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Integration Guide

Smart Registration Service

V1.8

Integration Guide for Service Provider

Version	1.8	
Status	Final	
Replaces version	1.7	
Issue date	30/09/2022	
Document name	INT-GUIDE-SP-v018.docx	
Server location	Swisscom Trust Services	

VER- SION	DATE	CHANGED BY	COMMENTS/NATURE OF THE CHANGE
1.0	24.01.2020	Joseph Koenig	Creation
1.1	02.03.2020	Joseph Koenig	Updated Identification status in §4
1.2	19.04.2020	Joseph Koenig	Status added in §4, §3 updated, appendix 1 updated
1.3	12.05.2020	Joseph Koenig	Appendix 1 updates, §6 Support added
1.4	10.07.2020	Joseph Koenig	Appendix 1 and 3 updates, Update &5.2
1.41	14.11.2020	Joseph Koenig	Appendix updated, Klarna method
1.42	24-08.2021	Joseph Koenig	Appendix updated video; Appendix added for eID
1.5	15-12-2021	Joseph Koenig	Appendix 4 added Nect §8.5, review §4, added §5
1.6	12-06-2022	Joseph Koenig	Updated Appendix 4, added Appendix 5 and 6 for SRS video and Auto Ident CH
1.7	30-09-2022	Joseph Koenig	SRS Auto ident CH and SRS Video Ident CH updated – Appendix 7 added for the SRS ident web flow
1.8	15-06-2023	Joseph Koenig	§6.3 Silent SMS mode added

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1 Introduction

The Smart Registration Service is a new service launched by Swisscom Trust Services in 2020 to enable Service Providers using electronic signature capabilities to use various efficient identification methods from selected Swisscom partners. Service providers can offer to the customers a signing process with on demand registration process with a selected authentication method based on the mobile number. The service consists of an API which can be used to get information about the different identification methods available and all necessary information to trigger the identification process itself. The Smart Registration Service is a complementary service to the Swisscom All-in Signing Service used to create electronic signatures and the Smart Registration Service that holds the registration data of the signatories. The identification process can be done independently from the signing process before the signing operation. During the signing operation only the registered authentication method is used.

1.1 Purpose

This integration guide is intended for developers of the service provider who would like to integrate the Smart Registration Service from Swisscom.

The technical documentation is mainly available on Swagger and this integration guide gives a big picture overview and helps the developer to go through the different steps.

The integration of the Smart Registration Service can be done within a very short time. The service uses well known protocols and does not require any special competencies.

- Estimation of integration time: 1 to 3 days
- Testing 1 to 3 days
- Productive within 1 to 2 weeks

1.2 Scope

The document refers to the Smart Registration Service. This guide describes how to perform the requests to get the available methods, how to set the filter and the semantic for its parameters. The guide will also give a catalogue (Appendix) with specific information or parameters for each identification method. It is recommended to check regularly the latest version of this Integration Guide to have the current overview of all possible methods. Swisscom Trust Services adds new services constantly, according to new technological possibilities and regulations.

1.3 Terms and Abbreviations

All-in Signing Service: cloud-service provided by Swisscom to issue qualified and advanced elec-

tronic signatures, seals and timestamps

API Application programming interface

Evidence Signed personal identification data collected during the identification process and stored in the

Smart Registration Service

LOA Level of assurance, the identification method and the presented ID document enable a user ei-

ther for LOA 3 (advanced signatures) or LOA 4 (qualified signatures)

SRS Smart Registration Service
IPSP Identity Proofing Service Provider

SP Service Provider

RA database Database of the Registration Service

RA Registration Authority: Role responsible for user identification and registration.

T&C Terms and Conditions

Verify call to verify whether an evidence stored in the RA database enables the respective user for signing.

1.4 Referenced Documents

- [1] Service Description SRS
- [2] All-in Signing Service Reference Guide, Swisscom (Switzerland) Ltd.

[3] Description of how to perform a verify call, http://documents.swisscom.com/prod-uct/filestore/lib/5f4322cf-3530-4d6a-b26f-b8f685f8d069/VerifyID4Signing-en.pdf

2 SRS API Description

2.1 Online Documentation and Wiki

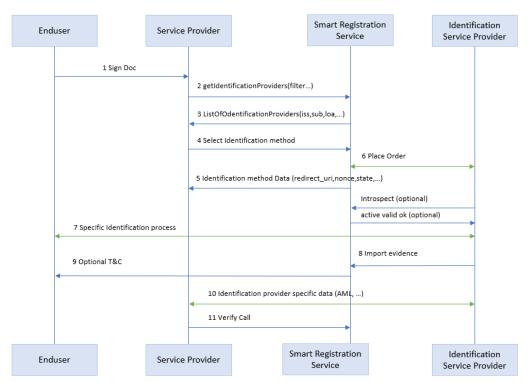
The API description is available on the Swagger platform on Swisscom Wiki. https://miss-backend-api-preprod.scapp.swisscom.com/swagger/index.html

2.2 Steps for an end to end Identification process (High level)

The procedure in a nutshell:

- Service provider authenticates to the SRS
- Service provider submits a request to SRS API with an appropriate filter
- SRS response contains a list of available identification methods
- Service provider choses a method and submits a request for the specific method
- SRS provides the information to trigger the identification process (target URL and method specific information and data: see Appendix)
- Identification process is done
- Service provider can get the status of the successful identification while polling the status of a verify call to the Smart Registration Service

2.3 Main Flow and sequence diagram



The following flow and sequence diagram show the interface in detail:

- (1) The user wants to sign a document and the Service Provider asks him to identify himself beforehand
- (2) The Service Provider starts the identification process with the Smart Registration Service and asks for the list of the available IPSP (Identification Service Provider on the diagram) using the bearer token.

- (3) The Service Provider receives the list of the Identification Service Providers with the appropriate identification methods required for its process from the Smart Registration Service. Appropriate means for example: usable only for eIDAS or for ZertES signatures or only usable in a special country etc.
- (4) The Service Provider selects (probably supported by the choice of the end user) the identification method and starts the identification process.
- (5) Swisscom asks the Identification Service Provider for the personalized URL for the specific end user.
- (6) The Smart Registration Service provides the personalized URL of the Identification Service Provider to the end user.
- (7) The end user now calls up the URL to start the identification process directly with the IPSP.
- (8) The Identification Service Provider submits an OAuth2.0 introspection call to the Smart Registration Service in order to check the validity of the request.
- (9) Swisscom analyses the bearer token and confirms the validity to the Identification Service Provider
- (10) The Identification Service Provider imports the data taken during the identification process into the Smart Registration Service using the associated import interface (Smart Registration Service).
- (11) Optionally the Service Provider can also fetch the evidence data from the Identification Service Provider, e.g., for AML check purposes using the Reference ID.
- (12) Depending on the method used in (4) the Smart Registration Service sends out a SMS for the acceptance of the terms and conditions.
- (13) The Smart Registration Service collects and archives the answer of the end customer concerning the terms and conditions.
- (14) The Service Provider can verify that the evidence has been imported to the Smart Registration Service.

2.4 Authentication to the SRS

Aafter the onboarding process the SP can access the SRS Service with the OAuth2 – client credentials protocol. See chapter 3 and Swagger Documentation.

2.5 Initial Service Provider Information

The Service Provider may send initial information gathered from the user in advance, for example name, surname, mobile number etc. to speed up the identification process. This information will be verified by the Identification Service Provider during the identification process.

This is optional and depends on Identification Service Provider. For more details, please refer to the Appendix "Initial Information".

3 Onboarding of Service Providers

The onboarding of a Service Provider is done after the contract for the use of SRS has been signed. Swisscom will configure the access to the SRS and send the credentials securely to the responsible person at the Service Provider (Username and Client Password). The protocol used for secure access to SRS is OAuth2.

To access the service the Service Provider shall provide:

- Client ID
- Client Secret.

See Swagger documentation for more details:

https://miss-backend-api-preprod.scapp.swisscom.com/swagger/index.html

4 Testing environment

A test environment is available to Service Providers for test integration purposes. Service Providers can test integration end to end including the identification process.

Swisscom provides in its testing environment the possibility to simulate the different status of the identification method result. To use the test environment, use credentials below (without quotes)

Client Id: "missswaggerclient"

Client secret: "missswaggerclientsecret"



The identification process can be mocked to facilitate testing. In the testing process the SP can simulate the status of the identification. In addition, the SP can enter its own testing data and then test the end-to-end process.

To trigger a mocked Identification, the request must be done with:

- **Issuer**="Test"
- **Method**="Video"

Store the Reference ID for further use.

After redirecting to the target URL, a form can be filled out to mock the result for the desired use case.

- Status can be set according testcase (see example below for a successful video identification)
- Important: use the call back method with the reference ID to update the status (only for test)

GET /api/identifications/{refId}/callback Update the status of an identification with a call to the issuer

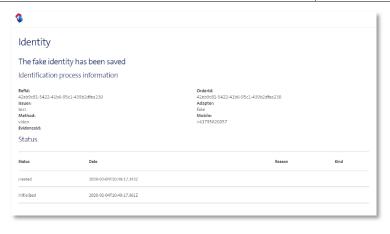
- After the evidence is created the status "Terminated" can be checked with the method "get status"
- After this step a Verify call or a lookup call can be done to check the successful end-to-end process





List of possible status: (The status should apply for all methods - see also Appendix for specific status handling for each method)

Status	Semantic	Recommended action
Created	The identification data is collected and stored in order to initialize an order with the IPSP	Retrieve the target URL, store the Ref ID and specific IPSP ID (order ID, ident ID, Case ID) for support purpose
Initial- ized	The identification task has been ordered by the IPSP. The identification task can now be started by the Service Provider using the target URL.	User starts identification with the target URL
Identifi- cation done	Identification process has been finished; evidence is in preparation	
Data ready	The data is ready on IPSP side and ready to be imported into the RA Database	
Termi- nated	The evidence is present in the RA database and depending the identification process, the user must accept Terms and Conditions.	For all methods except SRS Selfie Ident, start polling with a lookup call till user has accepted T&C. For SRS Selfie Ident user can already sign if this status is reached
Error	The Identification data could not be imported in RA service for any reason like, fraud suspicion, negative identification in general, or due to insufficient means (bad camera, microphone) to identify. The response contains a string with the reason field provided by the IPSP (not mandatory)	Restart a new process from the beginning with a new target URL
Nega- tively con- ducted	This Status is returned for SRS Video EU or SRS eID DE or SRS Selfie Ident EU if the Identification was unsuccessful for some reason (not a valid or expired document used, rejected by the back-office Agent user stopped before accepting the T&C in the app for SRS Selfie Ident)	Check the reason and restart a new process from the beginning with a new target URL
Timeout	The identification method was not finished or used in the defined Timeframe.	Restart a new process from the beginning with a new target URL
Canceled	User cancelled the identification process	Restart a new process from the beginning with a new target URL



5 Recommended Integration – Best Practice

5.1 Verify Call – Lookup Call

The verify call should be used by the integration partner before and/or after any identification process to be able to guide a user correctly through an end-to-end process.

If successful, the semantic of the Verify call is the confirmation that for a specified mobile number and its attached parameter a valid evidence exist, and user should be able to sign if the user did not reset his authentication method since the identification process*.

The verify call is interesting for matching purpose.

Online documentation for the verify call: https://rasp.scapp.swisscom.com/swagger/index.html

(*) for example, password change if user uses the Password/OTP authentication or Mobile ID reset or reactivation without recovery code.

The lookup call is easier to use as no personal data (DN) is needed and will be sufficient for most use cases. The Semantic of the Lookup call is the same as for Verify call.

Online documentation fort the lookup call: https://rasp.scapp.swisscom.com/swagger/index.html

Note: if the evidence will "expire" within 90 days, this information will also be available in the response. This is useful to inform the user of the need of a new identification

5.2 Status tracking end-to-end and method selection

It is recommended to track the status through the SRS API along the identification process. After the Identification process is done (in general Status "Terminated" or "Timeout" or "negatively conducted" is reached). Then it is recommended to poll the status for T&C acceptance* with a verify call or lookup call depending on your use case to guide the end user.

"Serial Mismatch": even if the tracking of the identification status and T&C status is done properly, this error can happen in the final signature process in some cases. Please refer to the integration guide of the signing service for more details about this error that should be handled in the user flow by the Service Provider. The user needs to get identified again if this error occurs.

SRS offers the possibility to choose the right method depending the use case. SRS does not provide any backup logic to send the send user automatically to an alternative method if one method is not successful. But SRS provides through the correct tracking of the different status the possibility for the Service Provider to choose an alternative method at any time.

Example: User started the SRS-Bank identification, but the process could not be achieved for some reason, then the user can be redirected to SRS-Video or SRS-eID to be able to try another way.

Note: The creation of a target URL is never Billed. Swisscom will only bill the successful identifications. (*) this is not needed for the robo-ident method

6 Additional Features of the SRS

6.1 Filter for Identification Methods

When requesting the list of available identification methods, the Service Provider can set a filter to get the relevant method for a specific process.

Filter parameter	Description	Remark
Issuer	Name of the IPSP	When this parameter is set then the response will only contain identification methods from this specific IPSP. Multiple issuers can be set.
Jurisdiction	Jurisdiction needed for the process	When this parameter is set the response contains only methods compatible with signatures for chosen jurisdiction. Multiple jurisdictions can be set. Jurisdiction available: EU (eIDAS), CH (ZertES)
LOA	Level of assurance (LOA) needed for the process. For example, LOA 4 if QES are needed, LOA 3 if AdES are needed.	When this parameter is set, the response contains only identification methods compatible with the chosen LOA.
Offline	Refers to an identification method where the user must follow a physi- cal process offline, e.g. meeting a RA Agent, or going to a Post Office	The value can be true (include such methods in the response) or false (exclude such methods in the response)
Method Type	Name of the identification method (string)	The value is a string representing the method type (see list below) Only corresponding methods are included in the response
Web flow	Refers to an identification method where the user can follow the whole process in a web browser. For example, user will not need to download an app.	The value can be true (include such methods in the response) or false (exclude such methods in the response)
Real Time Method	Refers to a method where a user can sign immediately after finishing the identification process.	The value can be true (include such methods in the response) or false (exclude such methods in the response)

Identification method types:

- "Video
- "eID": method is based on national eID concepts
- "Bank": method is based on bank identification
- "Robo-ident": method is based on a selfie and liveness check
- "Autoident": method based on a selfie and liveness check, with additional back-office check

This list will be updated regularly.

6.2 External ID

When choosing the identification method, the Service Provider has the possibility to provide an External ID. This External ID is a free text string defined by the Service Provider to be able to manage its own customer or partner requesting a signature where an identification is needed.

The External ID can be used by the SP for the billing of his customers.

(Note: This ID was named in the previous versions Customer ID)

6.3 Silent SMS

The Silent SMS Feature is a very useful feature for customer using the Smart Flows component. See also the integration guide for Smart Flows (<u>Link</u>)

To activate the Silent SMS mode the "disabledSmsAlerts" field must be set to "True" in the place order request.

Once set, the IPSP will transfer this information to Swisscom when the import is done, and no SMS will be sent out for the acceptance of the Terms & Conditions.

- Attention: please use this feature carefully, and only if you plan to get the Terms & Condition accepted through the Smart Flows process. Otherwise the user will not be able to finish the registration and the identification even if successful will be lost
- Note: please be aware that the life cycle SMS and potentially the Terms and Condition renewal will be sent out

7 Support

7.1 Overview

The whole identification process involves 3 parties: Swisscom, the service provider who wants to get a user enabled for the signature and the IPSP.

The goal here is to clarify which support team has to be contacted, where are the limits and what data needs to be provided for a successful support process.



The whole process can be divided in 5 steps:

- Authentication to SRS and performing requests, receive appropriate response (Swisscom)
- Lead the end user to start the identification process (Service Provider)
- Identification process itself (Identification Service Provider)
- Leading the end user till identification is successful (Service Provider)
- Evidence is present in RA Service and user gets SMS for T&C to finalize the process (Swisscom)

As general rules we consider:

- The end user is in direct contact with the Service Provider for any business purpose. Thus, the 1st level support is ensured by the Service Provider who stay the SPOC for the end-user.
- If the analyze of the issue by 1st level Support reveals that some parameters are not fulfilled by Swisscom or the identification provider, then the Service Provider can contact through the right Support channel the Swisscom or identification provider Support by providing enough information (see table below in section 6.2).

7.2 Support cases and limitations

Issues may occur in each phase. The following table shows a list of possible issue, in each case the competent support team to be contacted. Also listed the parameter to check as fulfilled process step.

Process step	Issue with this process step	Successful	Support Team (Data to provide)
1	 Server authentication to SRS Service Target URL not available, Order ID or Reference ID not available Unsuccessful response to correct request Service not responding 	Target URL Ref ID Order ID	Swisscom Service Desk with PRO-Nr (Ref-ID, Order ID, method used, problem description Time)
2	 User redirect to Target URL User Identity data gathering User Identity data forwarding to identification provider Specific Implementation: see recommendations 	Specific to SP	Service Provider Support
3	 Identification cannot be performed by officer Country not supported but in list Language not supported by Agent Timeouts Connection lost Specific identification app does not work (properly) 	Officer confirms "Identification was successful" or "identification was unsuccess- ful" Final screen ap- pears	Identification Service Provider via Swisscom Service Desk with PRO-Nr. (Ref-ID, Order ID, method used, problem descrip- tion Time)
4	Status checkingSpecific Implementation: see recommendations	Specific to SP	Service Provider Support
5	 Status is terminated but user does not get SMS for T&C Declaration of will (Mobile ID, PWD/OTP, etc.) 	Evidence id Verify call suc- cessful	Swisscom Service Desk with PRO-Nr (Ref-ID, identification method used, MSISDN, evidence ID, Problem description, Contact)

8 Appendix – Identification Methods catalogue and specification

8.1 Overview and general recommendations

Hereafter you'll find the current list of identification methods available. For each method a description is given as a data sheet, that helps you to integrate the service in an efficient way.

Be aware about the specific recommendations for each method about the time taken for the identification process as the whole process is mainly composed of asynchronous single transactions. Please be also aware about the validity of the evidence that can be different from one method to another.

We recommend providing some useful information for the end-users about the steps they will have to pass to get a better understanding on the webpage of the Service Provider.

In order to increase the usability by the user we recommend informing the end-user to activate Mobile ID (MID or MID App) in advance. Doing so, the end-user will be able to use its MID or MID App for signing in a very easy way. Otherwise, the user will need to use the Password/OTP process (2-step authentication)

Before the start of the IPSP's URL the user shall be notified that he will be redirected to an external identification service provider and shall be informed by the Service Provider about the usage of the personal data, e.g.:

- German: Durch den Aufruf der URL "https://xxx..." werden Sie zum Identifikationsportal unseres Identifikationspartners weitergeleitet, bei dem Sie sich im Auftrag der Swisscom Trust Services identifizieren können. Ihre hierfür erhobenen Personendaten werden ausschliesslich für die ordnungsgemässe Identifizierung im Rahmen der elektronischen Signatur verwendet.
- English: After the call of the URL "https://xxx.." You will be redirected to the identification portal of our identification partner which will identify you on behalf of Swisscom Trust Services. Your personal data collected for this purpose will be used exclusively for proper identification within the scope of the electronic signature.

In case you closed an additional contract with the Identification Service Provider for use of the identification data for own purposes (e.g., in the scope of the AML protection) you shall notify this like:

- German: Durch den Aufruf der URL "https://xxx..." werden Sie zum Identifikationsportal unsere Identifikationspartners weitergeleitet, bei dem Sie sich im Auftrag von uns und Swisscom Trust Services identifizieren können. Ihre hierfür erhobenen Personendaten werden ausschliesslich für die ordnungsgemässe Identifizierung im Rahmen der Überprüfung gegen die Bekämpfung der Geldwäsche und im Rahmen der elektronischen Signatur verwendet.
- English: By calling the URL "https://xxx..." you will be forwarded to the identification portal of our identification partners, where you can identify yourself on behalf of us and Swisscom Trust Services. Your personal data collected for this purpose will be used exclusively for proper identification in the context of the anti-money laundering review and in the context of electronic signatures.

8.2 Appendix 1 – Video Identification by Identity.tm

Identification method name:
 VIDEO IDENTITY.TM

• Identification Service Provider: Identity.tm

Signature capability for User Identified with this method:
 QES (AES)/eIDAS, AES/ZertES

➤ Validity of the evidence: 5 years max

Language possible for video calls (see also Language below)

German, English

List of supported countries
Link

User Flow

User starts identification — Video session is started (mobile phone or web) — Officer asks for information and scans ID documents - Mobile number is verified with a SMS Challenge - Video Session is terminated and Backoffice check is done — User gets SMS with link to the T&C of Swisscon. After T&C are accepted, user can sign. Please note the special requirements that people to be identified can use the proprietary identity.tm app below.

- Language: a language parameter can be set in the request to be led to an Agent speaking this language (Croatian "HR", French "FR", Spanish "ES"). Please be aware that the front end takes the language of the browser of the user agent. From beginning of September 2021, the additional language mentioned above will be available on a best effort basis.
- Method filter specification

Filter Parameter	Value	Value
lssuer	IDENTITY.TM	IDENTITY.TM
Jurisdiction	EIDAS	ZERTES
LOA	4	3 (since 2nd Oct. 2020)
Offline	FALSE	FALSE
Method Type	Video	video
Web flow	TRUE	TRUE
Realtime Method	TRUE	TRUE

- **Initial Identity Data submission(optional)**: When initiating the process, the Service Provider can submit identity Data gathered from the user in advance. This is not mandatory, i.e., the identification process can be started with an empty payload.
 - **Attention**: To be able to use the identity.TM Mobile App, at least the **Surname** must be provided. Otherwise only the flow in the browser can be used for identification.
 - In case of identity data is provided, this data must match with the real data of the user as this data will be verified during the identification process by the RA Agent (small typos are allowed

- and will be corrected by the RA Agent). Otherwise, the identification will be rejected as fraud attempt.
- Attention: Mobile Number update please be aware that in some case the user asks to change his mobile number within the Identification process. This is possible but, in this case, you must be aware that the number you potentially stored on SP side is wrong. Please inform the user to inform you in case of change.

Recommended implementation:

- Prior integration, it is useful that the SP think about the data match: It is possible to collect all the data
 that the SP has about the end user and send it to identity.tm. But only in case of an additional contract
 with identity.tm to use the data for own purposes (e.g., AML check) the SP gets back a data set of
 matched. Otherwise, the SP will only get back a "failed" without knowing which data was wrong and the
 SP will have to ask the end user to check the correct spelling or to correct the mistakes.
- If it is not needed to do a matching between the data in the Service Provider account and the Data in RA Service, then we suggest submitting only the Surname (also called Last name or Family name, necessary for the mobile App) and none of the other attributes listed below in the table. This submitted surname must correspond exactly to the real data of the user as written in the Pass or ID document (without typo).
- If a matching is needed, the SP should provide only the data he wants to be verified. If the identification is successful, the data is verified. If not, suggest your user to check all the entered data (all first names entered? no typos? accents? etc....).
 - Attention: do not provide titles in the surname field. Special characters or punctuation ("."", "etc.) will also lead to an error that will end in a negatively conducted identification.
- If the verification fails in the beginning of the Identification process, then the Status "IDENTIFICA-TION_NEGATIVELY_CONDUCTED", and the identification must be started again. The service provider will have to place a new order to get a new target URL

List of initial Identity Data that can be submitted

Attributes	Can be submitted to SRS (*)
First name, Surname	Yes
Mobile number	Yes
Postal Address data	No
Date of birth	Yes
Place of birth	Yes
Nationality	Yes
Artist Name	No
Title	No
Serial ID Document	No
Issuer Country	No
Issuing city	No
Validity	Yes

(*) see Swagger documentation

Connection lost during the Video Call

The call can take some time (usually several minutes). Within this time the connection can be lost, independently to the SRS Service or identity. TM service (e.g., bad signal quality), or something can happen on user side that breaks the process. In this case we recommend the service provider to inform the end user how he should proceed. The target URL can be reused for example and the customer could start again the identification.

In case the service provider has announced a new target URL to the end user, the service provider must ensure that all previous pending orders are properly cancelled according to the Swagger documentation. Otherwise, the service provider has a lot of pending orders.

Ideally, we would recommend the Service Provider to send to the end user the Target URL and all needed information to start over again by use of a separate communication channel (email for instance)

The Target URL is valid until cancellation. The service Provider can cancel the order if needed after a while (See Swagger documentation)

• Specific identification method response Information

	Description
Target URL	URL to the Identification Service Provider to start
Swisscom Reference to the transaction	Ref ID
Identity.TM Reference to the transaction	Order ID

• Domains to be whitelisted (User will be redirected to our identification partner)

	Description
Identity.tm	Main domain for the video identification
Example of target URL	https://www.identity.tm/sta- tus/649C6099931C4BBE2B34

• Recommended implementation

The video Identification process can take between **10 to 20 Minutes** (including back office 4-eyes principle check by compliance officer). After video identification is triggered by the Service Provider, the Service Provider should wait for this period before checking through a Verify Call whether the identification has been successful. Please note that the verify call can fail due to two reasons:

- Identification evidence data not yet transmitted to Swisscom (Status is not "Terminated", see §4 List of possible Status)
- User did not accept the terms of use

• System Requirement:

- If the browser is not supported, a message prompted
- ► Chrome, Firefox, Opera, Safari and Edge are supported.
- Internet Explorer is not supported.
- Known issues with current version of Safari.
- Desktop Browser: Chrome, Opera, Firefox, Safari, Edge latest versions (official) or
- Mobile Device: for native Android (5+) and iOS Apps (13+)
 - Internet Explorer is not supported. Known issues with current version of Safari.
- Bandwidth: Minimum 0,5 MB/s up/down
- Microphone: Enabled
- Camera: Enabled with minimum resolution 640 x 480 px
- Network requirements:
 - Minimum: The minimum Requirement is that TCP port 443 is open. Some firewall/proxy rules only allow for SSL traffic over port 443. You will need to make sure that non-web traffic can also pass over this port. TLS1.2
 - ➤ Better Experience: In addition to the minimum requirements being met, we also recommend that UDP port 3478 is open. TLS1.2
 - ➤ Best Experience: For the best possible experience, we recommend that UDP ports 1025 65535 be open. TLS1.2
- WebRTC: Outbound TCP, non-SSL web traffic on port 443 and the following domains must be accessible:
 - *.tokbox.com (static IP blocks also available)
 - > static.opentok.com

- > enterprise.opentok.com
- > api.opentok.com
- anvil.opentok.com
- WebSocket: In some situations, WebSocket connections are blocked over port 80. In this case a secure SSL connection using WSS over port 443 should successfully connect. The destinations and ports used by Pusher clients are as follows:
 - > ws://ws.pusherapp.com on port 80
 - wss://ws.pusherapp.com on port 443

• Miscellaneous

Generally, for better conversion, we recommend end-user to use the mobile App of identity or a **mobile browser** directly on the smartphone if user wants to use a web browser.

We also recommend using preferably a **Mobile Network** and avoid in general company WLAN.

Service Times

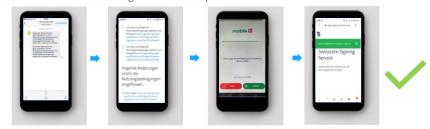
The service times is displayed on the start page. Please check especially the service times for specific languages.

Screenshots

• The Video identification is done with our partner identity.TM



- After the identification the user gets a SMS to accept T&C



8.3 Appendix 2 – Identification with bank account login, by Klarna

• Identification method name: Bank

• Identification Service Provider: Klarna

• Language of the front-end App German, English

• Signature capability for User Identified with this method: QES (AES) /eIDAS, AES /ZertES

• Validity of the evidence: 2 years

Countries/Documents:
N/A

Supported Banks: German banks except Listed here:
 Link

User flow

Precondition: User is owner of a bank account from a bank supported by Klarna Process. User starts identification – chooses his bank – User performs login to his bank account and small transaction – mobile phone is checked through SMS challenge – Checks are done – User gets an SMS to accept the T&C. After the T&C Are accepted, the user can sign.

• Method filter specification

Filter Parameter	Value
lssuer	KLARNA
Method Name	Bank
Jurisdiction	EIDAS/ZertES
LOA	LOA3, LOA4
Offline	FALSE
Method Type	Bank
Webflow	TRUE
Realtime Method	TRUE

• Initial Information: Information that can be provided while triggering the identification method:

M List of initial Identity Data that are submitted

Attributes	
Firstname (Given Names)	Mandatory*
Lastname (Surname)	Mandatory*
Date of birth	Mandatory*
Mobile number	Mandatory*
Place of birth	Optional

Country	Mandatory*
Email address	Optional
Language	Optional
External ID	Optional

^(*) This data must match with the personal data linked to the bank account.

• Specific identification method response Information

	Description
Target URL	URL to the Identification Service Provider to start
Ref. ID	Reference to the transaction

Recommended implementation

After the Identification process is started, a Session is active for 60 Minutes to finish the Process.

The Identification is finished when status "Terminated" is reached.

If the Timeout is reached (60 Minutes) without status "Terminated", then the Identification gets the Status Negative Identification.

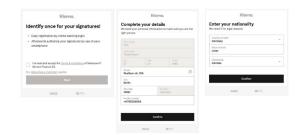
After the identification process is terminated, we recommend starting with Verify Call after a delay of **30 Seconds to 2 minutes**. After the verify call is successful, the user is correctly registered and can sign.

Connection lost during the Process

If the connection is lost during the process or something goes wrong the target URL can be used again 5 Times within the session time of 60 Minutes.

• **Note**: The Target URL contains additionally a Token so the length of the target URL will contain around 700 Characters. Typical Format: https://ident.playgroud.klarna.com/SESSION_ID?access_token=ey******* We recommend not to limit the target URL and not to encode it in the further process.

Screenshots









8.4 Appendix 3 –Identification with nPA (eID) by Identity.tm

- Identification method name:
- Identification Service Provider:
- Signature capability for User Identified with this method:
 - ➤ Validity of the evidence:
 - ➤ Language possible for the process
 - ➤ List of supported countries/documents

identity-tm-eid

Identity.tm

QES (AES)/eIDAS, AES/ZertES

5 years (or ID expiration date)

German, English

according eIDAS Regulation

- User Flow
 - User starts identification User chooses desktop process or identity.TM App.
- Identity.TM App: user follows the steps in the app, enters his PIN* for the eID process, user confirms his mobile number by entering a TAN
- Desktop version: user is asked first to verify his mobile number by entering a TAN. User starts the official Ausweiss-App2 and follows the steps. User confirms the identification with his PIN*

(*) The PIN is a code set by the user and known only by him to access the data on the nPA chip. This is done separately by the user typically when he receives the nPA from the official office of "Bundesrepublik Deutschland". To do so, the user gets a document containing a unique so called "Transport PIN" to activate the eID function of his nPA. Note that if the user didn't do this before then he will have the possibility to do it within the identity.TM app flow.

Method filter specification

Filter Parameter	Value	Value
lssuer	Identity-tm-eid	Identity-tm-eid
Method Name	eID (case sensitive)	elD
Jurisdiction	EIDAS	ZertEs
LOA	LOA4	LOA3
Offline	FALSE	FALSE
Method Type	elD	elD
Web flow	TRUE	TRUE
Realtime Method	TRUE	TRUE

Initial Information: Information that can be provided while triggering the identification method:

List of initial Identity Data that are submitted

	1
Attributes	
Firstname (Given Names)	Mandatory*
Lastname (Surname)	Mandatory*
Date of birth	Mandatory*
Mobile number	Mandatory*
	,
Place of birth	Optional
Country	Optional
Email address	Optional
Language	Optional
External ID	Optional

(*) This data must match with the personal data on the nPA

• specific identification method response Information

	Description
Target URL	URL to the Identification Service Provider to start
Ref. ID	Reference to the transaction

• Recommended implementation

The Identification is finished when status "Terminated" is reached.

If the status "Negatively conducted" is reached then there was a problem that didn't permit to confirm the identification (typically, wrong name or surname, fraud attempt, mobile number not verified etc...)

After the identification process is terminated, we recommend starting with Verify Call or lookup call after a delay of **30 Seconds to 2 minutes**. After the verify call is successful, the user is correctly registered and can sign.

For the browser version, we recommend following the same recommendations as for the video identification process by identity.TM (see § Appendix 1)

Connection lost during the Process

If the connection is lost during the process or something goes wrong the target URL can be used again as long as the identification was not flagged "negatively conducted"

Screenshots













8.5 Appendix 4 – Identification with Robo-Ident (SRS-Selfie-Ident) by Nect

• Identification method name: robo-ident

• Identification Service Provider: nect

• Signature capability for User Identified with this method: QES (AES)/eIDAS, AES/ZertES

➤ Validity of the evidence: 2 years (or ID expiration date)

Language possible for the process German, English

List of supported countries/documents ICAO compliant Passports, German ID

• User Flow (check out the explanation video: LINK

User starts identification with a target URL and open the page with the QR Code – User downloads and installs the Nect app (mandatory) and scans the QR Code with the Nect App.

- Nect App: user follows the steps in the app, scans his ID document, takes a selfie, and is asked to pronounce some random words appearing on the screen.
- After these steps the data is analyzed, and the result is displayed.
- In some cases, the user must repeat the pronunciation of new random words.

• Method filter specification

Filter Parameter	Value	Value
lssuer	nect	nect
Method Name	robo-ident	robo-ident
Jurisdiction	EIDAS	ZertES
LOA	LOA4	LOA3
Offline	FALSE	FALSE
Method Type	Robo-ident	Robo-ident
Web flow	TRUE	TRUE
Realtime Method	TRUE	TRUE

• Initial Information: no initial data is needed while triggering the identification method: <u>We recommend</u> providing an empty payload as no matching is done by this method.

Attributes	
Firstname (Given Names)	Optional
Lastname (Surname)	Optional
Date of birth	Optional
Mobile number	Optional

Place of birth	Optional
Country	Optional
Email address	Optional
Language	Optional
External ID	Optional

• Specific identification method response Information

	Description
Target URL	URL to the Identification Service Provider to start
Ref. ID	Reference to the transaction

• Recommended implementation

The Identification is finished and successful when status "Terminated" is reached.

If the status **"error"** is reached with the reason **"Timeout"** then the target URL cannot be used anymore, and the process is finished. This happens after **30 days** if Target URL was not used or **60 minutes** if the process was started in the App and T&C were accepted.

After the user has passed the step of accepting the Terms and Conditions of Nect then the timeout occurs after **60 Minute** inactivity or unsuccessful identification. Overall, the user can retry **5 times with the same target URL**.

If status "error" is reached without reason, this means the Identification was unsuccessful for an unknown reason.

Attention: identification on production environment should only be done with real and valid documents. Wrong or faked documents or "Tests" on production could be flagged as Fraud suspicion and the mobile number could be blacklisted.

If the identification is flagged unsuccessful in the app, there was a problem that didn't permit to confirm the identification (typically, wrong name or surname, fraud attempt, mobile number not verified etc.)

After the identification process is "terminated", and the confirmation appeared in the Nect app the user should be able to sign only after accepting the T&C of Swisscom successfully. We recommend making a polling with a lookup call anyway to ensure that the T&C were accepted correctly.

Please note that there is no additional need to get an SMS for T&C for the user.

• Connection lost or problems during the Process

If the connection is lost during the process or something goes wrong the target URL can be used again as long as the identification was not flagged "negatively conducted" or "error" or "timeout".

Possible reason for unsuccessful identification

Additionally to the Status error or negatively conducted, the reason is added to the status for support purpose. The reason describes the problem occurred and contains the information if user can start again or not.

Example:

"The user tried identifying with an unapproved document."

"The case result is final, i.e. no further attempts are possible."

In this example the user tried identifying with a document that is not supported and the user cannot try again with the same target URL.

Miscellaneous

- The Target URL is available 30 Days (Status created and initialized)
- Once the process is started the Timeout is reached after 60 minutes

- The process of ID verification takes in general around 2 minutes but can take up to 6 Minutes in some cases depending on the quality of the photos, taken, light conditions etc. and if there is a manual check.
- The method does not provide a matching if initial data is provided and there are no check criteria at the initial step. All data gathered during the identification process are verified but not compared to the initial data.
- Support is offered by Nect via email within the app: user should not the Case ID

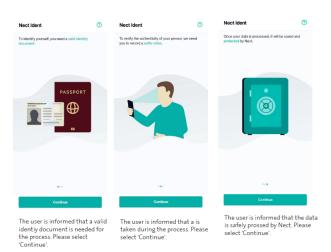
Screenshots

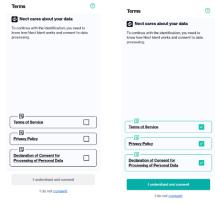






User has to select "Get started" to start the identification process.





Before the identification process begins, the user must agree to the General Terms of Service, the privacy policy, and the processing of his or her data. Please select "I understand and consent".

Swisscom Trust Services









Android specific: As the Nect Wallet app needs permission to take pictures, record video and record audio, please select 'While using the app'.

Tips are shown after the video. Please check them and if you are ready select 'Continue'.

Tips

- A video is played which visualizes the video taking of the ID front. Please make sure that:

 You place your profile picture on the top
 Slightly till the document that you can see the holograms
 Good lightning conditions







Recording of the front side starts automatically as soon as the ID document is held in the app's designated frame. By panning the document, holograms and other security features are made visible.



A photo of the back of the ID docume nt is then taken. If a passport is used f or identification, no photo of the back is required.



A video is played which visualizes the recording of the ID back side.



Please make sure that you have good lightning conditions, the ID card is placed correctly and all information is visible. Please select 'Continue'.

Place the whole document in the frame.



A photo of the back of the ID document is taken automatically.



Please re-check the picture if the text is clear to read. If you have the option to re-take the picture or 'continue'.







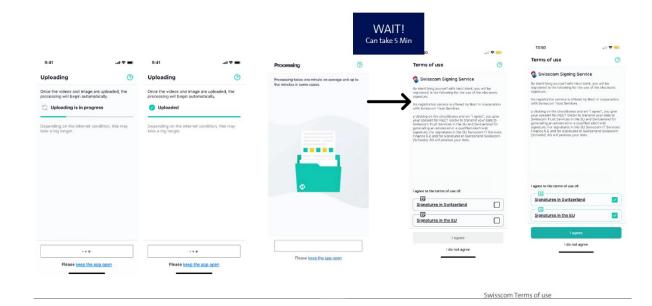
Continue

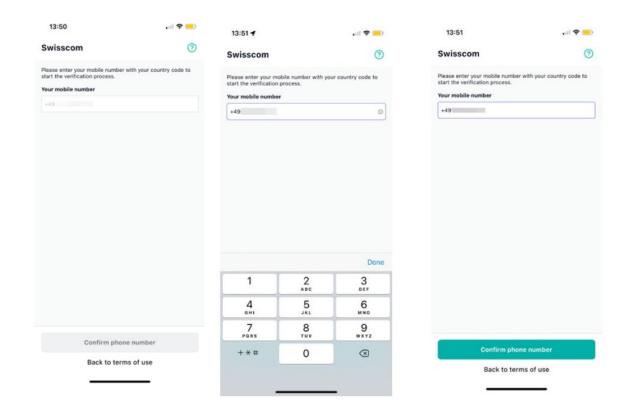
Tips are shown after the video. Please check them and if you are ready select 'Continue'

The third step of the identification is the recording of a selfie video.

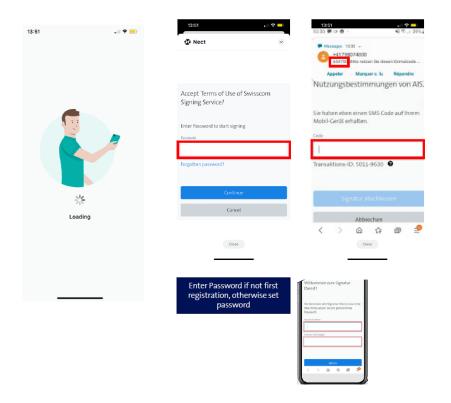
13:45	.iil 🗢 🚃
Nect Ident	②
ID front side	Completed
✓ ID back side	Completed
1	
Selfie video	Completed
Security questions	1 min

13:46	nil 🗢 🚃	
Security questions	•	
To better verify your identity for our partner company, please answer the following questions.		
For which service are you identif	ying?	
Swisscom	0	
2 What is your age?		
under 33	•	
33 - 45		
46 - 68		
over 58		
Please provide your full name		
Magdalena Petra Müller	0	
Continue		



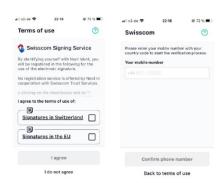


If user accepts T&C with Password and OTP:





If user accepts T&C with Mobile ID APP:

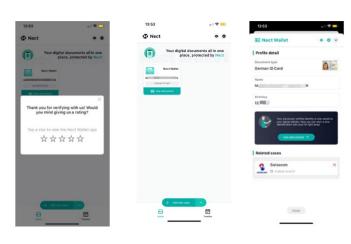




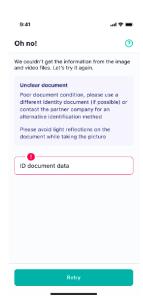




Identification is successful:



Identification is unsuccessful:



If the machine could not read out all necessary information from video of the front side, the picture of the back side or your selfie video — this page and a detailed explanation in English is shown. Please select 'Retry'.



Tips are shown on what might be the issue. Please select 'Continue'.

8.6 Appendix 5 – Identification with SRS Video-Ident-CH by INTRUM

Identification method name: video

• Identification Service Provider : intrum-video

• Signature capability for User Identified with this method: AES/eIDAS, AES/QES/ZertES

➤ Validity of the evidence: 5 years max

➤ Language possible for video calls (Agent language) German, English, French, Italian

➤ List of supported countries LIN

User Flow

User starts identification – Video session is started (mobile phone or web) – Officer asks for information and scans ID documents - Mobile number is verified with a SMS Challenge - Video Session is terminated and Backoffice check is done – User gets an SMS with a link to the T&C – User accepts T&C and User can sign.

- Language: a language parameter can be set in the request to be led to an Agent speaking this language Please be aware that the front end takes the language of the browser of the user agent.
- Method filter specification

Filter Parameter	Value	Value
lssuer	Intrum-video	Intrum-video
Jurisdiction	elDAS	ZertES
LOA	3	4
Offline	FALSE	FALSE
Method Type	Video	video
Web flow	TRUE	TRUE
Realtime Method	TRUE	TRUE

• Initial data provided: the data provided in the request must match exactly the data on the ID document. If there is an error in the Last name, the identification will be negative. If Surname and at least one given name is provided correctly in case of multiple given names, the identification is positive.

Attributes	
Firstname (Given Names)	Mandatory
Lastname (Surname)	Mandatory
Date of birth	Optional
Mobile number	Mandatory
Place of birth	Optional
Country	Optional
Email address	Optional
Language	Optional
External ID	Optional

Miscellaneous

- The Target URL is available 90 Days (Status created and initialized)
- The process of ID verification takes in general 5 to 10 minutes. (max 15 min)
- If no SMS is received after 15 min the identification is negative. Check the status.

• Possible reason for unsuccessful identification

Additionally to the SRS Status "error", "canceled" or "aborted", the reason is added to the status for support purpose. The reason describes the problem occurred.

Examples:

"User does not allow camera permission in the app."

"User does not accept the terms and conditions.")

"User is not ready for a selfie.")

"User aborts as the app is not scanning the document.")

"User cancels as the phone number is specified incorrectly.")

"User wants to identify later.")

"User is not interested in performing the identity verification.")

"User aborts because the app is not responding.")

...

Note: Please note that if Status is "aborted" the user can retry with the same IdentID. If Status is "cancelled" or "error" then User cannot retry and needs a new Target URL.

Hardware/Device

The identification can be done through a mobile APP or directly in a desktop modern browser (not internet Explorer). The mobile app is available in all Appstore's worldwide. The identification is not possible on a mobile browser.

If using a desktop browser, the camera and microphone must have a good quality than permits a correct conversation and scanning of documents.

Check here the compatibility:

https://www.idnow.io/wp-content/uploads/Compatibility Matrix 31012022-1.pdf

Technical requirements

UDP: 3478 (STUN)

UDP: 6000-7000 (for Video/Audio/Data Stream) (set when connection is initiated)

TCP: 443 (HTTPS)

TCP: 80 (if URL is entered "go.online-ident.ch" instead of https://redirect to 443 (HTTPS)

The following server names must be resolved to the following IPs (round robin). the server names should be used if possible.

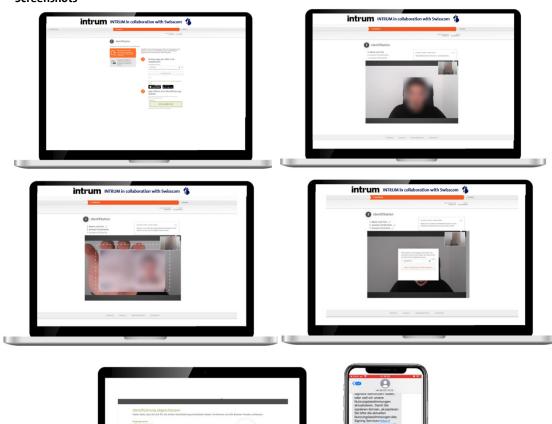
Name	resolves to (roundrobin)
gateway.online-ident.ch	185.85.230.51 193.169.187.174 185.85.230.50
go.online-ident.ch	185.85.230.51 193.169.187.174 185.85.230.50
api.online-ident.ch	185.85.230.51 193.169.187.174 185.85.230.50
video.online-ident.ch	185.85.230.51 193.169.187.174 185.85.230.50

Target	Protocol	Comment
185.85.230.51:443 193.169.187.174:443 185.85.230.50:443	TCP / HTTPS	User frontend
185.85.230.51:443 193.169.187.174:443 185.85.230.50:443	TCP / HTTPS	API calls video server
185.85.230.51:3478 193.169.187.174:3478 185.85.230.50:3478	UDP / STUN	Video communication
185.85.230.51:6000-7000 193.169.187.174:6000-7000 185.85.230.50:6000-7000	UDP / RTP, RTCP, TURN	Video communication

• Service Times

Monday-Saturday 7:00-22:00

• Screenshots



8.7 Appendix 6 – Identification with SRS Auto-Ident-CH by INTRUM

• Identification method name: autoident

• Identification Service Provider : intrum-autoident

• Signature capability for User Identified with this method: AES/eIDAS, AES/QES/ZertES

➤ Validity of the evidence: 2 years max

Language possible German, English, French, Italian

➤ List of supported countries LINK

User Flow

User starts identification in the browser or in the mobile app – user scans ID documents - Mobile number is verified with a SMS Challenge – User makes a selfie video that is analysed by an AI – A back-office check is done – **User gets an SMS with a link to the T&C** – User accepts T&C and User can sign.

- Language: language of the user agent (browser language or mobile phone language)
- Method filter specification

Filter Parameter	Value	Value
Issuer	Intrum-autoident	Intrum-autoident
Jurisdiction	eIDAS	ZertES
LOA	3	4
Offline	FALSE	FALSE
Method Type	Video	Video
Web flow	TRUE	TRUE
Realtime Method	TRUE	TRUE

• Initial data provided: the data provided in the request must match exactly the data on the ID document. If there is an error in the Last name, the identification will be negative. If Surname and at least one given name is provided correctly in case of multiple given names, the identification is positive.

Attributes	
Firstname (Given Names)	Mandatory

Lastname (Surname)	Mandatory
Date of birth	Optional
Mobile number	Mandatory
Place of birth	Optional
Country	Optional
Email address	Optional
Language	Optional
External ID	Optional

Miscellaneous

- The Target URL is available 90 Days (Status created and initialized)
- The process of ID verification takes in general 5 to 10 minutes. (max 15 min)
- If no SMS is received after 15 min the identification is negative. Check the status.

• Hardware/Device

The identification can be done through a mobile APP or directly in a desktop modern browser (not internet Explorer). The mobile app is available in all Appstore's worldwide. The identification is not possible on a mobile browser.

If using a desktop browser, the camera and microphone must have a good quality than permits a correct conversation and scanning of documents.

Check here the compatibility:

https://www.idnow.io/wp-content/uploads/Compatibility_Matrix_31012022-1.pdf

Technical requirements

UDP: 3478 (STUN)

UDP: 6000-7000 (for Video/Audio/Data Stream) (set when connection is initiated)

TCP: 443 (HTTPS)

TCP: 80 (if URL is entered "go.online-ident.ch" instead of https:// redirect to 443 (HTTPS)

The following server names must be resolved to the following IPs (round robin). the server names should be used if possible.

Name	resolves to (roundrobin)
gateway.online-ident.ch	185.85.230.51 193.169.187.174 185.85.230.50
go.online-ident.ch	185.85.230.51 193.169.187.174 185.85.230.50
api.online-ident.ch	185.85.230.51 193.169.187.174 185.85.230.50
video.online-ident.ch	185.85.230.51 193.169.187.174 185.85.230.50

Target	Protocol	Comment
185.85.230.51:443 193.169.187.174:443 185.85.230.50:443	TCP / HTTPS	User frontend
185.85.230.51:443 193.169.187.174:443 185.85.230.50:443	TCP / HTTPS	API calls video server
185.85.230.51:3478 193.169.187.174:3478 185.85.230.50:3478	UDP / STUN	Video communication
185.85.230.51:6000-7000 193.169.187.174:6000-7000 185.85.230.50:6000-7000	UDP / RTP, RTCP, TURN	Video communication

• Service Times

Monday-Saturday 7:00-22:00

• Screenshots









8.8 Appendix 7 – Identification over the Swisscom Trust Services Identification page

Technical requirements:

Java script should not be blocked on the browser

Browser: Chrome, Firefox, Edge, Safari

In enterprise Network, ensure that no proxy Firewall restriction apply or whitelist following needed domains:

Domain used in the whole Identification process

Domain List	Purpose
https://srsident.trustservices.swisscom.com/	SRS Identification web flow
https://fonts.gstatic.com/	SRS Identification web flow
https://www.google-analytics.com/	SRS Identification web flow
https://www.google.com/	SRS Identification web flow
https://www.googletagmanager.com/	SRS Identification web flow
https://www.gstatic.com/	SRS Identification web flow
https://go.online-ident.ch/	SRS Video ident CH
https://go.online-ident.ch/	SRS Auto ident CH
https://www.identity.tm/	SRS Video Ident EU
https://www.identity.tm/	SRS eID DE
https://ident.klarna.com/	SRS Bank DE
https://jump.nect.com/	SRS Selfie Ident EU
https://maps.googleapis.com/	SRS Direct

Swisscom Trust Services

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