Record	EPRO-FDHA	The ordinance of 22 March 2017 completes the Federal Act on the EPR by providing technical requirements in its nine annexes.	EPRO-FDHA (SR 816.111)
Federal Act on the Electronic Patient Record	EPRA	The Federal Act on the Electronic Patient Record, in force since 15 April 2017, regulates the conditions of introduction and dissemination of the EPR.	EPRA (SR 816.1)
Federal Ordinance on the Electronic Patient Record	EPRO	The ordinance of 22 March 2017 completes the Federal Act on the EPR by providing organisational, functional and certification requirements.	EPRO (SR 816.11)

Term	Abbr.	Definition	Source
Integration Profile		An integration profile is a guideline for implementation of a specific interoperability process, which provides precise definitions of how standards shall be implemented to meet specific requirements for exchanging or sharing clinical data.	IHE
Primary System		IT infrastructure of the health institution (hospital, pharmacy, nursing home, etc.)	13.050 Dispatch on the Federal Act on Electronic Patient Record of 29 May 2013; chapter 1.1.4
Reference Community		Community that performs additional tasks (e.g. administering patients).	Art. 2 e EPRA (SR 816.1)
Scheme Owner		Person or organisation responsible for developing and maintaining a specific certification scheme.	ISO/IEC 17065
Secondary System		Infrastructure of the EPR that holds data provided by the primary systems.	13.050 Dispatch on the Federal Act on Electronic Patient Record of 29 May 2013; chapter 1.1.4
Swiss Interoperability Conformity Assessment	SIA	Process demonstrating whether the Swiss interoperability requirements as defined in the EPRO-FDHA, annex 2, chapter 2.8a and 2.9, have been fulfilled by the community or the reference community.	
Swiss Interoperability Conformity Assessment Scheme	SIAS	Provides the technical and operational requirements as well as rules by which the Swiss Interoperability Conformity Assessment will be executed. Conformity requirements are derived from annex 2; annex 3; annex 4, annex 5; annex 5, amendment 1 and amendment 2; and annex 9 of the EPRO-FDHA.	
System Under Test	SUT	“System under test” is a system implementation that is tested against the Conformity Assessment Scheme.	IHE CAS
Test Case		A set of test scripts including values, execution pre-conditions, expected results and execution post-conditions, developed for a particular objective or test condition, such as to exercise a particular programme path or to verify compliance with a specific requirement.	IEEE 610
Test Laboratory		Organisation that carries out the SIA by means of the certification test system and according to the rules defined in the SIAS.	
Test Method		A definitive procedure that produces a test result using a combination of test cases, procedures, test data references and test tools.	EURO-CAS
Test Procedure		A step-by-step implementation of a test method contained in an automated test tool or defined via manual step.	EURO-CAS
Test Scripts		Test procedures that describe the sequence of actions for the execution of a given test procedure.	ISTQB
Test Specifications		A collection of test procedures for a particular functional area, including the background, approach, procedure and possible results for a test. A test specification is an aggregation of test descriptions.	EURO-CAS
Test Tools		An automated implementation of one or more test procedures.	EURO-CAS

1. Introduction

1.1 Purpose of this document

This document describes the Swiss Interoperability Conformity Assessment Scheme (SIAS) for assessing the electronic patient record platform (EPR platform), under the operational responsibility of a community or a reference community¹. It provides the technical and operational requirements as well as rules by which the conformity assessment will be executed. Conformity requirements are derived from annex 2; annex 3; annex 4, annex 5; and annex 5, amendment 1, amendment 2.1, amendment 2.2 and amendment 2.3, of the FDHA Ordinance on the Electronic Patient Record (SR 816.111 EPDV-EDI).

The document is available in English only.

1.2 Document life cycle

This document is periodically updated by order of the FOPH. Reasons to update this document include but are not limited to updates of

- the EPRO-FDHA and its annexes,
- the test cases, data and tools used for assessing the SUT and included in the CTS.

The most current edition of the SIAS is available on the FOPH website at <https://www.bag.admin.ch/epra>.

1.3 Contact for inquiries about SIA and SIAS

If you have any question about this document and SIAS, please contact the FOPH via email to ehealth@bag.admin.ch

SAS accredited certification bodies are published on the SAS website at <https://www.sas.admin.ch/sas/en/home/akkreditiertestellen/akkrstellensuchesas.html>

¹ In the remainder of this text, references to “community” always mean community AND reference community, except if stated otherwise.

2. References

2.1 Legislative texts (German version)

- [SR 816.1 Bundesgesetz vom 19. Juni 2015 \(Stand am 15. April 2020\) über das elektronische Patientendossier \(EPDG\)](#)
- [SR 816.11 Verordnung vom 22. März 2017 \(Stand am 1. April 2019\) über das elektronische Patientendossier \(EPDV\)](#)
- [SR 816.111 Verordnung des EDI vom 22. März 2017 \(Stand am 15. April 2021\) über das elektronische Patientendossier \(EPDV-EDI\)](#)
 - o [Anhang 2 der EPDV-EDI \(Zertifizierungsvoraussetzungen Gemeinschaften und Stammgemeinschaften\) - Ausgabe 7 - Inkrafttreten 01.06.2024](#)
 - o [Anhang 3 der EPDV-EDI \(Metadaten für den Austausch medizinischer Daten\) - Ausgabe 6 - Inkrafttreten 01.06.2024](#)
 - o [Anhang 4 der EPDV-EDI \(Austauschformate\) – Ausgabe 3 – Inkrafttreten 01.06.2024](#)
 - o [Ergänzung 1 zum Anhang 5 der EPDV-EDI \(Nationale Anpassungen der Integrationsprofile\) - Ausgabe 7 - Inkrafttreten 01.06.2024](#)
 - o [Ergänzung 2.1 zum Anhang 5 der EPDV-EDI \(Nationale Integrationsprofile\) - Ausgabe 6 - Inkrafttreten 01.06.2024](#)
 - o [Ergänzung 2.2 zum Anhang 5 der EPDV-EDI \(Nationale Integrationsprofile\) - Ausgabe 5 - Inkrafttreten 01.06.2024](#)
 - o [Ergänzung 2.3 zum Anhang 5 der EPDV-EDI \(Nationale Integrationsprofile\) - Ausgabe 6 - Inkrafttreten 01.06.2024](#)
 - o [Anhang 9 der EPDV-EDI \(Metadaten für den Dienst zur Abfrage der Gesundheitseinrichtungen und Gesundheitsfachpersonen\) - Ausgabe 3 - Inkrafttreten 01.06.2023](#)

2.2 Specifications

- Legally binding specifications are available on the FOPH website at <https://www.bag.admin.ch/epra>, tab “Dokumente” (Documents).
- Most current specifications (status: in process and not in force, respectively) are available on the eHealth Suisse website at <http://www.e-health-suisse.ch/specs>.
- Additional resources (e.g. XSD schemas, examples) are available on the FOPH website at <https://www.bag.admin.ch/epra>.

3. Scope of the SIA

The scope of the SIA is defined by EPRO-FDHA, annex 2, chapter 2.8a and 2.9.

For all transactions listed in section 6.4.3 in this document, a community must demonstrate during a SIA that these transactions are supported by its EPR platform according to the corresponding specifications. If a community decides not to implement one or more of the transactions defined in section 6.4.3, the community has to inform the test laboratory and the certification body at least four weeks prior to the SIA and has to document the identified deviations. The document provided by the community must list all the missing transactions, and for each of them a rationale explaining why these transactions have not been implemented. (See also chapter 6.4 note for document “Technical guidelines for SIA testing”.) After analysis of the provided information, the certification body together with FOPH will then decide whether it is acceptable not to support those transactions.

4. Resources

4.1 Execution test reports

Two execution test reports describe the test results:

- An *execution test report summary* of the community EPR platform. The report provides a summary of the test results for each SUT of the EPR platform concerned. An example is provided in annex 7.2.
- A *detailed test report* of the community EPR platform. The report provides detailed test results for each SUT of the EPR platform. An example is provided in annex 7.3.

4.2 Testing tools

The testing tools used for the execution of the test cases are classified in different categories as described in Antilope Project D3.1 deliverable²:

Table 1: SIA testing tools overview (based on Antilope D3.1)

Test tool category	Description
Test management tools	<p>A test management tool needs to facilitate the execution of tests but may include additional functionalities that would be useful in performing the tests and collecting the results. This document will focus on two distinct groups within the wide range of test management tools:</p> <p>a) Tools that help organize and run interoperability events involving large numbers of participants, such as the Swiss Projectathon or assessment sessions of a community where a large number of tests are performed. The tools in this group will typically manage test scenarios for peer-to-peer tests and may also support test planning and setup of the Swiss Projectathon. They may also support the configuration process for all participating communication partners (e.g. IP addresses, ports, codes to be used, message types, other tools such as simulators and validators). In order to trigger actual test runs, the software ideally selects the communication partners from the pool of existing systems based on a number of criteria, including their communication capabilities and test instances required to reach the system’s certification goals for the event (e.g. to run each test case with a certain number of distinct test partners). Such tools may also support other functionalities such as authoring of test cases and reporting of interim and final test results to the test managers and test partners.</p> <p>b) Execution frameworks that facilitate the selection of individual tests and the collection of test results, including evidence of tests performed such as pass/fail verdicts with corresponding traces.</p> <p>Example: Gazelle Management Tool (https://gazelle.ihe.net/content/gazelle-user-guides or https://gazelle.ihe.net/EU-CAT/home.seam)</p>

² <https://www.antilope-project.eu/front/index.html>

Test tool category	Description
Conformance testers	<p>A conformance tester is an automated tool that is capable of checking the behavior of the system under test. The tester takes the role of the communication partner, provides stimuli to the system under test, collects the responses and evaluates whether the order, timing and/or content of messages sent by the system under test conforms to the requirements of a given standard and integration profile. Advanced testers may take the roles of all entities that are communicating with the system under test.</p> <p>In some situations, a conformance tester is used to validate the structure and/or content of a document used in eHealth systems.</p> <p>The extent to which the conformance tester tools test the requirements in the integration profile varies and depends on the test plan defined in the CTS. Advanced conformance testing tools would check most or all important requirements.</p> <p>Depending on the level of precision in reporting discovered problems, conformance tester tools can provide valuable assistance in the rapid discovery and resolution of interoperability problems.</p> <p>Example: Gazelle EVS Client (https://gazelle.ihe.net/EVSCClient/home.seam)</p>
Simulators/stubs	<p>A simulator, or stub, is a tool acting as a connection partner to the system that needs to be tested.</p> <p>In most cases, a simulator stimulates the system under test (SUT) in order to trigger a certain behavior. The kind of stimulation depends on the type of partner to be tested. For a system on a network, the stimulation would occur by sending network messages. For other systems, this could mean feeding data into specific directories, simulating user input or any other input.</p> <p>A simulator itself does not assess the behavior of the tested entity. However, a simulator may have integrated capability to collect the trace of the exchange that could then be evaluated manually or by other means.</p> <p>Simulator tools are useful for pre-testing before interoperability events or as a replacement for needed communication partners that are not available in an event.</p> <p>For eHealth interoperability, testing general purpose tools may not be sufficient, and specific sophisticated simulators may be required.</p> <p>Example: Gazelle Patient Manager (https://gazelle.ihe.net/PatientManager/home.seam)</p>
Software libraries	<p>Software libraries may be used to build both eHealth systems and eHealth testing tools. An example is a library that supports encoding and decoding of HL7 messages. Such a library can be and is used to build a system that follows an IHE integration profile, but it can also be used to build testing tools that can be used for testing the same integration profile. While, strictly speaking, such libraries are not testing tools as such, the ability to share code development efforts may contribute significantly to the improvement of interoperability of eHealth systems.</p>
Test data generators	<p>A test data generator accelerates test data preparation by providing valid input data to be used in testing. The best results are achieved if a data generator can be used in such a way as to efficiently generate data that respects the constraints set by an integration profile being tested.</p> <p>Example: Gazelle Demographic Data Server (https://gazelle.ihe.net/DDS/home.seam)</p>
Reference implementations	<p>A reference implementation is, generally speaking, an implementation of a specification (standard or integration profile) to be used as a definitive interpretation for that specification. Other testing tool categories (libraries, conformance testers and others) may also represent reference implementations.</p>
Support tools	<p>During testing and debugging, various support tools may be useful. While they do not test anything themselves, they may provide the means of collecting the information that is needed to progress with testing. Examples include viewers that present the information in an understandable format, proxies that facilitate reliable and uniform collection of traces and many others.</p> <p>Example: Gazelle Security Suite (https://gazelle.ihe.net/gss/home.seam)</p>

Test tool category	Description
Network sniffers	<p>Network sniffers are also known as network analysers or protocol analysers. A sniffer is capable of decoding and analysing communication protocol messages inside the data packages. This can be done transparently to an ongoing communication, as required by non-destructive protocol testing. Network sniffers must be able to decode all relevant communication protocols (TCP/IP, HL7, DICOM, etc.) in order to prepare message validation or other tasks. Sniffers are not only used in eHealth but are applicable to any domain that uses network messaging to exchange information.</p> <p>Example: Gazelle Proxy (https://gazelle.ihe.net/proxy/home.seam)</p>

5. SIA actors and responsibilities

The following paragraph provides the technical and operational requirements as well as the rules for the actors to comply with during SIA.

Responsibilities these actors may have during other parts of the certification process are beyond the scope of this document.

- **FOPH:** The Federal Office of Public Health holds the role of scheme owner. With technical experts (for example from eHealth Suisse, IHE Catalyst or a selected test laboratory), the FOPH specifies this SIAS to cover all the requirements and criteria for assessing the community's conformity with the Swiss interoperability specifications. In the context of a SIA, the FOPH is responsible for providing the CTS.
- **Community and reference community:** The community provides access for patients and health professionals to the electronic patient record. The community must be certified by a certification body. In the context of an SIA, the community is responsible for following the technical certification process led by the test laboratory and submits its SIA results to the certification body.
- **Test laboratory:** The test laboratory, mandated by the FOPH, performs the SIA and evaluates the community's EPR platform for compliance with technical requirements as described in section 6.4 of this document. In the context of an SIA, the test laboratory is responsible for the following tasks:
 - The test laboratory receives the Certification Test System (CTS) from the FOPH as a virtual machine/SaaS, which includes the necessary testing environment for performing the SIA.
 - The test laboratory performs the SIA with the community following this SIAS and according to overarching requirements (e.g. ISO/IEC 17025).
 - When the SIA is completed, the test laboratory provides the test report to the community and the certification body.
- **Certification body:** The certification body reviews the technical and organisational requirements of the EPRO-FDHA in the community. During the SIA the certification body has no active role. After the SIA is completed, the certification body has, on request, access to all test related data produced during the SIA. The certification body decides in which category (verification procedure, ordinary renewal or extraordinary renewal) the certification process shall apply to the community when adaptations are reported.

[RA2] Three categories of influence on the certification are defined:

1. Adaptions to be audited during renewal of the certification: This category includes those topics/changes whose implementation by the communities **is not considered urgent**, as there is little or no risk to the Swiss EPR if they are not implemented. The transition period for implementation corresponds to the validity of the certification.
2. Adaptions to be audited during the annual audit: This category includes those topics/changes whose implementation by the communities **is not considered particularly urgent**. A maximum implementation period of one year is accepted.
3. Adaptions to be audited during an extraordinary renewal of the certification: This category includes topics/changes whose implementation by the communities **is considered particularly urgent**. Failure to implement the change entails the risk that the interoperability of the community systems is no longer given and/or a data protection and data security risk exists. It is therefore mandatory that the communities implement and certify the change as soon as possible.

6.3 Requirements for test laboratories

[RB1] The test laboratory SHALL provide a guideline on how to prepare for the SIA to the communities.

[RB2] The test laboratory SHALL approve the list of SUTs provided by the community (see [RC1]) that are included in the EPR platform and that SHALL be assessed and this before registering the SUTs at the SIA. This approval also includes any documented deviations from EPRO-FDHA, annex 2, chapter 2.8a and 2.9, if applicable. (see chapter 3 *Scope of the SIA*)

[RB3] The test laboratory SHALL accurately and clearly report the results of each test or series of tests carried out in accordance with any specific instructions in the test scripts. The two execution test reports SHALL at least fulfil the ISO/IEC 17025 report requirements.

[RB4] In addition to the requirements listed in [RB3], the execution test reports SHALL – where relevant for the interpretation of the test results – include information about deviations from, additions to or exclusions from the test methods, and information on specific test conditions, any opinions or interpretations.

[RB5] When all the registered SUTs of the community EPR platform have completed their assessments, the test laboratory SHALL provide to the community all the execution test reports (detailed and summary execution test reports) of the SUTs that are included in the EPR platform.

[RB6] The test laboratory SHALL use the CTS provided by the FOPH. In case of provision as SaaS, the FOPH SHALL provide access credentials to the platform.

[RB7] The validation report of the major version of the CTS and its configuration SHALL be sent to the FOPH, which will authorise the test laboratory to perform the SIA.

Note: The test laboratory receives the CTS on its premises or accesses the CTS directly in the cloud using its credentials. The test laboratory configures the CTS according to its own procedures and controls the conformity of the CTS using, for example, reference test data before starting any test session. The test laboratory issues a validation report on the CTS conformity.

[RB8] The SIA MAY be conducted online. In this case, the test laboratory SHALL define operational rules and procedures for running the SIA. The operational rules and procedures that impact the EPR platform SHALL be clearly provided and explained to the community during the preparation of the SIA.

[RB9] The test laboratory SHALL NOT disclose the status of the community or the results of the SIA without the community's prior written approval (which MAY be given by email).

[RB10] The test laboratory SHALL operate under the [Federal Act on Data Protection](#) (FADP).

6.4 Requirements for the communities and reference communities

Note: The document "Technical guidelines for SIA testing" provides information on the SIA testing process. It describes the SIA process, the main testing activities and technical requirements.

Furthermore, it provides the list of actors and components needed to implement a reference EPR platform. The document “Technical guidelines for SIA testing” can be requested from the FOPH.

6.4.1 Context reminder

A reference community or a community manages the EPR platform accessible by patients and healthcare professionals. The EPR platform is an aggregation of components or SUTs that collaborate in order to provide all the services and exchange formats according to annex 4 EPRO-FDHA for the EPR and where the set of integration profiles as defined in EPRO-FDHA, annex 2, chapter 2.9, is distributed among all the SUTs constitutive of the EPR platform.

[RC1] When a community registers for a SIA, the community SHALL provide an exhaustive list of SUTs and the needed information (see [RD5]) to the test laboratory and, if relevant, a documentation of any deviation from the required transactions as defined in EPRO-FDHA, annex 2, chapter 2.9. (see chapter 3 *Scope of the SIA*).

[RC2] When the list of SUTs is approved, the community SHALL register the EPR platform to the test laboratory for the assessment of their EPR platform SUTs and will provide their SUT characteristics (name, version, integration profile/actor/option) no later than three weeks before the start of the SIA testing.

[RC3] The list of SUTs that contribute to the integrity of the EPR platform SHALL NOT change at any time during the SIA. Its integrity SHALL be attested to when requested by the test laboratory.

[RC4] The community SHALL provide to the test laboratory all the information and documentation needed to successfully perform the SIA with a community or a reference community.

[RC5] When the conformity assessment is completed, the community SHALL send **all** the detailed reports of their EPR platform SUTs to the certification body as part of the documents needed for issuing the certification.

[RC6] The community MAY appeal the findings documented in a test execution report only if the community failed testing and believes in good faith that the test laboratory reported an incorrect decision about the compliance of the EPR platform based upon how it was evaluated during the SIA, due to a perceived bias or error and that, as a result, the test execution report does not accurately reflect the conformity of the EPR platform with the requirements listed in section 6.4.3. Both parties SHALL agree that neither of them will make any public statements or disclosures about the community’s appeal during or after the appeal except as required by law. The appeal will be processed by the test laboratory under its ISO/IEC 17025 accreditation.

6.4.2 Preparation before the assessment

[RD1] The community SHALL select a set of integration profiles in the list of integration profile/actor pairs presented in section 6.4.3 for their EPR platform.

[RD2] During preparation, the community MAY be supported by the test laboratory only for the SIA scope and its context to successfully perform the SIA.

[RD3] For more efficiency and to reduce cost, the community SHOULD participate in one of the Swiss Projectathons and SHOULD test the SUTs of their EPR platform.

Note 1: The Projectathon supports operators and implementers in improving their products and facilitating the adoption of the testing tools they will use during the SIA.

Note 2: The community has to prepare themselves by means of the reference EPR platform.

[RD4] The community SHALL nominate a project leader who will interface with the test laboratory during the SIA and during preparation of the SIA.

Note: The test laboratory MAY request other human resources such as SUT operators with relevant skills and experiences.

[RD5] All the needed information about the SUTs – such as name(s) of the vendors(s), names of the SUTs, versions of the SUTs, names of the SUT operators, name and address of the community, contact names, previous execution test reports – SHALL be provided to the test laboratory.

6.4.3 Test plan

This section describes the technical criteria for certification called *test plan*. This test plan is defined based on the integration profiles and test methods, e.g. test cases and test tools, embedded in the CTS.

The next sub-section provides the list of profiles, actors and transactions as well as the reference specifications and a reference to a sub-section with a description of the related test cases. To perform test cases, the Certification Test System (CTS) is used as a reference test system. The CTS includes a set of test tools as described in the annex 7.1.

6.4.3.1 IHE Integration Profiles

Integration Profile	Nat- Ext.	Actors	Transactions	Reference Specifications	Test cases
ATNA Audit Trail and Node Authentication <i>Basic security through a) functional access controls, b) defined security audit logging and c) secure network communications</i>	Yes	<ul style="list-style-type: none"> Secure Application Audit Repository 	<ul style="list-style-type: none"> Authenticate Node [ITI-19] Record Audit Event [ITI 20] 	IHE IT Infrastructure Technical Framework <ul style="list-style-type: none"> Vol 1 – Section 9; Revision 19.0 (2022-06-17) Vol 2 ITI TF-2; Revision 19.0 (2022-06-17) Download ⁴ Amendment 1 to Annex 5 of the EPDV-EDI <ul style="list-style-type: none"> Revision 01.06.2024 XSD Schemas <ul style="list-style-type: none"> 23-06-2021 	Section 6.4.4.1
CT Consistent Time <i>Synchronizes system clocks and time stamps of computers in a network (median error less than 1 second)</i>	Yes	<ul style="list-style-type: none"> Time Client 	Maintain Time [ITI-1]	IHE IT Infrastructure Technical Framework <ul style="list-style-type: none"> Vol 1 – Section 7; Revision 19.0 (2022-06-17) Vol 2 ITI TF-2; Revision 19.0 (2022-06-17) Download	Section 6.4.4.2
HPD Health Provider Directory	Yes	<ul style="list-style-type: none"> Provider Information Directory 	<ul style="list-style-type: none"> Provider Information Query [ITI-58] Provider Information Feed [ITI-59] 	IHE IT Infrastructure Technical Framework Supplement	Section 6.4.4.3

⁴ Please note that ITI-TF Rev.19 has been archived by IHE. To consult the ITI specifications, you should download this zip file only once.

<p><i>Supports discovery and management of healthcare provider information, both individual and organizational, in a directory structure</i></p>		<ul style="list-style-type: none"> • Provider Information Consumer • HPD Healthcare Provider Directory 	<ul style="list-style-type: none"> • Provider Information Delta Download (CH:PIDD) 	<ul style="list-style-type: none"> • Healthcare Provider Directory; Revision 1.8 (2020-08-28) <p>Central Services Interface Documentation</p> <ul style="list-style-type: none"> • Revision-1.0.41 (2023-07-10) <p>Amendment 1 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01.06.2024 	
<p>PDQv3</p> <p>Patient Demographics Query HL7 V3</p> <p><i>Queries for patient identity from a central patient information server leveraging HL7 version 3</i></p>	Yes	<ul style="list-style-type: none"> • Patient Demographics Supplier 	<p>Patient Demographics Query HL7 V3 [ITI-47]</p>	<p>IHE IT Infrastructure Technical Framework</p> <ul style="list-style-type: none"> • Vol 1 – Section 24; Revision 19.0 (2022-06-17) • Vol 2 ITI TF-2; Revision 19.0 (2022-06-17) <p>Download</p> <p>Amendment 1 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01.06.2024 	Section 6.4.4.4
<p>PIXv3</p> <p>Patient Identifier Cross-Referencing HL7 V3</p> <p><i>Queries for the patient identify Cross-References between hospitals, sites, Health Information exchange networks etc. leveraging HL7 version 3</i></p>	Yes	<ul style="list-style-type: none"> • Patient Identifier Cross-Reference Manager 	<ul style="list-style-type: none"> • Patient Identity Feed HL7 V3 [ITI-44] • PIXV3 Query [ITI-45] 	<p>IHE IT Infrastructure Technical Framework</p> <ul style="list-style-type: none"> • Vol 1 – Section 23; Revision 19.0 (2022-06-17) • Vol 2 ITI TF-2; Revision 19.0 (2022-06-17) <p>Download</p> <p>Amendment 1 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01.06.2024 	Section 6.4.4.5
<p>SVS</p> <p>Sharing Value Set</p> <p><i>Distributes centrally-managed common, uniform nomenclatures</i></p>	No	<ul style="list-style-type: none"> • Value Set Consumer • MDI Metadata Index Service 	<ul style="list-style-type: none"> • Retrieve Value Set [ITI-48] 	<p>IHE IT Infrastructure Technical Framework</p> <ul style="list-style-type: none"> • Vol 1 – Section 21; Revision 19.0 (2022-06-17) • Vol 2 ITI TF-2; Revision 19.0 (2022-06-17) <p>Download</p>	Section 6.4.4.6

				Central Services Interface Documentation <ul style="list-style-type: none"> Revision-1.0.41 (2023-06-01) 	
XCA Cross Community Access <i>Supports the means to query and retrieve patient relevant medical data held by other communities. A community is defined as a coupling of facilities/ enterprises that have agreed to work together.</i>	No	<ul style="list-style-type: none"> Initiating Gateway (no Option) Responding Gateway (No option) 	<ul style="list-style-type: none"> Cross Gateway Query [ITI-38] Cross Gateway Retrieve [ITI-39] 	IHE IT Infrastructure Technical Framework <ul style="list-style-type: none"> Vol 1 – Section 18; Revision 19.0 (2022-06-17) Vol 2 ITI TF-2; Revision 19.0 (2022-06-17) Download	Section 6.4.4.7
XCA-I Cross Community Access for Imaging <i>Extends XCA to share images, diagnostic reports and related information across communities</i>	No	<ul style="list-style-type: none"> Initiating Gateway (Imaging) (no Option) Responding Gateway (Imaging) (No option) 	Cross Gateway Retrieve Image Document Set [RAD-75]	IHE IT Infrastructure Technical Framework <ul style="list-style-type: none"> Vol 1 – Section 27; Revision 19.0 (2022-06-17) Download IHE Radiology Technical Framework <ul style="list-style-type: none"> Vol 3 –Revision 20.0 (2022-03-10) Amendment 1 to Annex 5 of the EPDV-EDI <ul style="list-style-type: none"> Revision 01.06.2024 	Section 6.4.4.8
XCPD Cross-Community Patient Discovery <i>Locates communities with electronic health records for a patient and translates patient identifiers across communities</i>	Yes	<ul style="list-style-type: none"> Initiating Gateway (no Option) Responding Gateway (No option) 	Cross Gateway Patient Discovery [ITI-55]	IHE IT Infrastructure Technical Framework <ul style="list-style-type: none"> Vol 1 – Section 27; Revision 19.0 (2022-06-17) Vol 2 ITI TF-2; Revision 19.0 (2022-06-17) Vol 3 ITI-TF-3; Revision 19.30 (2022-06-17) Download Amendment 1 to Annex 5 of the EPDV-EDI <ul style="list-style-type: none"> Revision 01.06.2024 	Section 6.4.4.9
XDS Cross-Enterprise Document Sharing	Yes	<ul style="list-style-type: none"> Document Registry Document Repository 	Registry Stored Query [ITI-18]	IHE IT Infrastructure Technical Framework <ul style="list-style-type: none"> Vol 1 – Section 10; Revision 19.0 (2022-06-17) 	Section 6.4.4.10

<p><i>Shares and discovers electronic health record documents between healthcare enterprises, physician offices, clinics, acute care inpatient facilities and personal health records</i></p>		<ul style="list-style-type: none"> • Document Source 		<ul style="list-style-type: none"> • Vol 2 ITI TF-2; Revision 19.0 (2022-06-17) • Vol 3 ITI-TF-3; Revision 19.0 (2022-06-17) <p>Download</p> <p>Amendment 1 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01.06.2024 	
<p>XDS Metadata Update</p> <p><i>Provides support for updating metadata used in the profiles XDS and XDR.</i></p>	No	<ul style="list-style-type: none"> • Document Registry 	Update Document set (ITI-57)	<p>IHE IT Infrastructure Technical Framework</p> <ul style="list-style-type: none"> • Technical Framework Supplement (TI) Revision 1.13 (2022-06-17) <p>Amendment 1 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01.06.2024 	Section 6.4.4.10
<p>XDS-I</p> <p>Cross-enterprise Document Sharing for Imaging</p> <p><i>Extends XDS to share images, diagnostic reports and related information across a group of care sites</i></p>	No	<ul style="list-style-type: none"> • Imaging Document Consumer 	<ul style="list-style-type: none"> • Provide and Register Imaging Document Set – MTOM/XOP [RAD-68] • Retrieve Imaging Document Set [RAD-69] 	<p>IHE IT Infrastructure Technical Framework</p> <ul style="list-style-type: none"> • Vol 1 – Section 27; Revision 19.0 (2022-06-17) <p>Download</p> <p>IHE Radiology Technical Framework</p> <ul style="list-style-type: none"> • Vol 3; Revision 20.0 (2022-03-10) <p>Amendment 1 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01.06.2024 	Section 6.4.4.11
<p>XDM</p> <p>Cross-Enterprise Document Media Interchange</p> <p><i>Transfers documents and metadata using CDs, USB memory or email attachments</i></p>	No	<ul style="list-style-type: none"> • Portable Media Creator • Portable Media Importer 	Distribute Document Set on Media [ITI-32]	<p>IHE IT Infrastructure Technical Framework</p> <ul style="list-style-type: none"> • Vol 1 – Section 16; Revision 19.0 (2022-06-17) <p>Download</p>	Section 6.4.4.12

<p>XUA</p> <p>Cross-Enterprise User Assertion</p> <p><i>Communicates claims about the identity of an authenticated principal (user, application, system, ...) across enterprise boundaries - federated identity</i></p>	Yes	<ul style="list-style-type: none"> • X-Service User • X-Service Provider 	<ul style="list-style-type: none"> • Authenticate User • Get X-User Assertion • Provide X-User Assertion [ITI-40] 	<p>IHE IT Infrastructure Technical Framework</p> <ul style="list-style-type: none"> • Vol 1 – Section 13; Revision 19.0 (2022-06-17) • Vol 2 ITI TF-2; Revision 19.0 (2022-06-17) • Vol 3 ITI-TF-3; Revision 19.0 (2022-06-17) <p>Download</p> <p>Amendment 1 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01.06.2024 	Section 6.4.4.13
<p>RMU</p> <p>Restricted Metadata Update</p> <p><i>Provides a mechanism for changing Document Sharing Metadata both within and across community boundaries in a controlled manner</i></p>	Yes	<ul style="list-style-type: none"> • Update Initiator • Update Responder 	Restricted Update Document Set [ITI-92)	<p>IHE IT Infrastructure Technical Framework Supplement</p> <ul style="list-style-type: none"> • Restricted Metadata Update Revision 1.3 (2021-07-02) <p>Amendment 1 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01.06.2024 	Section 6.4.4.14

6.4.3.2 National Integration Profiles

Integration Profile	National Extension	Actors and Options	Transactions	Reference Specifications	Test Cases
<p>CH: ADR</p> <p>Authorization Decision request</p> <p><i>Defines new functionalities for XDS-based communities concerning the enforcement of access policies. They are applied to the clinical data by an XDS Document registry, as well as to the access policies themselves, which are stored in a Policy Repository</i></p>	New actors and transactions	<ul style="list-style-type: none"> • Authorization Decision Provider • Authorization Decision Consumer 	Authorization Decision Request (CH:ADR)	<p>Amendment 2.1 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01-06-2024 <p>XSD Schemas</p> <ul style="list-style-type: none"> • 26-11-2021 	Section 6.4.4.15
<p>CH: PPQ</p> <p>Privacy Policy Query</p>	New actors and transactions	<ul style="list-style-type: none"> • Policy Repository 	<ul style="list-style-type: none"> • Privacy Policy Feed [CH:PPQ-1] • Privacy Policy Retrieve [CH:PPQ-2] 	<p>Amendment 2.1 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01-06-2024 	Section 6.4.4.16

<p><i>Defines new functionalities for XDS-based communities concerning the management of access policies in terms of updating or modifying policies as well as querying policies from and adding policies to a Policy Repository by a Policy Source and Policy Consumer</i></p>				<p>XSD Schemas</p> <ul style="list-style-type: none"> • 26-11-2021 	
<p>CH:ATC Audit Trail Consumption <i>Defines the audit trail consumption requirements a community has to provide for a patient's audit trail</i></p>	Yes	<ul style="list-style-type: none"> • Patient Audit Consumer • Patient Audit Repository 	<ul style="list-style-type: none"> • Retrieve ATNA Audit Event [ITI-81] 	<p>Amendment 2.2 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01-06-2024 	Section 6.4.4.17
<p>CH:CPI Community Portal Index <i>Index containing all information about certified (reference-) communities and their endpoints according to the Federal Act on the Electronic Patient Record (EPRA)</i></p>	Yes	<ul style="list-style-type: none"> • CPI Consumer • CPI Provider 	<ul style="list-style-type: none"> • Community Information Query [CH:CIQ] • Community Information Delta Download [CH:CIDD] 	<p>Amendment 2.3 to Annex 5 of the EPDV-EDI</p> <ul style="list-style-type: none"> • Revision 01-06-2024 <p>Central Services Interface Documentation</p> <ul style="list-style-type: none"> • Revision-1.0.41 (2023-07-10) <p>XSD Schemas</p> <ul style="list-style-type: none"> • Revision 23-06-2021 	Section 6.4.4.18
<p>CH:EMED Exchange format eMedication</p>	Yes	<ul style="list-style-type: none"> • CH-EMED_CONTENT_CONSUMER 	<ul style="list-style-type: none"> • N/A 	<p>Annex 4 of the EPD-EDI</p> <ul style="list-style-type: none"> • 2024-06-01 (DE) • 2024-06-01 (FR) 	Section 6.4.4.20
<p>CH:VACD Exchange format eVaccination</p>	Yes	<ul style="list-style-type: none"> • CH-VACD_CONTENT_CREATOR • CH-VACD_CONTENT_CONSUMER 	<ul style="list-style-type: none"> • N/A 	<p>Annex 4 of the EPD-EDI</p> <ul style="list-style-type: none"> • 2024-06-01 (DE) • 2024-06-01 (FR) • 2024-06-01 (IT) 	Section 6.4.4.21
<p>CH: Allergy & Intolerance Exchange format eAllergy</p>	Yes	<ul style="list-style-type: none"> • CH-ALLERGYINTOLERANCE_CONTENT_CONSUMER 	<ul style="list-style-type: none"> • N/A 	<p>Annex 4 of the EPD-EDI</p> <ul style="list-style-type: none"> • 2024-06-01 (DE) • 2024-06-01 (FR) • 2024-06-01 (IT) 	Section 6.4.4.22

6.4.3.3 Other Interfaces: UPI

Standard interfaces to the Unique Person Identification (UPI) register of the Central Compensation Office (ZAS)

Profile	National Extension	Actors and Options	Interfaces	Reference Specifications	Test Cases
UPI Unique Person Identification <i>Index maintained by the Central Compensation Office (ZAS) that implements administrative identification of physical persons and the identification management</i>		<ul style="list-style-type: none"> • UPI_Service • UPI Client 	eCH-0213 <i>UPI / SPID announcements: This interface covers all SPID-based announcements that record information in the UPI. This standard also describes the common types of the three interfaces (eCH-0213-commons). The communication is based on a request addressed to the UPI and the response of the latter.</i>	eCH-0213 Schnittstellenstandard Meldungen UPI/SPID <ul style="list-style-type: none"> • Version 1.0 (2017-09-13) 	Section 6.4.4.19
		<ul style="list-style-type: none"> • UPI_Service • UPI Client 	eCH-0214 <i>UPI / SPID request: this interface covers all UPI requests concerning SPIDs. This is a read only interface. The communication is based on a request and a response from UPI.</i>	eCH-0214 Abfragen UPI/SPID <ul style="list-style-type: none"> • Version 2.0 (2018-12-03) 	
		<ul style="list-style-type: none"> • UPI_Service • UPI Client 	eCH-0215 <i>Broadcast Mutations UPI / SPID: this interface describes the broadcast (distribution) of the mutations of people with SPID that the UPI sends to all the customers who subscribed.</i>	eCH-0215 Broadcast Mutationen UPI/SPID <ul style="list-style-type: none"> • Version 2.0 (2018-12-03) 	

6.4.4 Test cases description and related tools

The following tables provide for each integration profile, the related test cases, a short test case description and the test case version. Above each table, there is a link to a PDF document with a detailed description of all test cases for the corresponding profile.

6.4.4.1 ATNA – Audit trail and Node Authentication

[Detailed test case description for ATNA](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
13888	ATNA_SA-SN_ITI19_Error_Cases	Verify Secure Application or Secure Node acting as Server are able to reject invalid TLS handshakes	Version: 1.1 Last modified: 26/01/24 17:13:50
13889	ATNA_SA-SN_ITI-20	Verify a Secure Application or a Secure Node is able to send an Audit Message with the Syslog protocol to the Syslog Collector simulator	Version: 1.0 Last modified: 26/01/24 17:14:08
13890	ATNA_SA-SN_Questionnaire	ATNA Secure Application or Secure Node completes the ATNA Questionnaire to provides information on secured elements of the system.	Version: 1.1 Last modified: 26/01/24 17:14:22

6.4.4.2 CT – Consistent Time

[Detailed test case description for CT](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
13891	CHCT_TIME-CLIENT_ITI1	Synchronize a system with a public NTP server on Swiss time	Version: 1.0 Last modified: 26/01/24 17:19:17

6.4.4.3 HPD – Health Provider Directory

[Detailed test case description for HPD](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
13895	CHHPD_PROV_INFO_CONS_ITI-58	Provider Info Consumer ITI-58 HPD query request on HPD Simulator Provider Info Directory message validation using EVSClient.	Version: 1.0 Last modified: 26/01/24 17:19:57

13894	CHHPD_PROV_INFO_DIR_ITI-58	Provider Info Consumer ITI-58 HPD query request on HPD Simulator Provider Info Directory message validation using EVSClient.	Version: 1.0 Last modified: 26/01/24 17:21:46
13893	CHHPD_PROV_INFO_DIR_ITI-59	An ITI-59 Provider Information Feed initiated from HPD Simulator to your system. HPD query response message validation using EVSClient	Version: 1.0 Last modified: 26/01/24 17:21:53
13892	CHHPD_PROV_INFO_SRC_ITI-59	HPD Provider Info Feed message from Provider Info Source, sent on HPD Simulator Provider Info Directory, validated using EVSClient	Version: 1.0 Last modified: 26/01/24 17:22:00

6.4.4.4 PDQv3 – Patient identifier Cross-Referencing HL7v3

[Detailed test case description for PDQv3](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
13898	CHPDQv3_PDS_ITI-47_1	This test checks the ability of your system acting as a CH:PDQV3 Patient Demographic Supplier to answer to an exact match query (ITI-47) in a single domain	Version: 1.0 Last modified: 26/01/24 17:22:20
13897	CHPDQv3_PDS_ITI-47_2	Test test checks the ability of your system acting as CH:PDQV3 Patient Demographic Supplier to answer to a query (ITI-47) in a single domain	Version: 1.0 Last modified: 26/01/24 17:22:29
13896	CHPIX_CHPDQ_SERVER_CONF	This is a preliminary test for CH:PDQv3 suppliers and CH:PIXV3 managers. The goal is to populate the system under test with a well-known set of patient data.	Version: 1.0 Last modified: 26/01/24 17:22:56

6.4.4.5 PIXv3 – Patient Identifier Cross Referencing HL7v3

[Detailed test case description for PIXv3](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
13896	CHPIX_CHPDQ_SERVER_CONF	This is a preliminary test for CH:PDQv3 suppliers and CH:PIXV3 managers. The goal is to populate the system under test with a well-known set of patient data.	Version: 1.0 Last modified: 26/01/24 17:22:56
13907	CHPIXV3_MGR_CONF	The purposes of this test are first to demonstrate that your system acting as CH:PIXV3 Patient Identifier Cross-Reference Manager can be configured to access feeds from specific patient identity source systems	Version: 1.1 Last modified: 26/01/24 17:23:10

		and then to actually configure your system to access feeds from the testing tool.	
13906	CHPIXV3_MGR_ITI-44	This test checks the ability of the CH:PIXV3 Patient Identifier Cross-Reference Manager to integrate the messages exchanged in the context of the Patient Identity Feed HL7v3 (ITI-44) transaction: add record, revise record and resolve duplicates.	Version: 1.1 Last modified: 26/01/24 17:23:16
13905	CHPIXV3_MGR_ITI-45_1	This test checks that your CH:PIXV3 Patient Identifier Cross-Reference manager correctly answers to PIXV3 queries (ITI-45) when both the query patient identifier and the requested domain are known.	Version: 1.1 Last modified: 22/07/24 11:30:16
13904	CHPIXV3_MGR_ITI-45_3	This test verifies the ability of the CH:PIXV3 Patient Identifier Cross reference manager actor to handle the error case of the PIXV3 Query (ITI-45) where no identifier exists for the queried patient in any of the domains sent in DataSource.value	Version: 1.1 Last modified: 19/07/24 13:35:02
13903	CHPIXV3_MGR_ITI-45_4	This test verifies the ability of the CH:PIXV3 Patient Identifier Cross reference manager actor to handle the error case of the PIXV3 Query (ITI-45) where the system under test does not know the patient identifier enclosed in the query.	Version: 1.1 Last modified: 22/07/24 11:31:19
13902	CHPIXV3_MGR_ITI-45_5	This test verifies the ability of the CH:PIXV3 Patient Identifier Cross reference manager actor to handle the error case of the PIXV3 Query (ITI-45) when it does not recognize one or more of the Patient Identification Domains for which an identifier has been requested.	Version: 1.1 Last modified: 22/07/24 11:32:24
13901	CHPIXV3_MGR_ITI-45_6	This test checks that your SUT correctly answers to PIXV3 queries when it knows multiple identifiers within at least one of the requested domains	Version: 1.0 Last modified: 26/01/24 17:23:55

6.4.4.6 SVS – Sharing Value Set

[Detailed test case description for SVS](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
13911	SVS_VALUE_SET_CONS_ITI-48	Value Set Consumer SUT ITI-48 Retrieve Value Set Request with Value Set Repository simulator	Version: 1.0 Last modified: 26/01/24 17:39:48
13910	SVS_VALUE_SET_REPO_CONF	SVS Repository is loaded with value sets (codes) for the test session	Version: 1.2 Last modified: 11/04/24 09:02:43
13909	SVS_VALUE_SET_REPO_ITI_48	Value Set Repository SUT responds to ITI-48 Retrieve Value Set Request from Value Set Consumer simulator	Version: 1.0 Last modified: 26/01/24 17:40:03

6.4.4.7 XCA – Initiating Gateway Actor

[Detailed test case description for XCA](#)

Test Case Permanent ID	Test Case Name	Test Case description	Version and reference
13918	CHXCA_INIT-GW_ITI-38	This test is to verify the SUT capacity to query the metadatas of documents through an ITI-38 transaction to a XCA Responding Gateway.	Version: 1.4 Last modified: 18/07/24 16:19:40
14022	CHXCA_INIT-GW_ITI-38_Unavailable_Community	This test is to verify the SUT capacity to add errors in the response when a community isn't available.	Version: 1.0 Last modified: 10/06/24 11:12:59
13917	CHXCA_INIT-GW_ITI-39	This test is to verify the SUT capacity to retrieve documents through an ITI-39 transaction to a XCA Responding Gateway.	Version: 1.4 Last modified: 26/01/24 17:31:57
13916	CHXCA_RESP_GW_ITI-38	This test is to verify the SUT capacity to provide the metadatas of documents through an ITI-38 transaction from a XCA Initiating Gateway.	Version: 1.2 Last modified: 26/01/24 17:32:24
13915	CHXCA_RESP_GW_ITI-38_INVALID	This test is to verify the SUT capacity to provide the correct error messages in response to a flawed ITI-38 transaction formulated by an XCA Initiating Gateway.	Version: 1.1 Last modified: 26/01/24 17:32:32
13914	CHXCA_RESP_GW_ITI-39	This test is to verify the SUT capacity to provide documents through an ITI-39 transaction in response to a XCA Initiating Gateway.	Version: 1.3 Last modified: 26/01/24 17:32:38

13913	CHXCA_RESP_GW_ITI-39_INVALID	This test is to verify the SUT capacity to send the correct error messages in response to a flawed ITI-39 transaction through a XCA initiating gateway	Version: 1.3 Last modified: 26/01/24 17:32:46
13912	XCA_INIT_GW_CONF	Description of the data and configuration needed for the tests of the XCA Initiating Gateway actor	Version: 1.2 Last modified: 26/01/24 17:40:25

6.4.4.8 XCA-I - Cross Community Access for Imaging

Detailed test case description for XCA-I

Test Case Permanent ID	Test Case Name	Test Case description	Version and reference
14083	Initiating Imaging Gateway : Do This First	Requirements for Imaging Document Source system as part of the RAD-75 test case workflow (Peer to Peer and No Peer).	Version: 1.0 Last modified: 01/07/24 19:48:13
14086	Responding Imaging Gateway: Do This First	Requirements for Responding Imaging Gateway system as part of the RAD-75 test case workflow (Peer to Peer and No Peer).	Version: 1.0 Last modified: 18/07/24 18:19:35
14089	CH:XCA-I_RAD-75_INIT_IMG_GATE	The purpose of this test case is to evaluate the ability of the Initiating Imaging Gateway system to participate in a medical imaging data retrieval workflow between two XDS communities.	Version: 1.0 Last modified: 02/07/24 17:22:23
14091	CH:XCA-I_RAD-75_RESP_IMG_GATE	The purpose of this test case is to evaluate the ability of the Responding Imaging Gateway system to participate in a medical imaging data retrieval workflow between two XDS communities.	Version: 1.0 Last modified: 02/07/24 11:48:56

6.4.4.9 XCPD - Cross Community Patient Discovery

Detailed test case description for XCPD

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
13923	CHXCPD_INIT-GW_ITI-55	This test evaluates the capability of the CH:XCPD Initiating Gateway to send a valid Cross-Community Patient Discovery (ITI-55) query.	Version: 1.0 Last modified: 26/01/24 17:32:53
13922	CHXCPD_RESP-GW_CONF	This is a test to configure the system under test acting as a CH:XCPD Responding Gateway before the other tests are executed.	Version: 1.0 Last modified: 26/01/24 17:33:02
13921	CHXCPD_RESP-GW_ITI-55	This test verifies the ability of the system under test acting as a CH:XCPD Responding Gateway to handle Cross-Community Patient Discovery queries (ITI-55) for which it owns matching patients.	Version: 1.0 Last modified: 26/01/24 17:33:33

6.4.4.10 XDS - Cross-Enterprise Document Sharing and Metadata Update

[Detailed test case description for XDS](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
13931	CHXDS.b_DOC_REG_CONF	Configuration and data feed for the XDS Document Registry.	Version: 1.1 Last modified: 26/01/24 17:34:0903/01/2020 16:05:11
13929	CHXDS.b_DOC_REG_ITI-42	This test is to verify the SUT capacity to register a document metadatas through an ITI-42 transaction with a XDS document repository.	Version: 1.2 Last modified: 26/01/24 17:34:23 14/11/2023 9:08:14
13928	CHXDS.b_DOC_REG_ITI-57	Document Registry SUT receives update document metadata from Document Administrator Simulator.	Version: 1.32 Last modified: 18/07/24 23:39:12 14/11/2023 9:10:55
13927	CHXDS.b_DOC_REPO_CONF	This test targets at setting up the context for the XDS.b Document Repository actor.	Version: 1.2 Last modified: 26/01/24 17:34:36 06/02/2020 16:46:36
13926	CHXDS.b_DOC_REPO_ITI41_ITI42	This test verifies the capacity of a system to receive and accept a document in a Provide and Register (ITI-41) transaction. It includes metadata forwarding (ITI-42).	Version: 1.2 Last modified: 26/01/24 17:35:50 14/11/2023 9:22:46
13925	CHXDS.b_DOC_REPO_ITI43	This test verifies the capacity of a system to respond to a retrieve request in a Retrieve Document (ITI-43) transaction.	Version: 1.2 Last modified: 26/01/24 17:35:59 14/11/2023 9:25:28
13924	CHXDS.b_DOC_SRC_ITI-41	This test is to verify the SUT capacity to register a document and its metadata through an ITI-41 transaction with a XDS document repository.	Version: 1.2 Last modified: 26/01/24 17:36:06 14/11/2023 9:29:13

6.4.4.11 XDS-I - Cross-Enterprise Document Sharing for Imaging

[Detailed test case description for XDS-I](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
14066	Document Repository : Do This First	Requirements for Document Repository system as part of the RAD-68 test case workflow (Peer to Peer and No Peer).	Version: 1.0 Last modified: 01/07/24 19:43:39

14069	Imaging Document Consumer : Do This First	Requirements for Imaging Document Consumer system as part of the RAD-69 test case workflow (Peer to Peer and No Peer).	Version: 1.0 Last modified: 17/07/24 10:45:01
14076	CH:XDS-I.b_RAD-68_DOC_REP	The purpose of this test case is to verify the behaviour of the DocumentRepository system when processing a RAD-68 request associated with the publication of a KOS manifest	Version: 1.0 Last modified: 17/07/24 10:45:01
14079	CH:XDS-I.b_RAD-69_IMG_DOC_CONS	The purpose of this test case is to evaluate the ability of the Imaging Document Consumer system to participate in a medical imaging data retrieval workflow.	Version: 1.0 Last modified: 18/07/24 18:24:20

6.4.4.12 XDM - Cross Enterprise Document Media Interchange

[Detailed test case description for XDM](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
13942	XDM_PMC_Create_Media	Portable Media Creator creates CD-R and/or USB	Version: 1.1 Last modified: 26/01/24 17:40:32
13941	XDM_PMC_Validate_ZIP	NIST tool validates XDM Zip file generated by Portable Media Creator	Version:1.0 Last modified: 26/01/24 17:40:40
13940	XDM_PMI_Import_Error_case	Portable Media Creator and Importer exchange content on XDM media (CD-R or USB). Content is taken from gazelle samples so no PMC needed for this test. Content contains errors that shall be reported by the SUT.	Version: 1.0 Last modified: 26/01/24 17:40:46
13939	XDM_PMI_Import_Media	Portable Media Creator and Importer exchange content on XDM media (CD-R or USB). Content is taken from gazelle samples so no PMC needed for this test	Version: 1.0 Last modified: 26/01/24 17:40:54

6.4.4.13 XUA - Cross Enterprise User Assertion

Detailed test case description for XUA

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
13960	CHXUA_X-ASSERT-PROV_ASS	This test checks the conformance of the assertion issued by the X Assertion Provider when the Authenticate User is an Assistant.	Version: 1.2 Last modified: 26/01/24 17:36:33
13959	CHXUA_X-ASSERT-PROV_DADM	This test checks the conformance of the assertion issued by the X Assertion Provider when the Authenticate User is a Document Administrator.	Version: 1.1 Last modified: 26/01/24 17:36:42
13958	CHXUA_X-ASSERT-PROV_HCP	This test checks the conformance of the assertion issued by the X Assertion Provider when the Authenticate User is an Healthcare Professional.	Version: 1.1 Last modified: 26/01/24 17:36:48
13957	CHXUA_X-ASSERT-PROV_INVALID_CASE	Simulated X-Service User sending an invalid request for an assertion to an X-Assertion Provider	Version: 1.2 Last modified: 11/04/24 11:38:51
13956	CHXUA_X-ASSERT-PROV_PADM	This test checks the conformance of the assertion issued by the X Assertion Provider when the Authenticate User is a Policy Administrator.	Version: 1.1 Last modified: 26/01/24 17:37:14
13955	CHXUA_X-ASSERT-PROV_PAT	This test checks the conformance of the assertion issued by the X Assertion Provider when the Authenticate User is a Patient.	Version : 1.1 Last modified: 26/01/24 17:37:20
13954	CHXUA_X-ASSERT-PROV_REP	This test checks the conformance of the assertion issued by the X Assertion Provider when the Authenticate User is a Representative.	Version: 1.1 Last modified: 26/01/24 17:37:27
13953	CHXUA_X-ASSERT-PROV_TCU	This test checks the conformance of the assertion issued by the X Assertion Provider when the Authenticate User is a Technical User.	Version: 1.1 Last modified: 26/01/24 17:37:33

13952	CHXUA_X-SERV-USR_AUTH_USR	Verify X-Service User is able to initiate and run a valid CH:XUA Authenticate User transaction with the simulated User Authentication Provider using the artifact binding.	Version: 1.1 Last modified: 11/04/24 08:58:36
13951	CHXUA_X-SERV-USR_GXUA_ASS	X-Service User requests an assertion to a simulated X-Assertion Provider for an Assistant.	Version: 1.1 Last modified: 26/01/24 17:37:48
13950	CHXUA_X-SERV-USR_GXUA_DADM	X-Service User requests an assertion to a simulated X-Assertion Provider for a Document Administrator.	Version: 1.1 Last modified: 26/01/24 17:37:55
13949	CHXUA_X-SERV-USR_GXUA_HCP	X-Service User requests an assertion to a simulated X-Assertion Provider for an Healthcare Provider.	Version: 1.1 Last modified: 26/01/24 17:38:01
13948	CHXUA_X-SERV-USR_GXUA_PADM	X-Service User requests an assertion to a simulated X-Assertion Provider for a Policy Administrator.	Version: 1.1 Last modified: 26/01/24 17:38:11
13947	CHXUA_X-SERV-USR_GXUA_PAT	X-Service User requests an assertion to a simulated X-Assertion Provider for a Patient.	Version: 1.1 Last modified: 26/01/24 17:38:19
13946	CHXUA_X-SERV-USR_GXUA_REP	X-Service User requests an assertion to a simulated X-Assertion Provider for a Representative.	Version: 1.1 Last modified: 26/01/24 17:39:13
13945	CHXUA_X-SERV-USR_GXUA_TCU	X-Service User requests an assertion to a simulated X-Assertion Provider for a Technical User.	Version: 1.1 Last modified: 26/01/24 17:39:20
13944	XUA_X-SERVICE-PROV_ITI-40	This test is used to synthesis the testing of the XUA X-Service-Provider actor.	Version: 1.2 Last modified: 26/01/24 17:41:02
13943	XUA_X-SERVICE-USER_ITI-40	This test is used to synthesis the testing of the XUA X-Service-User actor.	Version: 1.0 Last modified: 26/01/24 17:41:15

6.4.4.14 RMU - Restricted Metadata Update

[Detailed test case description for RMU](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
13962	RMU_UPDATE_INIT_ITI-92	The Initiator prepares and issues an update to DocumentEntry metadata objects via Restricted Update Document (ITI-92) transaction with the Responder as a simulator.	Version: 1.3 Last modified: 26/01/24 17:39:33
13961	RMU_UPDATE_RESP_ITI-92	The Responder accepts requests for updates to DocumentEntry metadata objects send by a simulated Update Initiator.	Version: 1.4 Last modified: 26/01/24 17:39:40

6.4.4.15 CH:ADR - Authorization Decision Request

[Detailed test case description for CH:ADR](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
14103	CHADR_delegation_for_Provider_Error_Cases	Test if a ADR Provider returns the corresponding errors when receiving wrong requests in case of delegation.	Version: 1.0 Last modified: 01/07/24 11:13:08
14106	CHADR_delegation_for_Provider	A HCP needs to delegate his right on patient's resources to an another HCP between 2 dates. The ADR Consumer requests the ADR Provider to check HCP1's rights.	Version: 1.0 Last modified: 01/07/24 11:14:55
13969	CHADR_due_to_ATC_for_Provider	Authorization Decision Provider	Version: 1.2 Last modified: 26/01/24 16:14:38
13968	CHADR_due_to_ATC_for_Provider_Error	Authorization Decision Provider Error case	Version: 1.2 Last modified : 26/01/24 16:15:08
13967	CHADR_due_to_PPQ_for_Provider	Authorization Decision Provider	Version: 1.2 Last modified: 26/01/24 16:15:30
13966	CHADR_due_to_PPQ_for_Provider_Error	Authorization Decision Provider Error case	Version: 1.2 Last modified: 26/01/24 16:16:26
13965	CHADR_due_to_XDS_for_Provider	A simulator sends ADR AuthorizatoonDecisionrequests due to XDS requests to an ADR Provider SUT	Version: 1.2 Last modified: 26/01/24 16:16:44

13964	CHADR_due_to_XDS_for_Provider_Error	Authorization Decision Provider	Version: 1.2 Last modified: 26/01/24 16:17:15
13963	CHADR_FOR_CONSUMER	This test is used to synthesize the testing of the ADR Authorization Decision Consumer actor.	Version: 1.2 Last modified: 18/07/24 16:45:12
14107	CHADR_PPQdelegation_for_Consumer	This test is used to synthesize the testing of the ADR Authorization Decision Consumer actor in a delegation context.	Version: 1.0 Last modified: 18/07/24 08:57:42

6.4.4.16 CH:PPQ - Privacy Policy Query

[Detailed test case description for CH:PPQ](#)

Test Case Permanent ID	Test Case Name	Test Case description	Test Case and Test Data Version
14110	CHPPQ_AddDelegation_Repository	System acting as PPQ Repository must respond to a simulated PPQ request aiming at adding a delegation policy from an HCP to an another.	Version: 1.0 Last modified: 01/07/24 11:23:27
14112	CHPPQ_AddDelegation_Repository_Error_Cases	System acting as PPQ Repository must respond to a simulated PPQ request aiming at adding wrong delegation policies.	Version: 1.0 Last modified: 01/07/24 11:25:55
13977	CHPPQ_POLICY_REPO_PPQ-1_ADD	System acting as PPQ Repository must respond to a simulated PPQ request aiming at adding a policy in the repository.	Version: 1.2 Last modified: 26/01/24 17:24:17
13976	CHPPQ_POLICY_REPO_PPQ-1_DEL1	System acting as PPQ Repository must respond to valid and invalid PPQ requests aiming at deleting a policy in the repository.	Version: 1.2 Last modified: 26/01/24 17:24:28
13975	CHPPQ_POLICY_REPO_PPQ-1_UPD	PPQ Repository must respond to a valid simulated PPQ UpdatePolicy Request.	Version: 1.2 Last modified: 26/01/24 17:24:36
13974	CHPPQ_POLICY_REPO_PPQ-2	PPQ Repository must respond to a valid simulated PPQ XACMLPolicy Request	Version: 1.2 Last modified: 26/01/24 17:25:45
13970	PPQ_REPO_CONF	Configuration and data feed for the PPQ Repository	Version: 1.0 Last modified: 26/01/24 17:39:26

6.4.4.17 CH:ATC - Authorization Request

[Detailed test case description for CH:ATC](#)

Test Case Permnet ID	Test Case Name	Test Case description	Test Case and Test Data Version
13983	CHATC_ARR_CONF	Configuration and data feed for the ATC Patient Audit Record Repository.	Version: 1.0 Last modified: 26/01/24 17:17:36
13982	CHATC_ARR_ITI81_ErrorCases	Patient Audit Record Repository must handle correctly authorization enforcement and various error situations of ITI-81 according to CH:ATC profile.	Version: 1.1 Last modified: 26/01/24 17:17:46
13981	CHATC_ARR_ITI81_NormalCases	The purpose of this test case is to make sure your Patient Audit Record Repository is able to answer to the Search operation on AuditEvent resources using the search parameters as defined in CH:ATC profile	Version: 1.3 Last modified: 26/01/24 17:17:53
13980	CHATC_PAT_AUDIT_CONS_ITI81	This is a no-peer test run against a simulator of the ATC Audit Record Repository actor. We are checking that the Patient Audit Consumer is able to query using the required parameter and evaluate its capability to use the optional parameter. This test also checks that the system sends the IUA assertion in the HTTP header.	Version: 1.3 Last modified: 26/01/24 17:18:03
13979	CHATC_PAT_AUDIT_CONS_Translate	Verify that a Patient Portal is able to translate Audit Events with codes into German, French or Italian	Version: 1.1 Last modified: 26/01/24 17:18:18

6.4.4.18 CH:CPI - Community Portal Index

[Detailed test case description for CH:CPI](#)

Test Case ID	Test Case Name	Test Case description	Test Case and Test Data Version
13985	CHCPI_CONSUMER_CHCIDD_1	CPI consumer as SUT must query CPI provider	Version: 2.0 Last modified: 26/01/24 17:18:26
13984	CHCPI_CONSUMER_CHCIQ_1	CH-CPI consumer as SUT must query CH-CPI provider	Version: 2.0 Last modified: 26/01/24 17:18:33

6.4.4.19 UPI – Unique Person Identification

[Detailed test case description for UPI](#)

Test Case ID	Test Case Name	Test Case description	Test Case and Test Data Version
13992	CH:UPI_eCH0213_SPID_CANCEL	UPI client send an eCH0213 request to cancel the SPID for a patient	Version: 2.1 Last modified: 26/01/24 17:26:51
13991	CH:UPI_eCH0213_SPID_CREATION	UPI client send an eCH0213 request to create an SPID for a patient	Version: 2.2 Last modified: 18/07/24 15:39:49
13990	CH:UPI_eCH0213_SPID_INACTIVATE	Verify the inactivation of a SPID for a patient	Version: 2.1 Last modified: 26/01/24 17:27:14
13989	CH:UPI_eCH0214_FROM_DEMOGRAPHICS	UPI client send an eCH0214 request for a patient attributes using his demographics.	Version: 2.2 Last modified: 18/07/24 17:33:31
13988	CH:UPI_eCH0214_FROM_NAVS	UPI client send an eCH0214 request for a patient demographics using his NAVS.	Version: 2.1 Last modified: 26/01/24 17:27:32
13987	CH:UPI_eCH0214_FROM_SPID	UPI client send an eCH0214 request for a patient demographics using his SPID.	Version: 2.1 Last modified: 26/01/24 17:27:44
13986	CH:UPI_eCH0215_RECEIVE_A_BROADCAST_MUTATION	UPI client receive an eCH0215 broadcast mutation and modify its patients.	Version: 1.0 Last modified: 26/01/24 17:27:57

6.4.4.20 EMED – eMedication Exchange Format

[Detailed test case description for EMED](#)

Test Case ID	Test Case Name	Test Case description	Test Case and Test Data Version
13993	CH-EMED_Import_Document_PDF_Medication Card	CH-EMED Import Medication Card document PDF representation	Version: 1.0 Last modified: 26/01/24 17:19:43
14122	CH EMED_Import_Doc_PDF_Med_Prescription	CH-EMED Import Medication Prescription document PDF representation	Version: 1.0 Last modified: 28/08/24 14:27:52

6.4.4.21 VACD – eVaccination Exchange Format

[Detailed test case description for VACD](#)

Test Case ID	Test Case Name	Test Case description	Test Case and Test Data Version
14001	CH-VACD_Aggregated_Doc_add_dose	The Content Creator has to demonstrate that it can aggregate Immunization Administration documents in one result document.	Version: 1.0 Last modified: 26/01/24 17:28:12
14000	CH-VACD_Aggregated_Doc_allergy	The Content Creator has to demonstrate that it can aggregate Immunization Administration documents in one result document.	Version: 1.1 Last modified: 26/01/24 17:28:26
13999	CH-VACD_Aggregated_Doc_foreign	The Content Creator has to demonstrate that it can aggregate Immunization Administration documents in one result document.	Version: 1.1 Last modified: 26/01/24 17:28:39
13998	CH-VACD_Aggregated_Doc_Val_Vacci	The Content Creator has to demonstrate that it can aggregate Immunization Administration documents in one result document.	Version: 1.1 Last modified: 26/01/24 17:28:52
13997	CH-VACD_Create_Immunization	The Content Creator has to demonstrate that it can create a valid Immunization Administration document from its system.	Version: 1.3 Last modified: 19/07/24 18:19:13
13996	CH-VACD_Create_Vac_Record_doc	The Content Creator has to demonstrate that it can create a valid Vaccination Record document from its system.	Version: 1.2 Last modified: 26/01/24 17:29:42
13994	CH-VACD_Import_Data_Immu_Admin	The Content Consumer has to demonstrate that it can extract data elements. Optionally, the Content Consumer can show the extract data in a document by using a stylesheet.	Version: 1.1 Last modified: 26/01/24 17:30:17
13995	CH-VACD_Import_Data_Vac_Rec_Doc	The Content Consumer has to demonstrate that it can extract data elements. Optionally, the Content Consumer can show the extract data in a document by using a stylesheet.	Version: 1.0 Last modified: 26/01/24 17:29:57

6.4.4.22 Allergy & Intolerance – eAllergy: Exchange Format

[Detailed test case description for eAllergy](#)

Test Case ID	Test Case Name	Test Case description	Test Case and Test Data Version
14125	CH-Allergy_Import_Data	This test case is used to verify that the Content Consumer can import discrete data elements of an allergy intolerance.	Version: 1.0 Last modified: 28/08/24 14:55:26

7. Annexes

7.1 Certification Test System and Test Tools

Tool name	Antilope D3.1 classification	installed version	Tested profile
Gazelle Test Management	Test management tool	7.1.7	NONE
Proxy	Proxy	5.1.1	NONE
EVSCient	Interoperability validator	7.0.4	CH:ADR
			CH: AllergyIntolerance
			CH:ATC R4
			CH:EMED
			CH:PPQ
			CH:UPI
			CH:VACD
			CH:XUA
			CH:PIX
			CH:PDQ
			CH:XCPD
			CH:HPD
			CH:XDS
			CH:XCA
SVS			
Gazelle Webservice Tester	Conformance tester	1.7.4	CH:PPQ
			CH:XCA
			CH:XCA-I
			CH:XDS-I.b
			CH:XDS
			CH:ADR
			CH:RMU
			CH:SVS
			CH:XUA
CH:ATC			
XDS Testing (NIST XDS Toolkit)	Conformance tester	7.6.0	CH:XDS
			CH:XDS-I.b
XDStar Client	Simulator/stub, interoperability validator	3.0.2	CH:XCA
			CH:XDS
			CH:XCPD
			CH:RMU
Patient Manager	Simulator/stub	9.16.7	CH:PDQ
			CH:PIX
			CH:XCPD
HPD Simulator	Simulator/stub	2.4.5	CH:CPI
			CH:HPD
SVS Simulator	Support tools, Simulator/stub	2.3.4	SVS
Authentication Simulator	Simulator/stub	0.1.2	CH:XUA
Gazelle Security Suite		6.3.3	CH:ATNA

	Support tool, Simulator/stub, interoperability validator		CH:XUA
EPR Assertion Provider Simulator	Simulator/stub	1.3.0	CH:XUA
EPR Get X User Assertion Validator	Validator (in EVS Client)	1.1.2	CH:XUA
Gazelle STS	Simulator/stub	1.3.1	CH:XUA
EPR ADR Simulator	Simulator/stub	1.3.7	CH:ADR
EPR PPQ Simulator	Simulator/stub	1.3.7	CH:PPQ
Metadata Update Responders (EPR RMU Simulator)	Simulator/stub	1.3.1	CH:RMU CH:XDSMU
EPR XDSMU Simulator	Simulator/stub	1.2.0	CH:RMU CH:XDSMU
ATC Patient Audit Record Repository	Simulator/stub	2.0.1	CH:ATC
XDS XCA Simulator	Simulator/stub	1.0.3	CH:XCA CH:XDS
Assertion Manager	Support tools	4.2.5	NONE
Demographic Data Server	Test data generator	4.3.4	NONE
Gazelle HL7 Validator	Interoperability validator	3.8.5	CH:PIX CH:XCPD CH:PDQ
Schematron Validator	Interoperability validator	2.5.2	CH:ADR CH:ATNA CH:PPQ CH:UPI CH:XUA
Gazelle FHIR Validator (R4)	Interoperability validator	4.1.7	CH:AllergyIntolerance CH:ATC CH:EMED CH:VACD
Matchbox	Interoperability validator	3.8.8	CH:ATC CH:EMED CH:VACD
UPI EPR-SPID Manager	Simulator/stub	1.0.1	CH:UPI
UPI EPR-SPID Responder	Simulator/stub	1.0.1	CH:UPI
DCM4CHEE	Simulator/stub	5.29.1	XDS-I.b
DICOM3TOOLS	Imaging validator	20211009110822	XDS-I.b

7.2 Execution test report summary (sample)

See following page.

Swiss Interoperability Conformity Assessment

Execution Test Report Summary

The [product and version] of the [Company] documented in this report is a component of the EPR platform of the community [Name, address] This product and version was tested according to the requirements developed in the Swiss Interoperability Conformity Assessment Scheme (SIAS) to demonstrate conformance with the specifications described in annex 2 section [XX] section [XX], annex 3 section [YY] and annex 5 section [ZZ] of the ordinance of FDHO; RS 816.111.

It demonstrates that the product is capable to contribute to the EPR platform of the community, according to normative specifications defined in EPRO-FDHO.

Testing consisted of observed demonstrations in a controlled environment under normal operating conditions and using approved test tools used by the ISO/IEC 17025 accredited test laboratory. Test efforts also included review of test tool results, self-attestation materials and, where applicable, interoperability testing files and audit logs. Testing was constrained by the requirements as specified in the latest version of the SIAS at the time of testing. Any exceptions to these requirements are noted within the execution test reports when applicable.

Report ID:

Test Session: [Dates]

Community: [Name] [Address]

Number of the component: [X]

Total Number of components tested for the community: [Z]

Company Name

Product Name

Version

[Name of the test laboratory] [N°Accreditation][Report ID]/

Page Z of X

Integration Profiles/Actors Tested for Conformity Assessment

The [name of test laboratory] determined that

[product name] [version] provided for conformity assessment by

[company name] located at [address]

successfully demonstrated compliance to the integration profile(s)/actor(s) pairs required for the Swiss Conformity Assessment described in the SIAS [Date].

The system under test was made available for test on [Date]. Tests were executed from [Date] to [Date], [on-line] [on the premises of the test laboratory at [Address]].

Integration Profile	Actors and options	Reference Specifications	Test Results
IHE Integration Profiles			
IHE RMU Restricted Metadata Update Document Metadata Update	Name of the actor No options	IHE IT Infrastructure Technical Framework Supplement <ul style="list-style-type: none"> Restricted Metadata Update; Revision 1.0 (2018-05-23) Amendment 1 to Annex 5 of the EPDV-EDI <ul style="list-style-type: none"> Revision 15-07-2019 	Passed
IHE Integration Profiles with extension			
CH: ATNA Audit Trail and Node Authentication	No options	IHE IT Infrastructure Technical Framework <ul style="list-style-type: none"> Vol 1 – Section 9; Revision 15.0 (2018-07-24) Vol 2 ITI TF-2a; Revision 15.0 (2018-07-24) Amendment 1 to Annex 5 of the EPDV-EDI <ul style="list-style-type: none"> Revision 15-07-2019 XSD Schemas <ul style="list-style-type: none"> Revision 2017-12-13 	Passed with comments
CH Profiles			
CH: ADR Authorization Decision request	No options	Amendment 2.1 to Annex 5 of the EPDV-EDI <ul style="list-style-type: none"> Revision 15-07-2019 XSD Schemas <ul style="list-style-type: none"> Revision 15-07-2019 	Passed

[Name of the test laboratory] [N°Accreditation][Report ID]/

Page Z of X

Additional Software required for testing

The following additional software/options were required by [Company Name] to assist in demonstrating compliance with the associated conformance requirements by providing the specified functionality:

Software Products and Developer	Associated Integration Profiles/Actors	Functionality Provided
None	-	-

[Name of the test laboratory] [N°Accreditation][Report ID]/

Page Z of X

SPECIMEN

Report Summary

[Test Laboratory Name] an accredited ISO/IEC 17025 under contract [Reference] with FOPH has reviewed and confirms that [Product] [Version] successfully passed the test scripts identified in this report through attestation, observed demonstration, review of audit logs, and interoperability file validations. Testing was conducted using SIAS requirements testing processes based on ISO/IEC 17025. All tests results documented in this report including the mentioned exceptions, are considered formal test results. This test result summary is authorized by

Test laboratory Representative

Function/Title

Signature and Date

Information on the Accreditation Body
(logo, other)

A detailed test report is kept by [Test Laboratory], the [Community Name] and the certification body and available upon requests to the [Company Name].

Please visit [https://](https://.....) for the most current version of the SIAS

About [Test laboratory]

Information on [Test Laboratory],

Name of the contact

Address

Copyright

[Name of the test laboratory] [N°Accreditation][Report ID]/

Page Z of X

Appendix A – Testing Comments

This appendix documents or references any exceptions identified during the SIA.

Integration Profile	Actors and options	Test Case Comments	Test Tools
IHE Integration Profiles			
IHE CT Consistent Time	Time Client No option		No test tools

Additional software required for testing with exceptions:

Software Products and Developer	Associated Integration Profiles/Actors	Functionality Provided
None	-	-

[Name of the test laboratory] [N°Accreditation][Report ID]/

Page Z of X

7.3 Detailed test report (Template example)

See following page.

TEST EVENT – DATE

[COMPANY]

Test Laboratory

Contact	
Email address	

Tested Organization

Contact Name	
Address	
Email address	

Tested System(s)

Name of the test session		
Product Name	Version	Owner
This test session was held from dd/mm/yyyy to dd/mm/yyyy		

Report identification

This report has been generated on dd/mm/yyyy with identifier [name of test session].[COMPANY.Id].

Disclaimer

This report summarizes the outcome of the testing performed by [COMPANY] during the [TEST SESSION], it includes information about success and failure and should only be used internally. This report does not certify the capabilities of any commercial product offered by [COMPANY].

System: [SUT] (Version)

Results per Integration Profile/Actor/Option

Results per integration profile/actor/option				
Integration Profile	Actor	Option	Type*	Result
		(None, option)	(T,S)	(Pass, Failed)
* T: Thorough/S: Supportive				

Test instances summary

Test instances summary				
Tests	Performed	Passed	Failed	Partially verified
[nn]	[nn]	[nn]	[nn]	[nn]

Tests: Number of individual test cases run during the session.

Performed: Total number of test instances performed (This count does not take into account the aborted, still running and not verified test instances)

This report shall not be reproduced, except in full, without the written permission of the FOPH.

8. Changelog

Edition 1.9

- Revision of the sections 6.4.2, 6.4.3.1, 6.4.3.2, 6.4.4.5, 6.4.4.10, 6.4.4.11, 6.4.4.16 so that the test cases were deleted that verify the interoperability of the components within a community infrastructure.
- Update of the sections 6.4.3.1, 6.4.3.2 and 6.4.3.3 to comply with the 2024 ordinance.
- Update of the sections 6.4.4 and childs
 - o Due to a restructuring of the test case types, all the test identifiers and dates were changed on 26 January 2024, even though their content has not changed. These tests therefore have a new identifier and a new modification date, but their version remains unchanged. This procedure is documented in the ticket: <https://gazelle.ihe.net/jira/browse/CTS-259>
 - o Add test cases:
 - CHXCA_INIT-GW_ITI-38_Unavailable_Community
 - Initiating Imaging Gateway : Do This First
 - Responding Imaging Gateway: Do This First
 - CH:XCA-I_RAD-75_INIT_IMG_GATE
 - CH:XCA-I_RAD-75_RESP_IMG_GATE
 - Document Repository : Do This First
 - Imaging Document Consumer : Do This First
 - Imaging Document Source : Do This First
 - CH:XDS-I.b_RAD-68_DOC_REP
 - RAD-68 ; SUT Imaging Document source
 - CH:XDS-I.b_RAD-69_IMG_DOC_CONS
 - CH:XDS-I.b_RAD-69_IMG_DOC_SRC
 - CHADR_delegation_for_Provider_Error_Cases
 - CHADR_delegation_for_Provider
 - CHADR_PPQdelegation_for_Consumer
 - CHPPQ_AddDelegation_Repository
 - CHPPQ_AddDelegation_Source
 - CHPPQ_AddDelegation_Repository_Error_Cases
 - CH EMED_Imp_Doc_PDF_Med_Prescription
 - CH-Allergy_Import_Data
 - o Deprecate test cases:
 - CHXCA-I_INIT_GW_RAD-69_RAD-75
 - CHXCA-I_RESP_GW_RAD-69_RAD-75
 - CHXDS-I.b_DOC_CONS_RAD-69
 - CHXDS-I.b_DOC_SRC_RAD-68
 - CHXDS-I.b_DOC_SRC_RAD-69
- Update of the section 8.1

Edition 1.8

- Update of the Legislative text part (section 2.1).
- Add the eVaccination and eMedication reference documents.
- Update the test cases' version and last modified date. Update the links to access the updated test cases.
- Add the eVaccination and eMedication test cases.
- Update the Certification Test System and Test tools part with the new tools versions.

-
- Section 6.4.3
 - o Update of the test plan with new IHE & CH reference documents.
 - o Adaptation to ITI-TF Rev. 19 download process (Archived by IHE)
 - o Removed XDS-SD profile
 - Section 6.4.4
 - o Update of the test cases version and last modified date.
 - o Update of the links to access the updated test cases.
 - Section 7.1
 - o Update of the Certification Test System and Test tools part with the new tools versions.

Edition 1.6.1

- Updated versions and dates of test cases modified by patch 20220630 (section 6.4.4)
- Update of the Proxy version modified by patch 20220630 (section 7.1)

Edition 1.6

- Table with test case description for CH:CPI updated (chapter 6.4.4.19)
- Table with test case description for CH:UPI updated (chapter 6.4.4.20)
- List of test tools updated with UPI simulator and new version of HPD simulator (section 7.1)

Edition 1.5.1

- 6.4.3.1 IHE Integration Profiles and Chapter 6.4.3.2 National Integration Profiles: Links to specifications in column Reference Specifications were updated.
- Certification Test System and Test Tools in Annex 7.1 updated based on new CTS version 1.5
- Correction of typos

Edition 1.5

- Updating of references to legal texts that were updated in April, 2021
- Additional paragraph in the chapter 2, scope of the SIA on the technical guidelines for SIA testing
- Requirements for the certification body in chapter 6.2 updated
- Requirements for the communities and reference communities in chapter 6.4 updated
- Tables 6.4.4.10 XDS - Cross-Enterprise Document Sharing and 6.4.4.12 XDS – Metadata Update merged
- Table with test case description for ATNA updated (chapter 6.4.4.1)
- Table with test case description for HPD updated (chapter 6.4.4.3)

-
- Table with test case description for PIXv3 updated (chapter 6.4.4.5)
 - Table with test case description for XCA updated (chapter 6.4.4.7)
 - Table with test case description for XDS updated (chapter 6.4.4.10)
 - Table with test case description for XDM updated (chapter 6.4.4.12)
 - Table with test case description for XUA updated (chapter 6.4.4.13)
 - Table with test case description for RMU updated (chapter 6.4.4.15)
 - Table with test case description for CH:ATC updated (chapter 6.4.4.18)
 - Table with test case description for CH:UPI updated (chapter 6.4.4.20)
 - Certification Test System and Test Tools in Annex 7.1 updated

Edition 1.4

- Table with test case descriptions for PIXv3 updated (chapter 6.4.4.5)
- Table with test case descriptions for XUA updated (chapter 0)
- Table with test case descriptions for CH:CPI updated (chapter 6.4.4.18)

Edition 1.3

- Updating of references to legal texts and specifications to the state of legislation as of 15.04.2020 (chapters 2.1, 6.4.3.1, 6.4.3.2)
- Removal of transaction ITI-46 from chapter 6.4.3.1
- Table with test case descriptions for PIXv3 updated (chapter 6.4.4.5)
- Minor changes and corrections

Edition 1.2

- A more detailed definition was added to chapter 3 *Scope of the SIA*. Plus some depending changes were made in chapters 6.3 and 6.4.1.
- Tables with test case descriptions updated and aligned to CTS 1.2 (section 6.4.4). Changes apply to:
 - o 6.4.4.1 ATNA – Audit trail and Node Authentication
 - o 6.3.4.4 PDQv3 – Patient Identifier Cross-Referencing HL7v3
 - o 6.4.4.6 SVS – Sharing Value Set
 - o 6.4.4.7 XCA - Initiating Gateway Actor
 - o 6.4.4.10 XDS - Cross-Enterprise Document Sharing
 - o 6.4.4.11 XDS-I - Cross-Enterprise Document Sharing for Imaging
 - o 6.3.4.14 XUA – CrossEnterprise User Assertion
 - o 6.3.4.16 RMU – Restricted Metadata Update
 - o 6.4.4.17 CH:ADR – Authorization Decision Request
 - o 6.4.4.17 CH:PPQ - Privacy Policy Query

-
- Table with test tools updated (section 7.1)
 - Minor changes and correctionsTable with test tools updated (section 7.1)

Edition 1.1

- Link to amendment 2.3. appendix 5 of EPRO-FDHA updated to edition 3 of amendment 2.3. appendix 5 of EPRO-FDHA. (New endpoint for RMU was added.) (section 2.1)
- Links to XSD Schemas updated (section 6.4.3.2)
- Tables with test case descriptions updated and aligned to CTS 1.1 (section 6.4.4). Changes apply to:
 - o 6.4.4.1 ATNA – Audit trail and Node Authentication
 - o 6.4.4.3 HPD – Health Provider Directory
 - o 6.4.4.6 SVS – Sharing Value Set
 - o 6.4.4.10 XDS - Cross-Enterprise Document Sharing
 - o 6.4.4.11XDS-I - Cross-Enterprise Document Sharing for Imaging
 - o 6.4.4.17 CH:PPQ - Privacy Policy Query
- Table with test tools updated (section 7.1)
- Minor changes and corrections

Edition 1.0

- Links to legislative texts updated (section 2.1)
- Responsibilities of certification body and test lab modified (section 5, 6)
- Links to specifications updated (section 6.4.3.1, 6.4.3.2, 6.4.3.3)
- Links to test case PDF per profile added (section 6.4.4)
- List of certification test system and test tools updated (section 7.1)

Version 0.8.2

- Transactions for UPI added (section 6.4.3.3 and 6.4.4.19)
- List of test tools added (section 7.1)
- Changelog added (section 8)
- Minor changes and corrections