

Q3 2022

# OOTS Guidance

An introduction for teams across the EU working on the implementation of the Once-Only Technical System



# About this guidance

This guidance was created through a collaborative process between the Commission and the Member States.

It is intended to provide a high-level overview and introduction to the way the Once-Only Technical System (OOTS) will work, and we hope it is useful to a broad range of stakeholders.

There are, of course, variations and choices Member States will need to make for their specific implementations that will depend on their preferences and existing IT landscape that are not represented here.

The scenario used to illustrate the guidance is where the user is retrieving evidence from 1 provider. There may be cases where users are retrieving evidence from more than 1 provider in more than 1 Member State.

# Contents

- [Legal Framework](#)
- [Scope](#)
- [Governance](#)
- [Sub-Groups](#)
- [Common Misconceptions](#)
- [Benefits of the OOTS](#)
- [High-level Architecture](#)
- [User journey walk through](#)
- [Useful links](#)

# A few key definitions:

<b>Single Digital Gateway Regulation (SDGR)</b>	The regulation in which article 14 sets the requirement to establish a technical system for the automated exchange of evidence between competent authorities in different Member States
<b>Once-Only Technical System (OOTS)</b>	The technical system for the cross-border automated exchange of evidence
<b>Competent authority (CA)</b>	Competent authority means any Member State authority or body established at national, regional or local level with specific responsibilities relating to the information, procedures, assistance and problem-solving services covered by the SDGR
<b>Procedural requirement</b>	Facts or compliance that are proved with evidence
<b>Evidence</b>	Evidence means any document or data, including text or sound, visual or audiovisual recording, irrespective of the medium used, required by a competent authority to prove facts or compliance with procedural requirements
<b>Evidence type</b>	Evidence type is a category of structured or unstructured evidence with a common purpose or content;
<b>Evidence provider</b>	The competent authority which is providing the evidence
<b>Procedure portal</b>	A webpage or a mobile application where a user can access and complete an online procedure.

# Legal Framework

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# Two regulations describe the legal framework for the OOTS

## Single Digital Gateway Regulation (EU) 2018/1724



[Read the regulation online](#)

## Implementing Regulation C(2022)5628



[Read the regulation online](#)

## What

Art.14 of the SDGR establishes the need for a: Technical system for the cross-border automated exchange of evidence and application of the 'Once-Only' principle

## Who

**MS:** SDG Coordination group

**EC:** GROW/CNECT/DIGIT

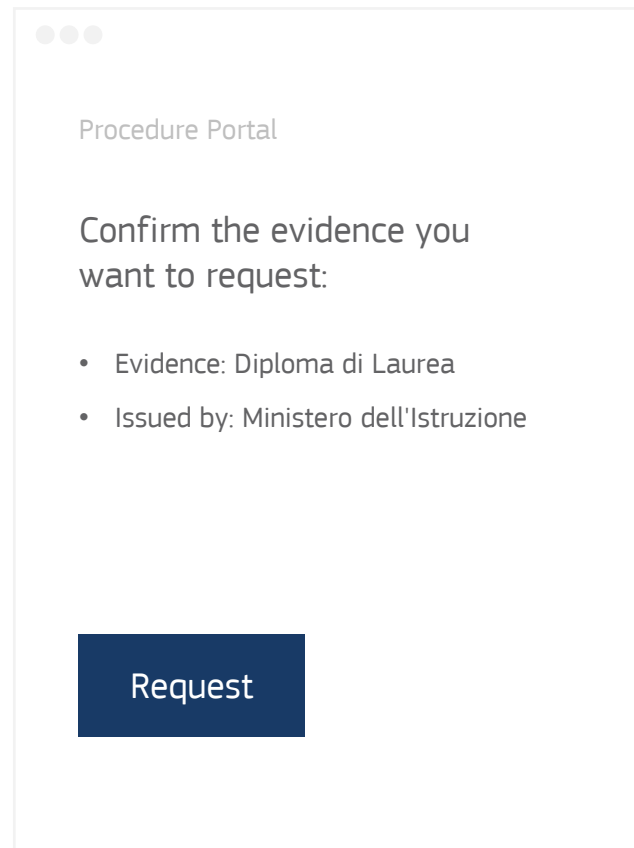
## By when

December 2023

# Two key principles of the regulation put the user at the center of the evidence exchange process

## 1

The user must give their **explicit request**



Procedure Portal

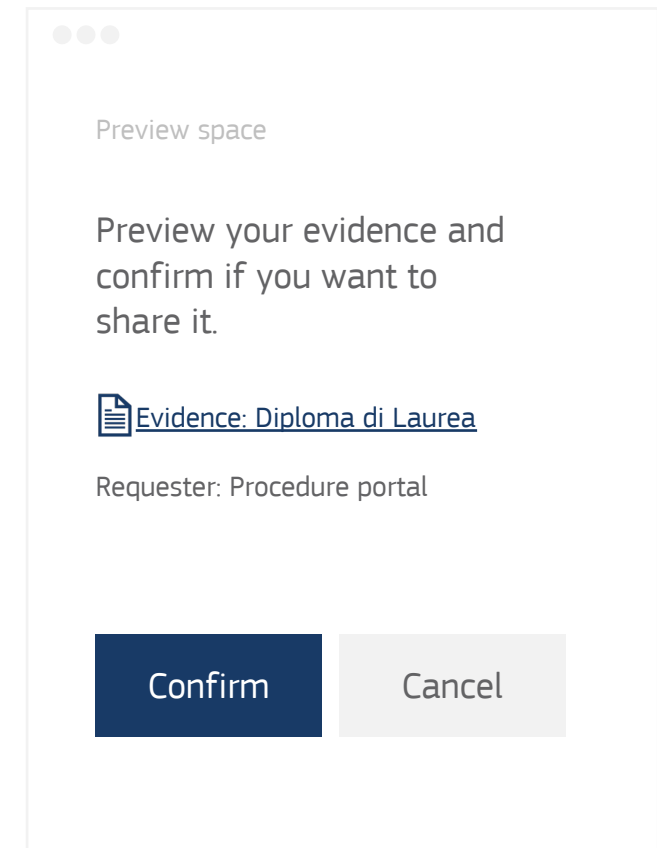
Confirm the evidence you want to request:

- Evidence: Diploma di Laurea
- Issued by: Ministero dell'Istruzione

Request


## 2

...and have the possibility to **preview** the evidence before it is exchanged



Preview space

Preview your evidence and confirm if you want to share it.

 [Evidence: Diploma di Laurea](#)

Requester: Procedure portal

Confirm Cancel

# Scope

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## The SDGR sets out the use of the technical system for online procedures in the scope of these directives →

Not all procedures portals will need to connect to the OOTS. In the context of the Evidence Mapping Sub-Group, Member States are consulting their competent authorities to determine which procedures require the exchange of evidence across borders. Through this work, Member States will define which procedure portals will need to connect in order to be able to request evidence and which competent authorities will need to connect in to provide evidence.

### Procedures in scope

21 procedures of Annex II of the SDGR (2018/1724/EU)

Recognition of Professional qualifications (2005/36/EC):

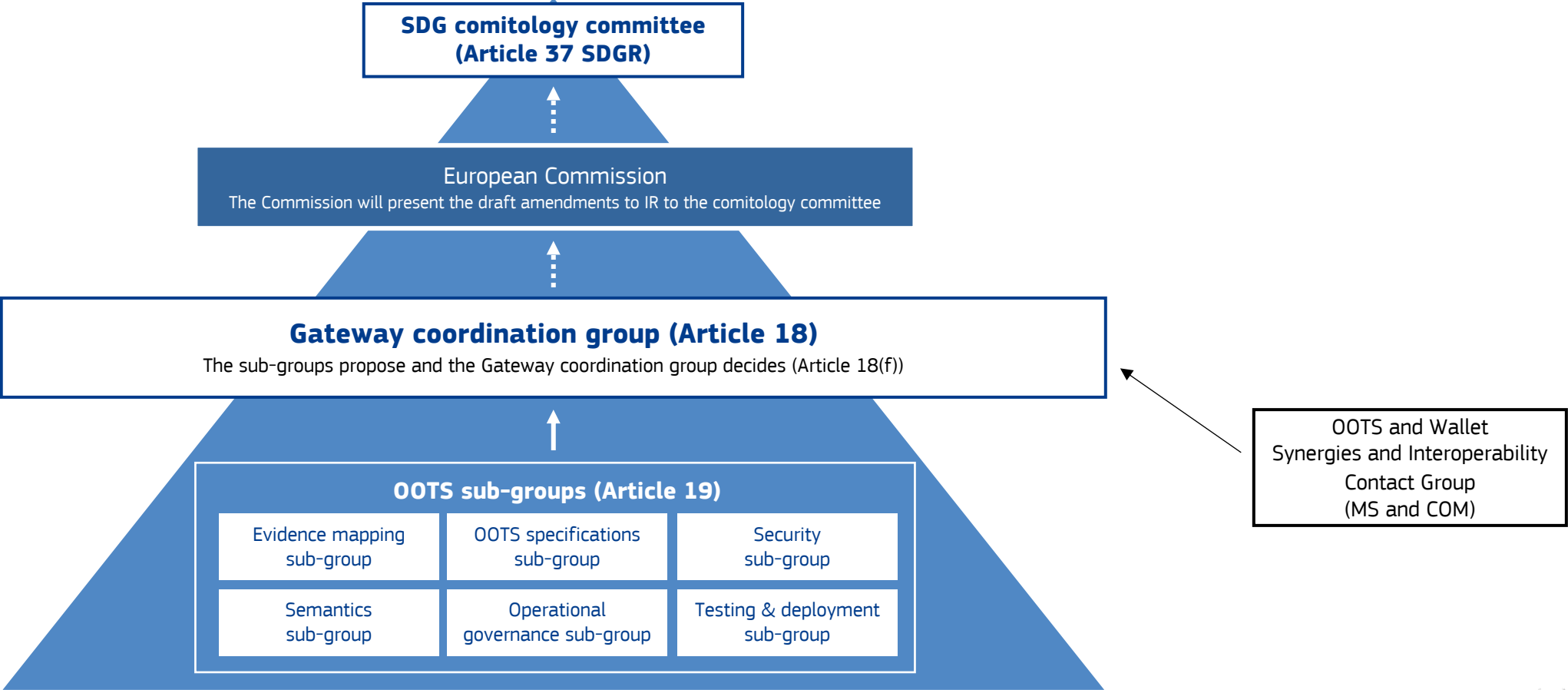
Services Directive (2006/123/EC)

Public procurement (2014/24/EU) + (2014/25/EU)

# Governance

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# Project governance



# **OOTS Sub-Groups**

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# OOTS sub-groups

Member States experts will work together with colleagues from the Commission in sub-groups to implement the OOTS by Dec 2023.

Data & Business	Technical Infrastructure	SLAs and Policies
<b>Evidence mapping</b>	<b>OOTS specifications (TDD)</b>	<b>Operational governance</b>
<b>Standardisation of data models</b>	<b>Testing &amp; deployment</b>	<b>Security</b>

# Work ahead



**European Citizen wanting to work, study, live abroad**  
(and Businesses to transact and expand in the EU Single Market)

Portals

## My eAdministration

Procedure Portals and Data Sources

OOTS Governance,  
SLAs and policies

Content

## Evidence types

Evidence to be identified and brought onboard  
in waves (recital 16)

Standardised  
evidence is optional (\*)

Evidence to be  
identified and  
mapped in "waves"

eID

## eIDAS Infrastructure

Authentication & Identification, Powers and  
Mandates, Record Matching in waves (recital 22)

eID capabilities  
available in "waves"

Exchange

## OOTS Evidence Exchange Infrastructure

Access Points, Common Services, OOTS Envelope  
Structure and Preview Areas

Legal deadline by  
12/2023



Note there will be an 'End of year assessment report on the functioning of the gateway' for the Council and the EP

# **Common Misconceptions**

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# Common misconceptions



MSs are required to harmonise their procedures or the evidences they request per procedure.



Each MS can maintain their procedures as they are and determine their own procedural requirements.



MSs are required to standardise or structure their evidences according to specific data models.



Portals can request structured evidence if the evidence provider offers it, otherwise portals can request PDFs.



The OOTS will rely on a European Commission central database of citizen data.



Citizen data will be exchanged directly between MS competent authorities at the request of the citizen.



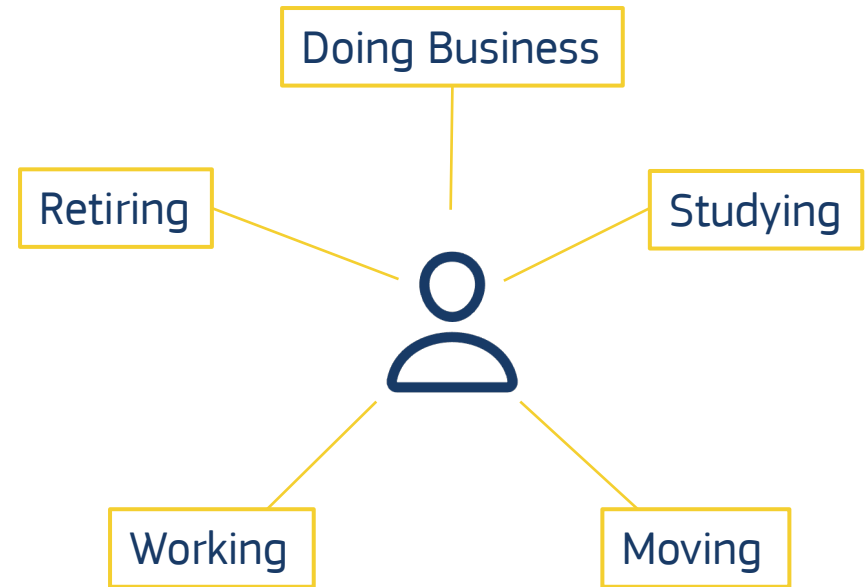
# **Benefits of the OOTS**

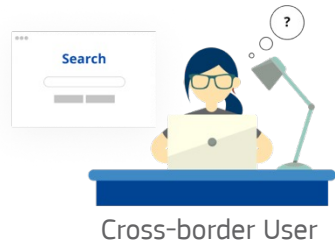
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# The OOTS is creating a cross-sector data space.

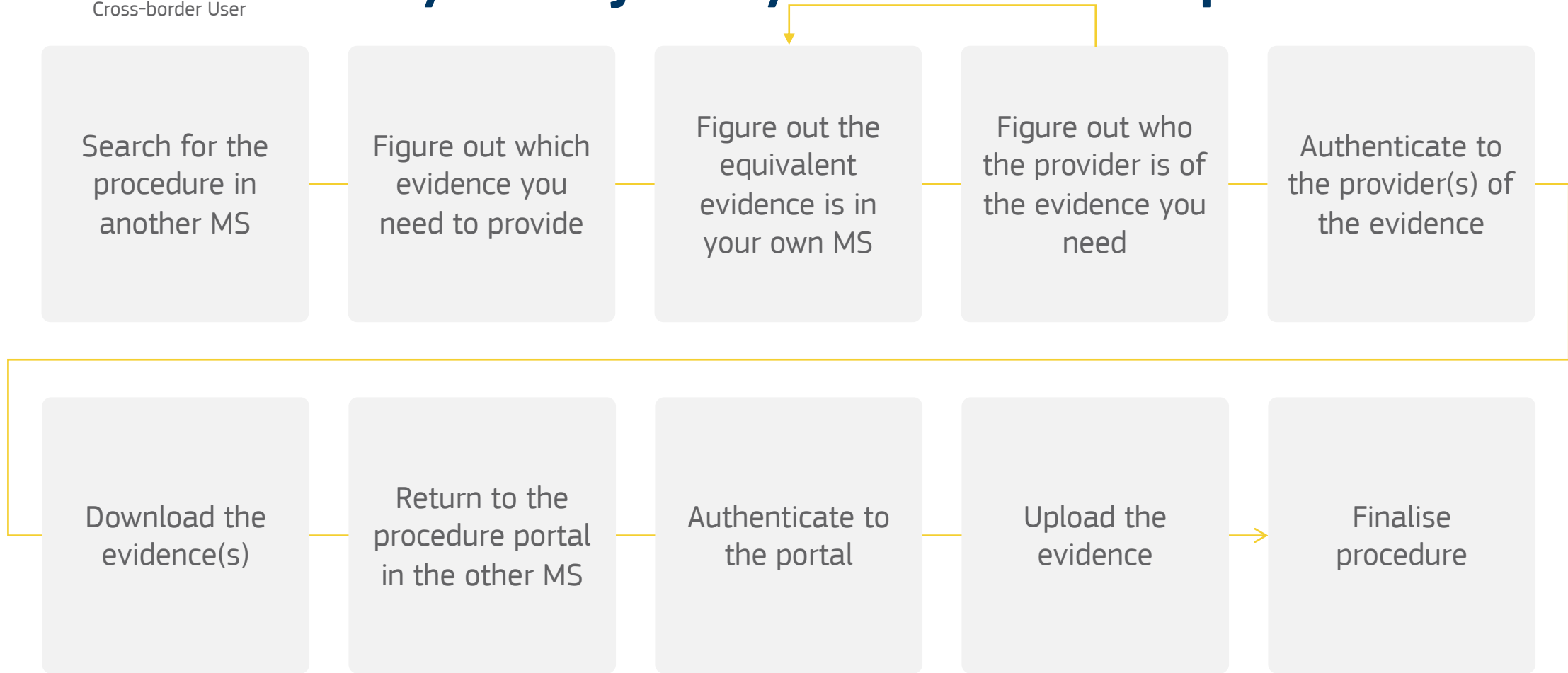
When completing an online procedure, citizens will be able to give their explicit request to retrieve evidence from a competent authority in another Member State.

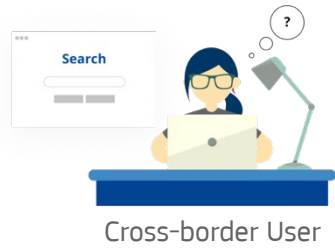
The explicit request triggers the retrieval of evidence from competent authorities across many different sectors (education, vehicles, population registers, ...) through the OOTS.





## Once-Only Technical System: Today's user journey for cross-border procedures





## Once-Only Technical System: Tomorrow's user journey for cross-border procedures

Search for the  
procedure in  
another MS

Authenticate to  
the procedure  
portal in another  
MS

Request evidence  
exchange

Authenticate on  
the provider side

Preview and  
confirm

Finalise  
procedure

# The Once-Only Technical System will eliminate barriers to mobility

## Today...

There are different evidences required across the Member States for administrative procedures



## The OOTS will

Automate the mapping of evidence types between the Member States via the OOTS common services.

There are many evidence providers in each Member State and no easy way to know who they are



Provide an EU-wide catalogue of evidence providers via the OOTS common services.

It is not easy for administrations to confirm that evidence citizens upload is authentic and up-to-date



Directly connect public administrations with authentic data sources via a secure channel.

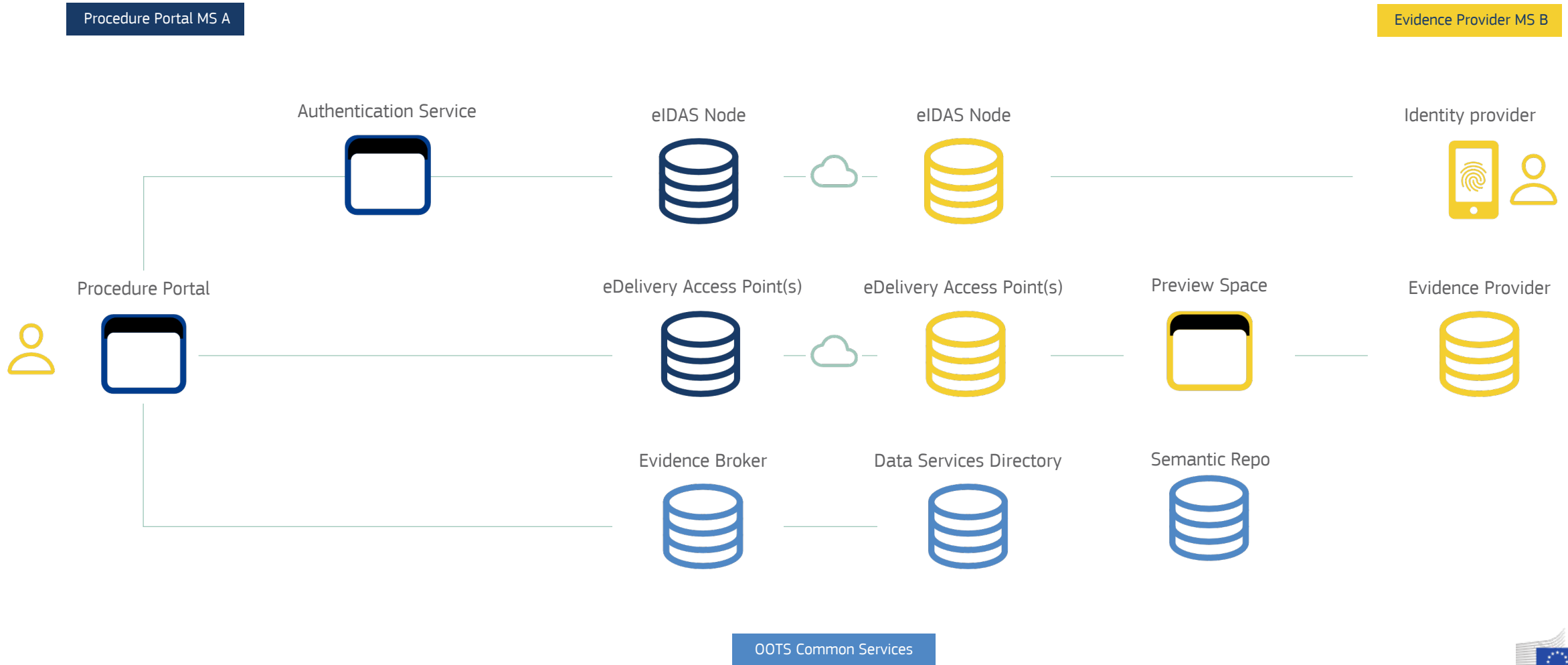
## In summary, the benefits of the OOTS are:

1. The OOTS means **citizens no longer need to do the work** to figure out what the matching evidence is in another Member State and which authentic data source can provide it and to play the go-between
2. Public Administrations can **trust** evidence delivered through the OOTS as it is provided **directly from the authentic source** via a trusted protocol (eDelivery)
3. As the evidence comes directly from the source, public administrations will **always receive the latest version of the evidence**.
4. OOTS exchanges **standardised and non-standardised** evidence with the **same level of trust and security**
5. OOTS will be a secure and privacy friendly **cross-sector G2G data-space** for exchange of data directly among public administrations, which can be used even beyond once-only

# High-Level Architecture

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# Architectural design of the once only system





# eID and eDelivery are key components of the Once-Only Technical System

The European Commission already provides a range of services and specifications to help you implement them.

[Check out the website to learn more.](#)



## eID

Offer services capable of electronically identifying users across Europe.

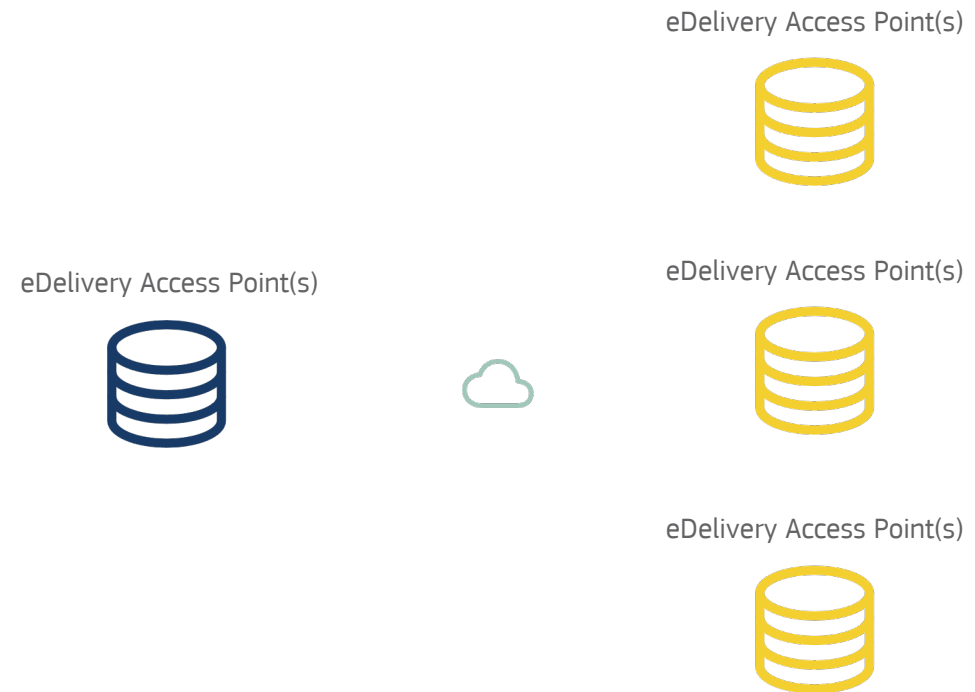


## eDelivery

Exchange electronic data and documents in an interoperable and secure way

# Member States are free to choose how many eDelivery access points they use in their OOTS Architecture

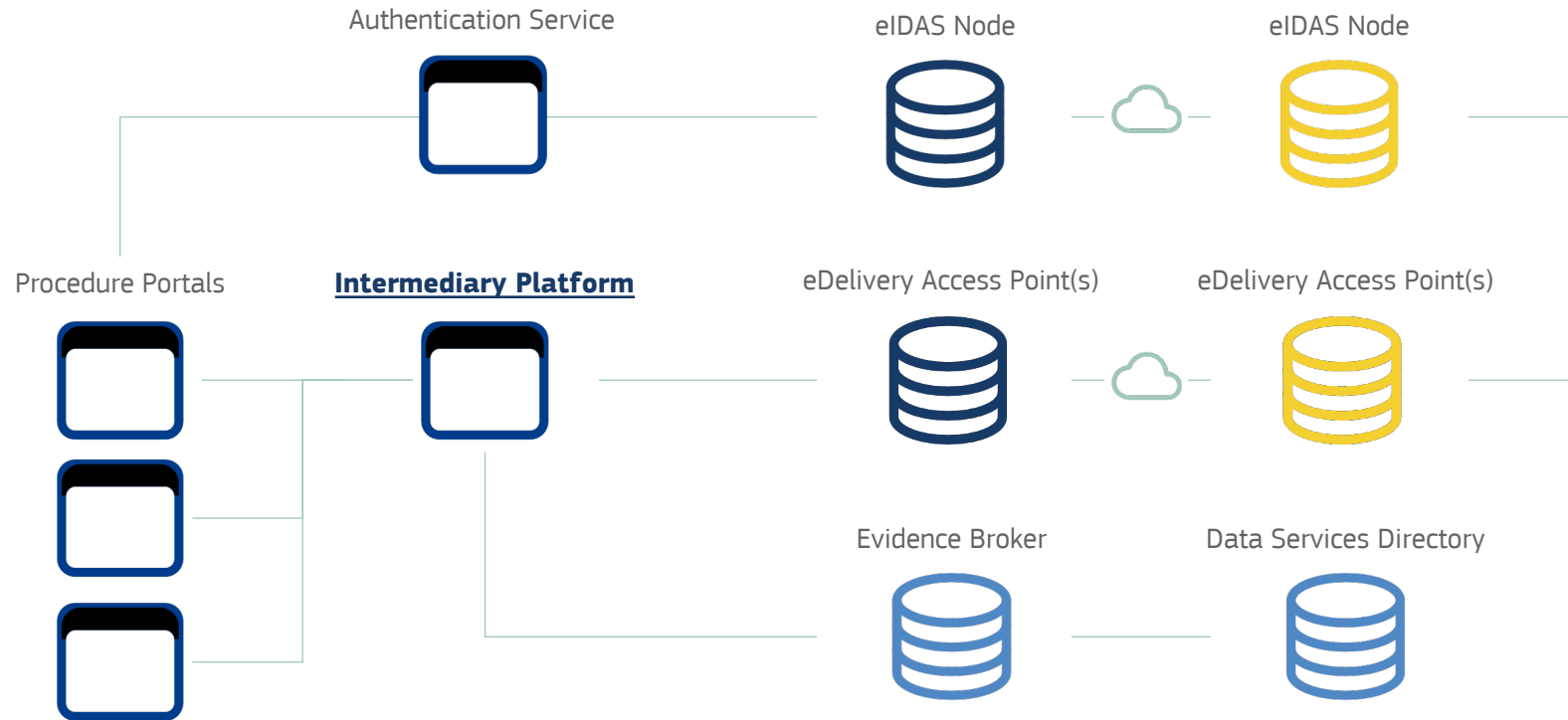
Member States may choose to deploy one Access Point for the OOTS, one per region, one per sector or any other configuration that makes most sense for their country.



# Intermediary Platforms

Many Member States are considering intermediary platforms.

Procedure Portal MS A



An Intermediary Platform may simplify the implementation the **Procedure Portal side**:

- The platform could provide the functionality to operate client interfaces to the Common Services, so Procedure Portals do not have to;
- The platform could implement eDelivery for the Procedure Portals by providing (or connecting to) an eDelivery Access Point.

See 7.7 of the High-Level Architecture in the OOTS Technical Design Documents for more details.

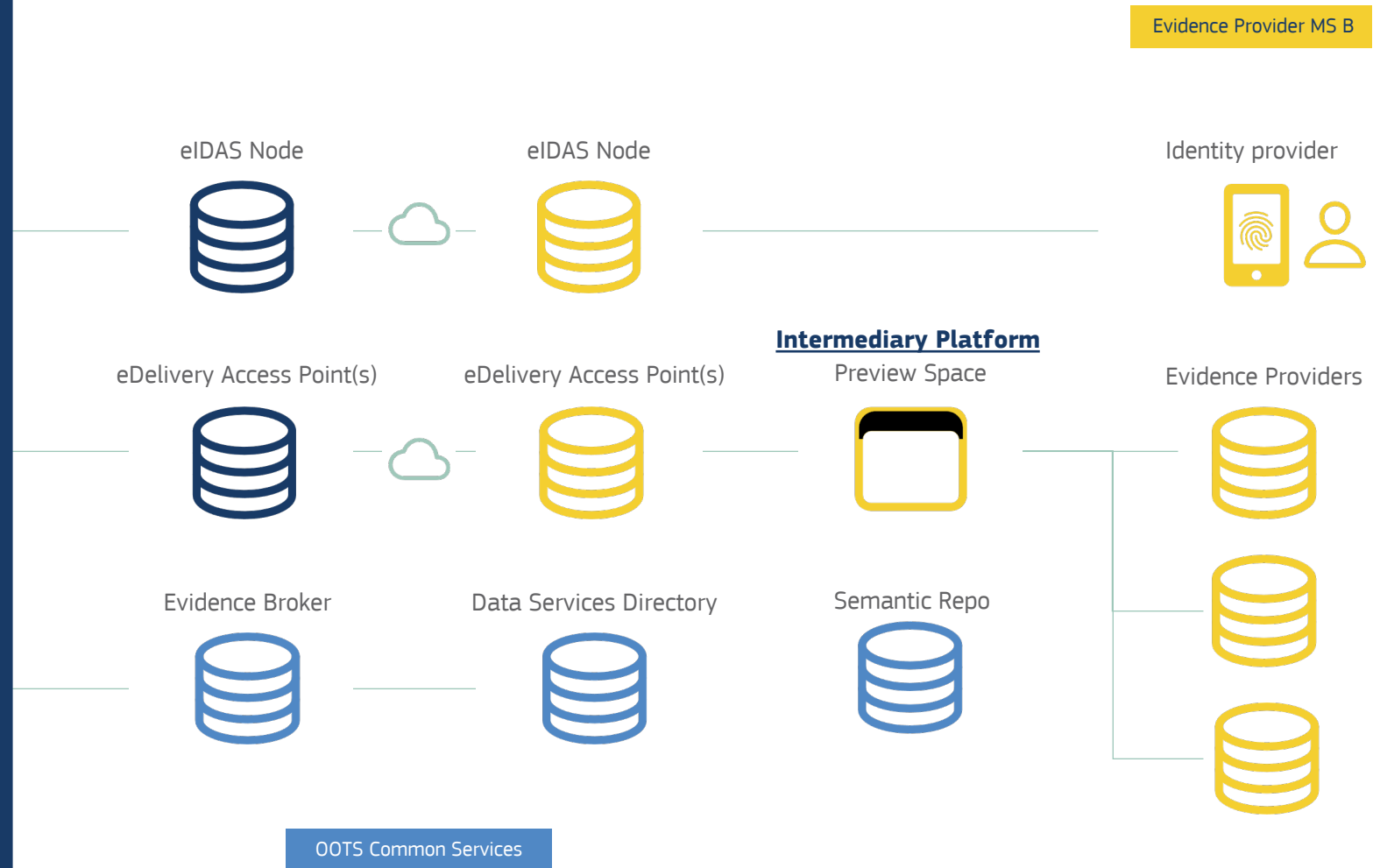
# Intermediary Platform

Provider side

An Intermediary Platform may simplify the implementation on the **Evidence Provider side**:

- The platform could implement a Data Service for the type of evidences that it makes available;
- The platform could implement eDelivery for the Procedure Portals by providing (or connecting to) an eDelivery Access Point;
- The platform could provide the preview functionality for multiple evidence providers
- Implementation, testing, configuration, maintenance, etc. are all simplified.

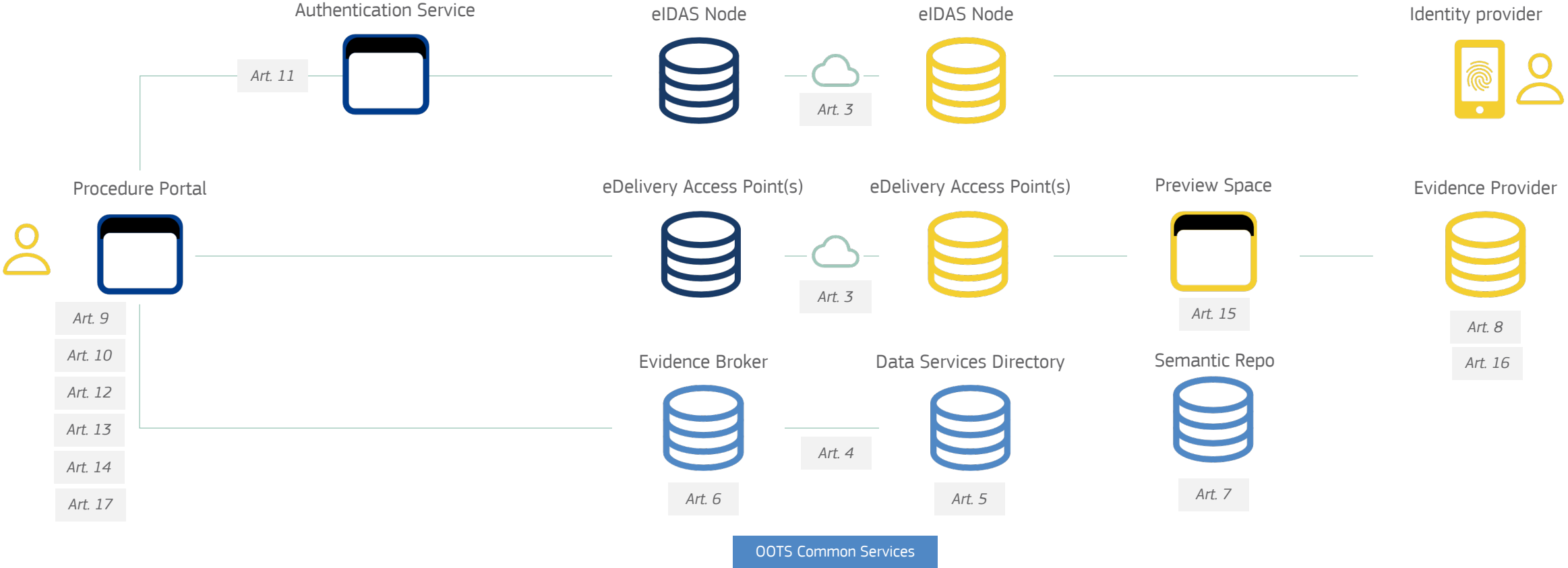
See 7.7 of the High-Level Architecture in the OOTS Technical Design Documents for more details.



# Mapping of architecture to Implementing Regulation

Procedure Portal MS A

Evidence Provider MS B

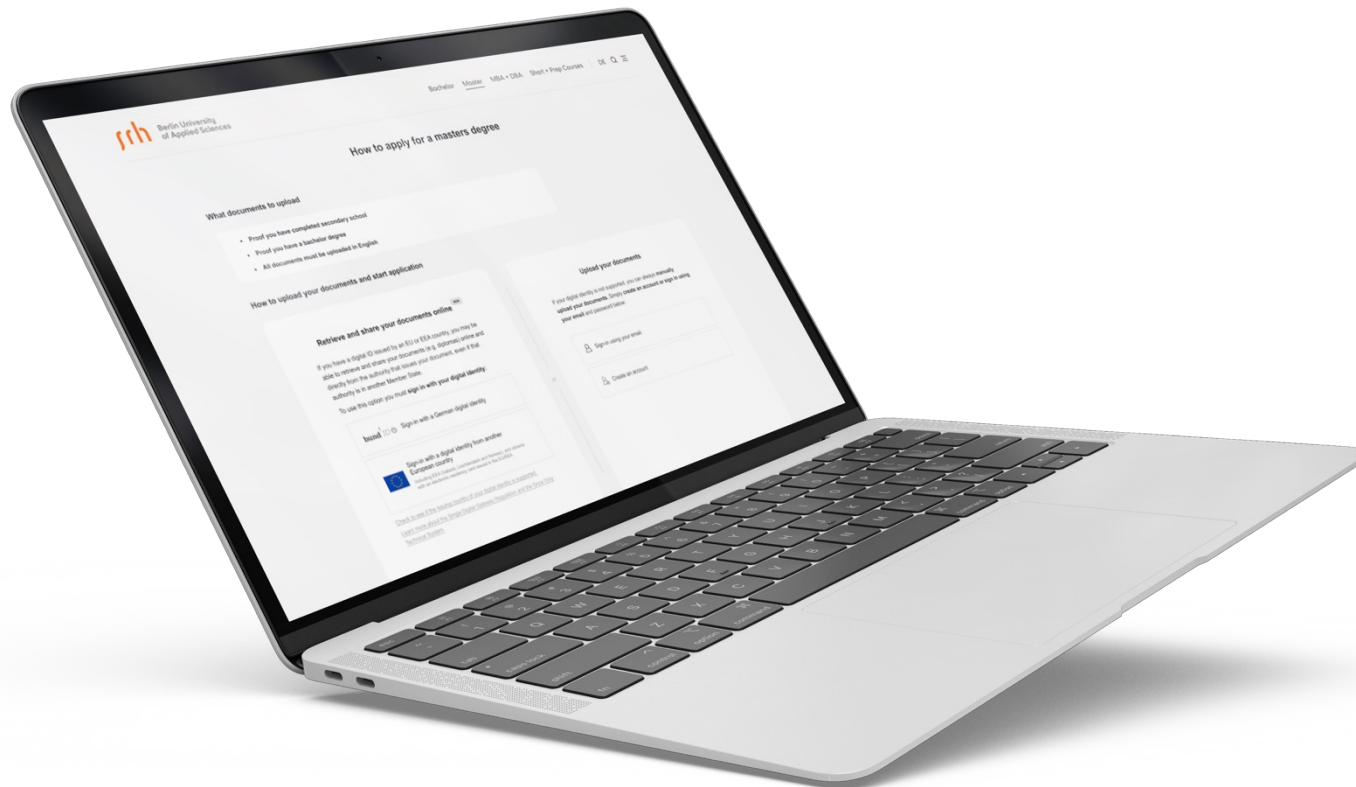


# User journey

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1. Authenticate | 2. Locate evidence | 3. Evidence Request | 4. Redirect | 5. Preview | 6. Evidence Response | 7. Submit

# Prototype

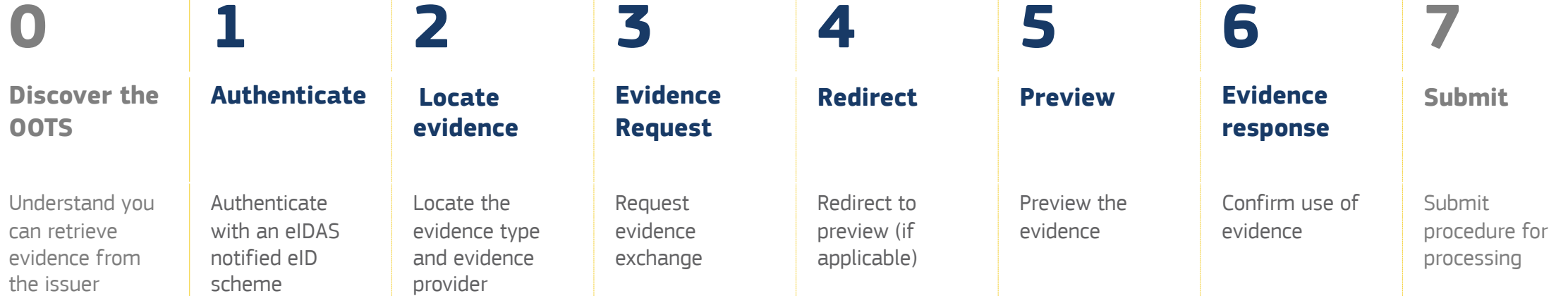


Access the latest clickable prototypes to get a feel for the end user experience.

→ [LINK TO PROTOTYPE](#)

# 7 key steps in the once only journey

Scope of the OOTS





# 1 Authenticate

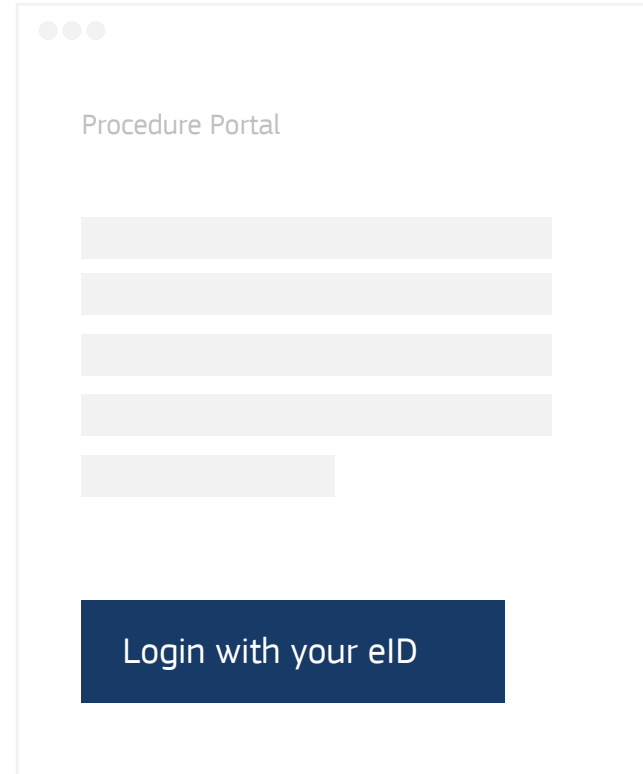
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Users must have an eIDAS enabled eID to request the exchange evidence through the Once-Only Technical System

## **User must authenticate to use the OOTS**

Users begin their once only journey on a portal that offers access to one of the online procedures in scope of the Single Digital Gateway Regulation. Cross-border users will start the procedure by authenticating with their eID.

Only users who authenticate with an eIDAS means from a notified eID scheme will be able to request evidence through the Once-Only Technical System.



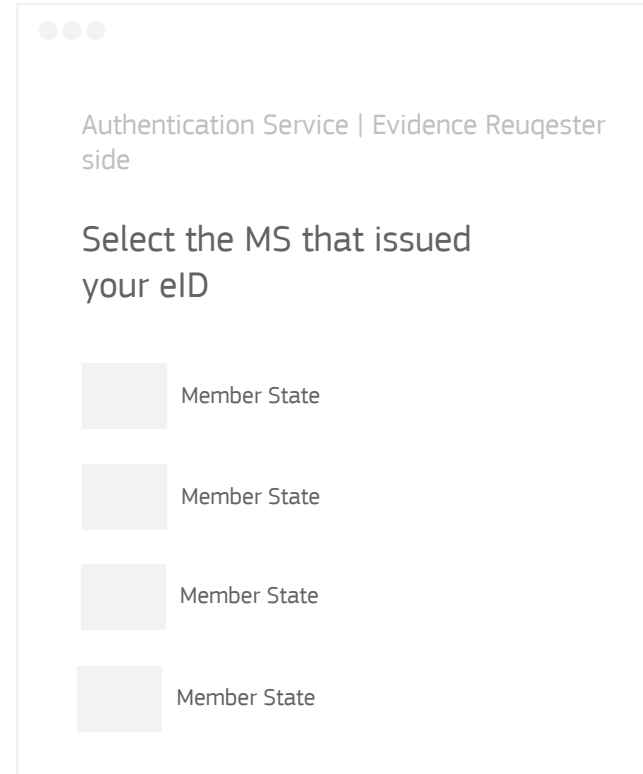
The image shows a screenshot of a web portal titled "Procedure Portal". At the top left, there are three small grey circles. Below the title, there are five horizontal grey bars representing input fields for login information. At the bottom of the form, there is a dark blue button with the text "Login with your eID" in white.

## User must select the MS that issued their eID

Once users have chosen to sign-in with their eID on the procedure website, they will typically be re-directed to the website of the national authentication provider on the procedure portal side.

Users must then select from a list, the Member State that issued their eID. If their eID was issued by another Member State, the user will then be redirected to the website of the selected national authentication service.

An authentication request is sent from the eIDAS node in the procedure portal Member State to the eIDAS node in the Member State that issued the users' eID.



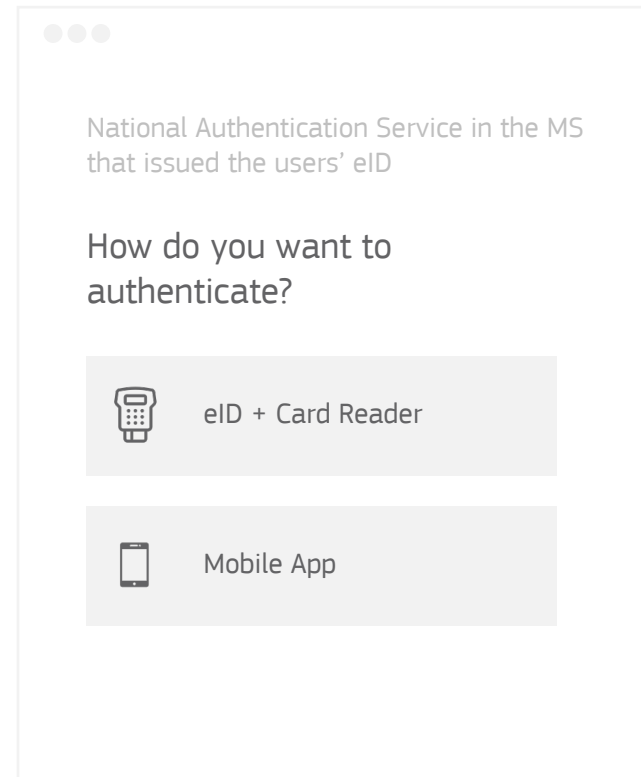
Authentication Service | Evidence Reuqester side

Select the MS that issued your eID

- Member State
- Member State
- Member State
- Member State

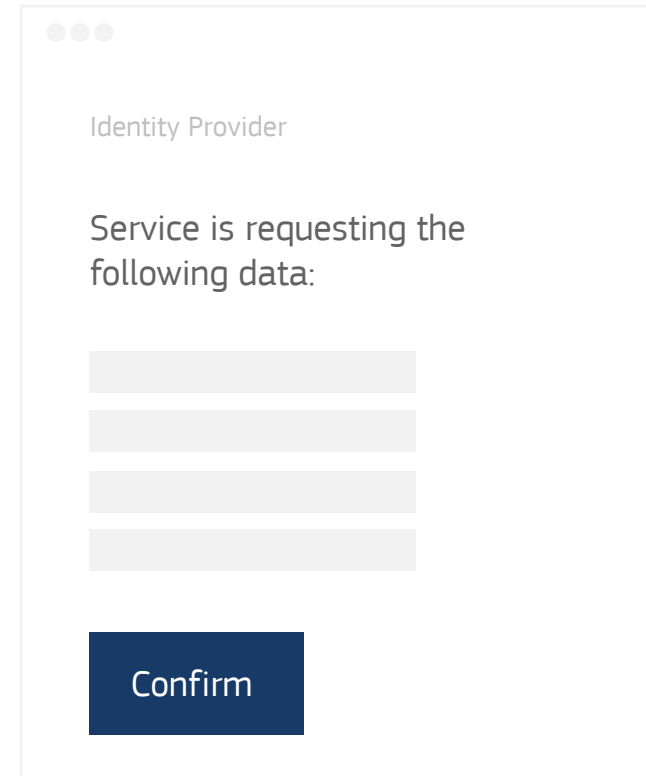
## User must select their eID means

National authentication portals may provide users with multiple eID means to authenticate. Typically, these include a mobile app or an eID card reader. Users must authenticate with an eIDAS notified scheme or they won't be able to exchange evidence via the Once-Only Technical System.



## User will be asked for consent

Users will be asked to consent to share their eIDAS attributes with the requesting service in the Member State where they are completing the procedure, this request for consent is performed by either by the national authentication service on the provider side and/or by the users' identity provider. Once the user has successfully authenticated, they are re-directed back to the procedure portal.



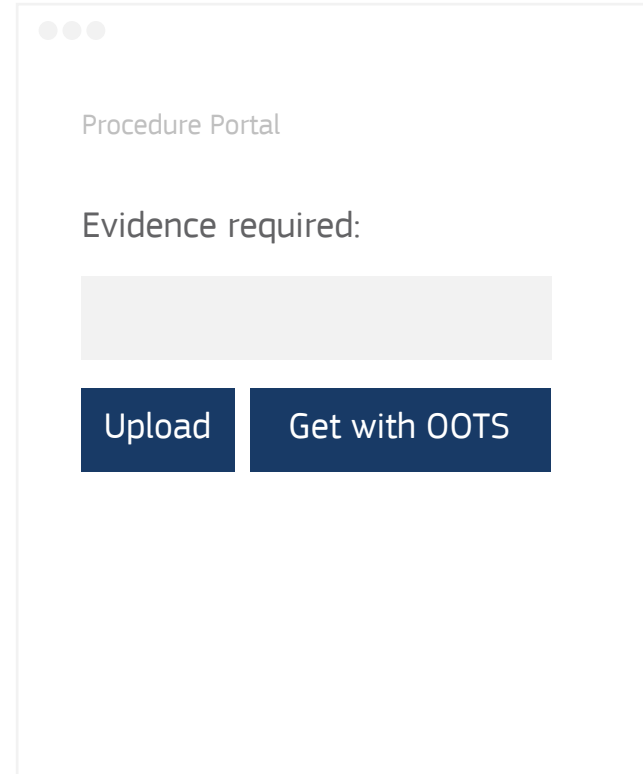
## 2 Locate evidence

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The procedure portal must identify what to ask for (*Evidence Type*), and who to ask it from (*Evidence Provider*).

## **Users can choose to use once only**

Using the Once-Only Technical System is not obligatory – users can still choose to use the Once-Only Technical System or upload the required documents manually.



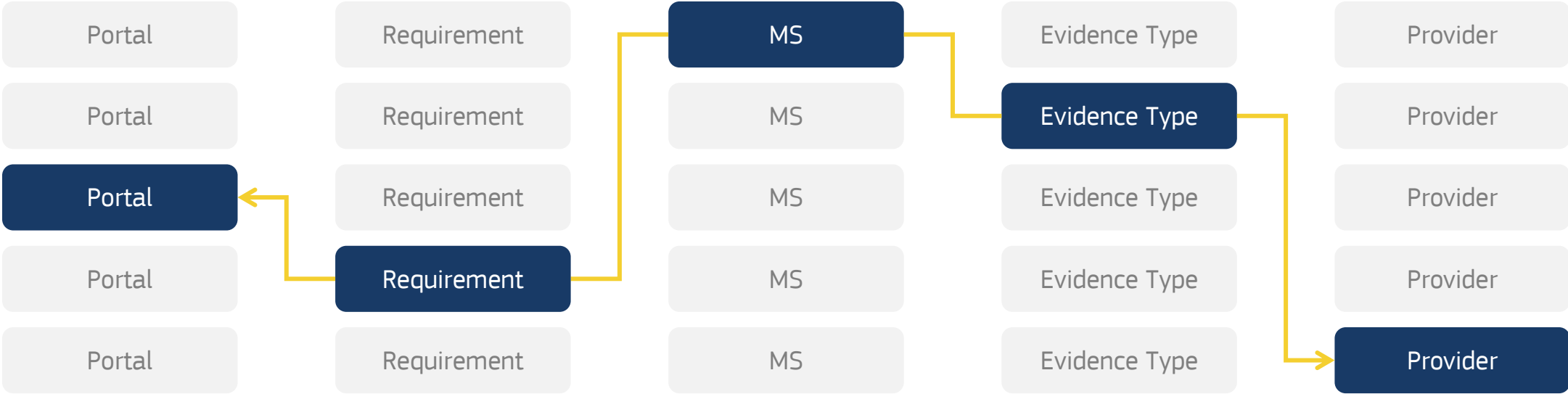
Procedure Portal

Evidence required:

[Upload](#) [Get with OOTS](#)

# Simplified view of mapping requirements to evidences

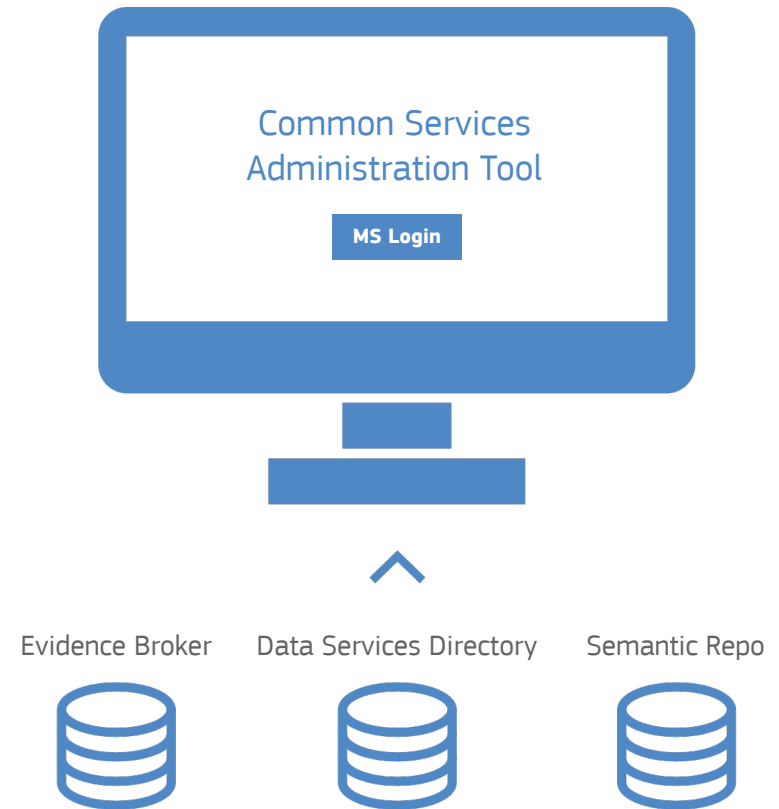
- A procedure portal has procedural requirement(s) (e.g. Poof of Birth).
- Each requirement is linked to an evidence type(s) in each Member State (e.g. Birth Certificate)
- Each evidence type has one or more providers in each Member State (e.g. Population Register)





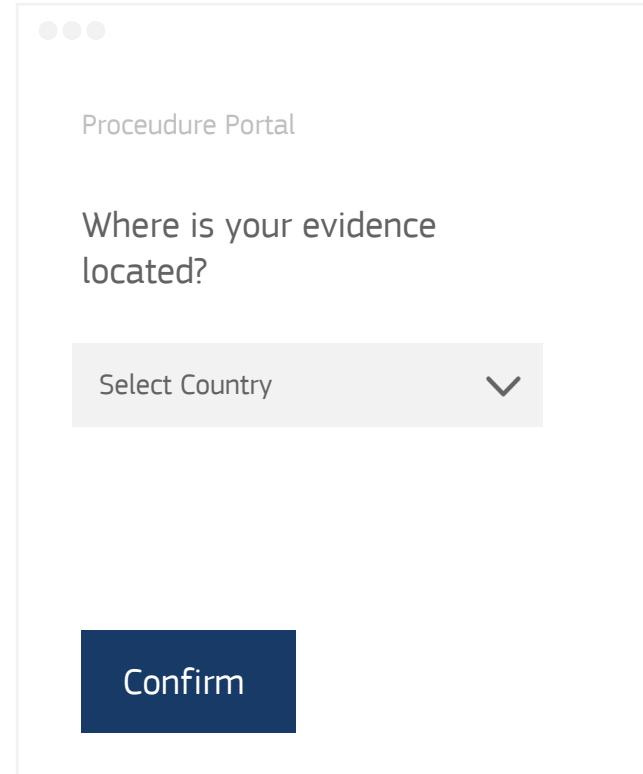
# Member States will have a user interface to the OOTS Common Services

MSs will be able to manage their requirements, evidence types and data services through the application.




## **User must indicate in which MS their evidence is located**

For each procedural requirement, the user needs to select the MS where their evidence is issued. If there are multiple evidences required, the user needs to be able to select the provider MS for each evidence.



Procedure Portal

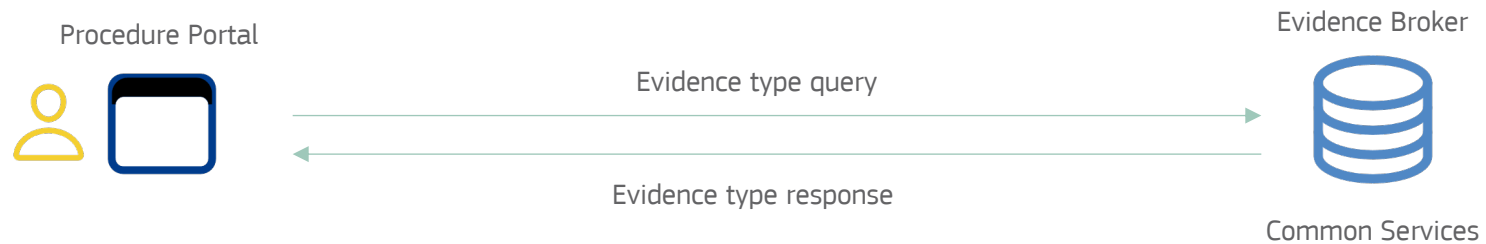
Where is your evidence located?

Select Country 

**Confirm**

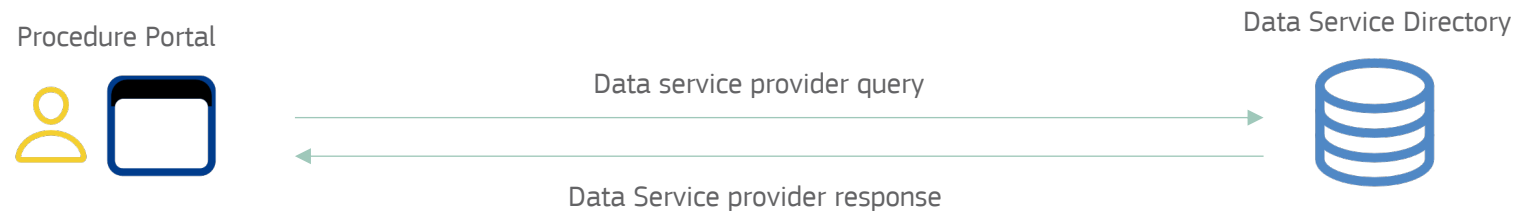
## Determining the evidence type

If the portal does not already know what evidence type to request, the procedure portal sends a query to the Evidence Broker. The Evidence Broker allows the Procedure Portal to look up the right evidence type(s) to request from the Evidence Provider.



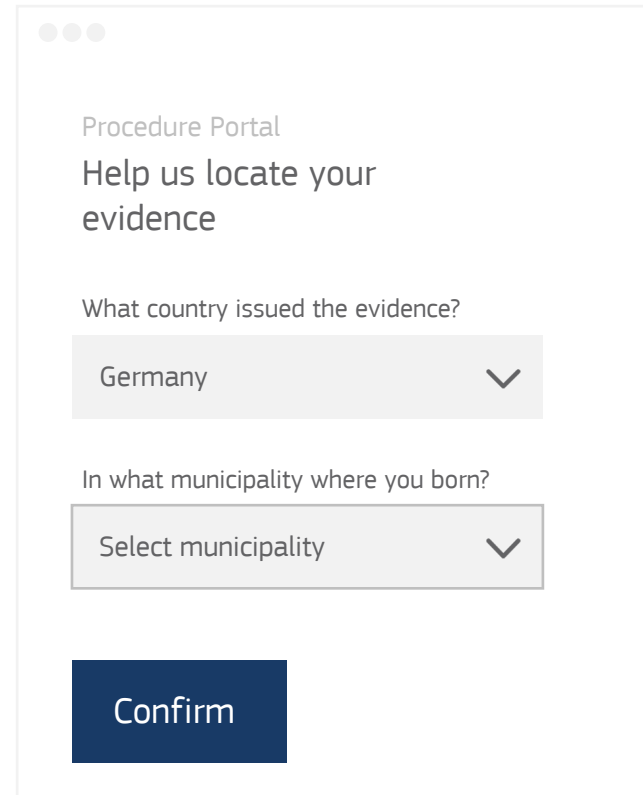
## Determining the Evidence Provider

To determine who to send the request for evidence to, the portal sends a query to the Data Service Directory (DSD) with the evidence type (provided by the Evidence Broker) and Member State. The DSD returns the name of the Evidence Provider and the ID of the eDelivery Access point, or any additional attributes required to locate the evidence provider.



## Additional attributes

In some cases, Member States may need information from the user to determine the right evidence provider. Users may be required to input a region or other piece of information to help locate the right provider. We call the additional information required *additional attributes*. Member States must register these attributes in the DSD. When defined, the DSD will respond to a query from a portal with a request for these additional attributes. The portal must in turn, request them from the user. The portal will then use the user's input to query the DSD again to define the relevant evidence provider(s) .



The screenshot shows a mobile-style interface for a 'Procedure Portal'. At the top, there are three grey circles. Below them, the text reads 'Procedure Portal' and 'Help us locate your evidence'. The first question is 'What country issued the evidence?', with a dropdown menu showing 'Germany' and a downward arrow. The second question is 'In what municipality where you born?', with a dropdown menu showing 'Select municipality' and a downward arrow. At the bottom, there is a dark blue button with the text 'Confirm'.


## Selecting the Evidence Provider

If the Data Service Directory returns multiple Evidence Providers for an evidence type the user will be asked to select the relevant Evidence Provider from a list. For example, if university diplomas are stored in each university rather than in a central database, the user will be asked to select the right university to request the evidence from.


Procedure Portal

Help us locate your evidence


What country issued the evidence?

Germany 

In what municipality where you born?

Bavaria 

What University issued your evidence?

Select provider 

**Confirm**

# 3 Evidence request

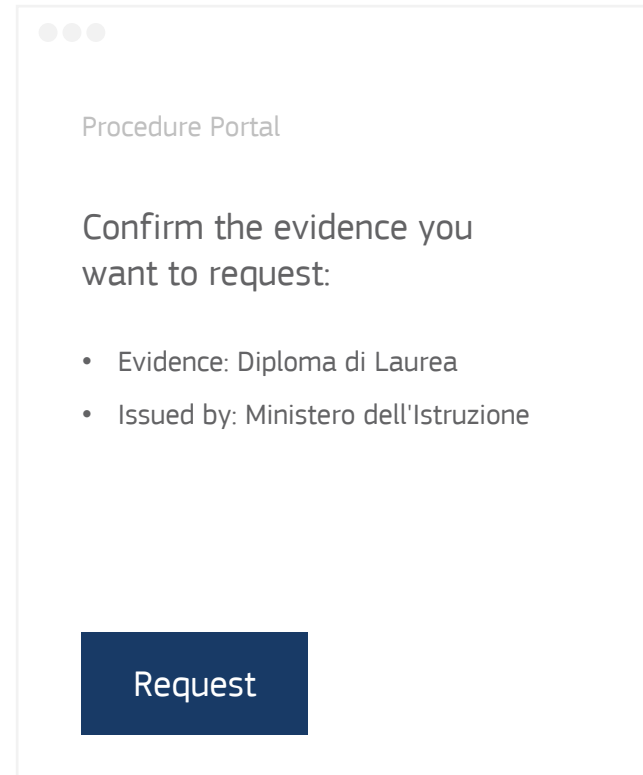
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The request for evidence is sent to the Evidence Provider

## User's explicit request

Processing of requests for evidence is only permitted at the explicit request of the user, unless the exemption from article 14.4 of the SDGR applies. To enable users to provide an informed explicit request they should be provided with:

1. The name(s) of the Evidence Provider(s);
2. The identifier of the evidence type(s) that will be requested.
3. Optionally a description of the evidence type



Procedure Portal

Confirm the evidence you want to request:

- Evidence: Diploma di Laurea
- Issued by: Ministero dell'Istruzione

Request



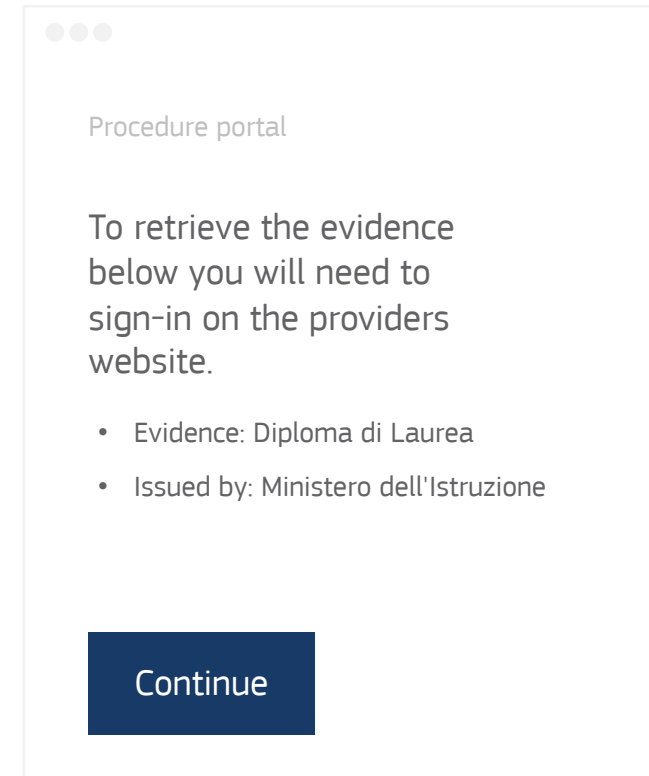
## Evidence request is sent

Once the user explicitly requests to retrieve an evidence, the first (1 of 2) request-response dialogue is triggered:

1. The Requester sends an evidence request message through an eDelivery access point to each one of the selected Providers for each requested type of evidence.
2. The data service of each Provider returns an evidence response message through an eDelivery access point for each of the evidence request messages containing a redirect URL and optionally additional information describing the evidence in one or multiple languages.

**The user** can then click on the URLs to be re-directed to the provider side.

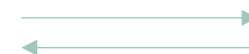
**Note:** If no preview is required, the evidence provider can respond directly to the first evidence request message, with the evidence itself.



Procedure Portal



First request msg



Response with URL



Evidence Provider



# 4 Redirect

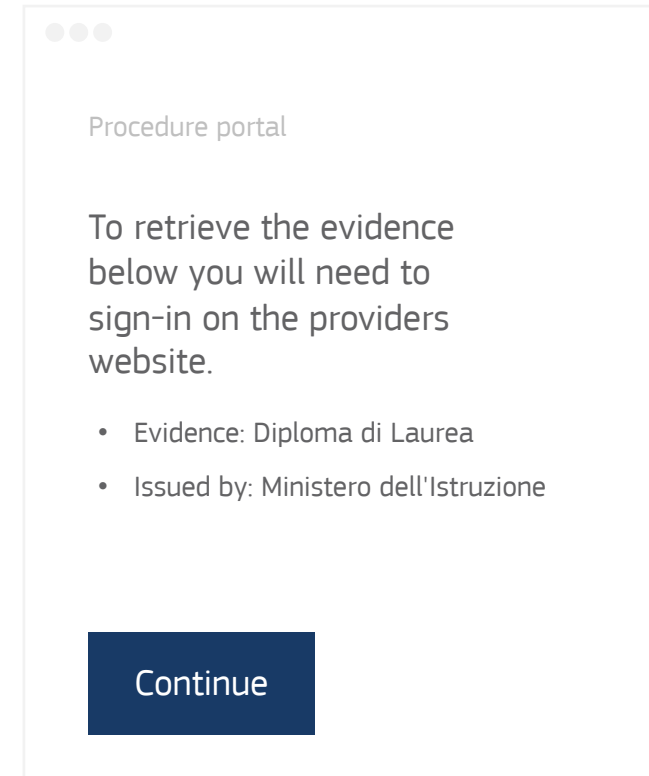
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The user is redirected to the provider side

## User is redirected to the provider side

When a user chooses to proceed with evidence exchange by clicking on the link in the procedure portal, they are redirected to the URL at the provider side for each evidence or a group of evidences. The requester will then send a second message to the provider; it will include 'return information' as an appended return URL parameter.

Later, after the user has been directed to the provider side and confirms they want to proceed with evidence exchange, the evidence provider will respond to this message with the evidence itself.



Procedure Portal



Second request msg

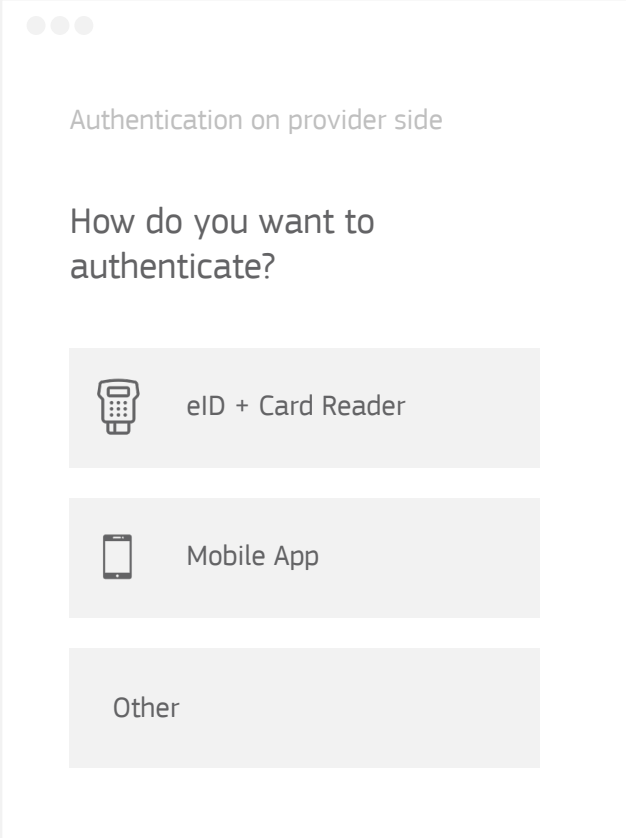


Evidence Provider




## User may need to authenticate again


The user will potentially have to re-authenticate; this is up to the evidence provider to decide. If the user is required to re-authenticate, the provider must check that the mandatory attributes of the minimum eIDAS data set retrieved in the re-authentication process match the ones received in the request for evidence sent by the procedure portal.



Authentication on provider side

How do you want to authenticate?

 eID + Card Reader

 Mobile App

Other

The image shows a screenshot of a user interface for authentication. At the top, there are three grey circles. Below them, the text 'Authentication on provider side' is displayed. The main question is 'How do you want to authenticate?'. There are three options, each in a light grey rectangular button: 'eID + Card Reader' with a card reader icon, 'Mobile App' with a smartphone icon, and 'Other'.

# 5 Preview

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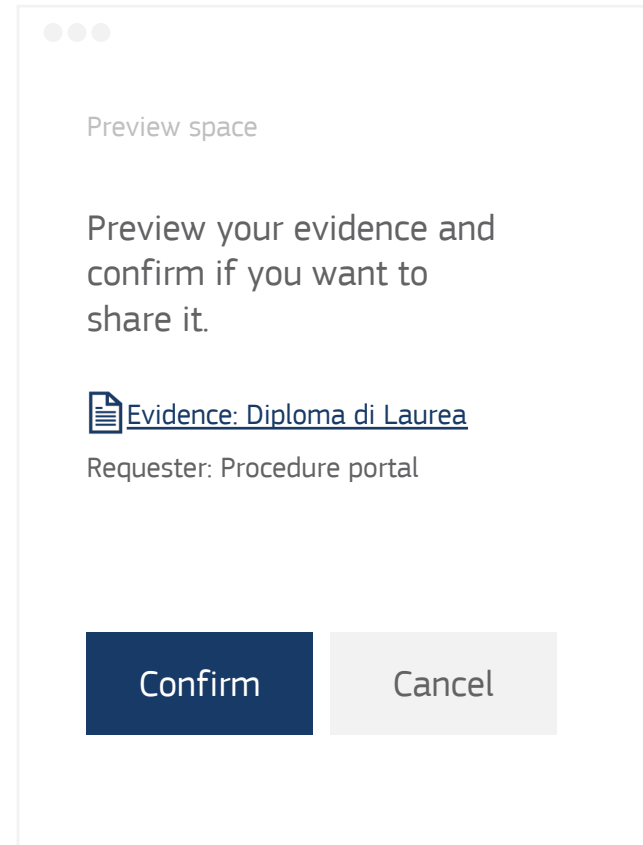
The user previews their evidence

## User previews the evidence

Except where Preview is not required by national law, users must be offered the possibility to preview the evidence before they decided to proceed with evidence exchange.

If the user decides to proceed, the evidence provider will respond to the second evidence request message(s) from the requester with the evidence(s).

Whether the user choose to confirm or cancel the evidence exchange, the user is then redirected back to the requester side.



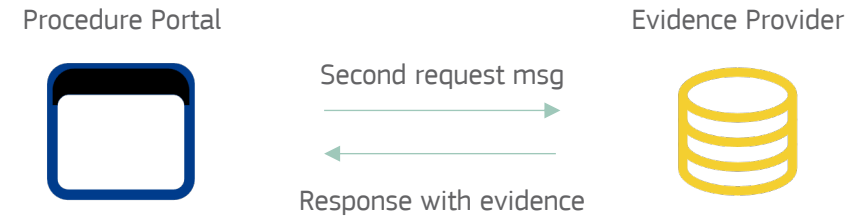
# 6 Evidence response

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The Evidence Provider responds to the evidence request

## Evidence Provider sends the evidence

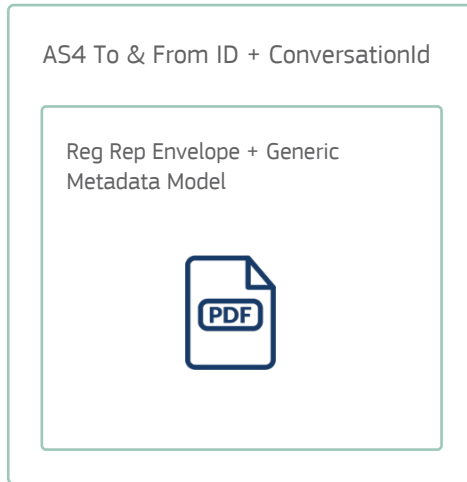
In response to the second request message from the procedure portal the evidence provider returns a response containing the evidence (if the user decided to use the evidence) or an error (in case the user decides not to use the evidence, if the evidence cannot be located or if the provider cannot match the user's identity).



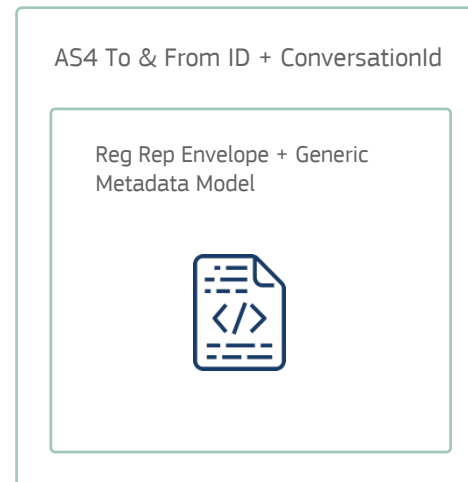


## The structure of the evidence response

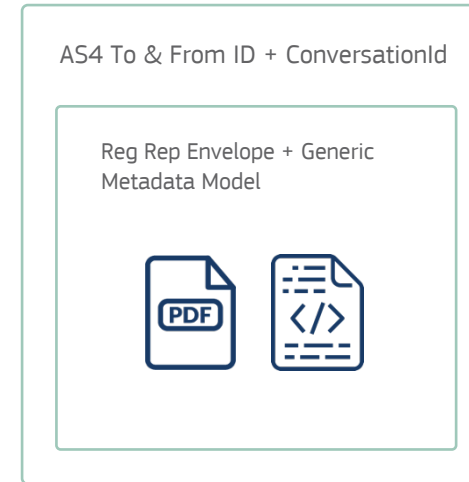
To be automatically exchanged via the Once-Only Technical System an evidence must be supplemented by the metadata elements of the Once-Only Technical System generic metadata model which uniquely identifies the evidence and the evidence provider along with other additional and optional fields such as the language in which the evidence is issued. The evidence itself must be in one of three formats:



1) Evidence that is in a human readable format (e.g., a PDF).



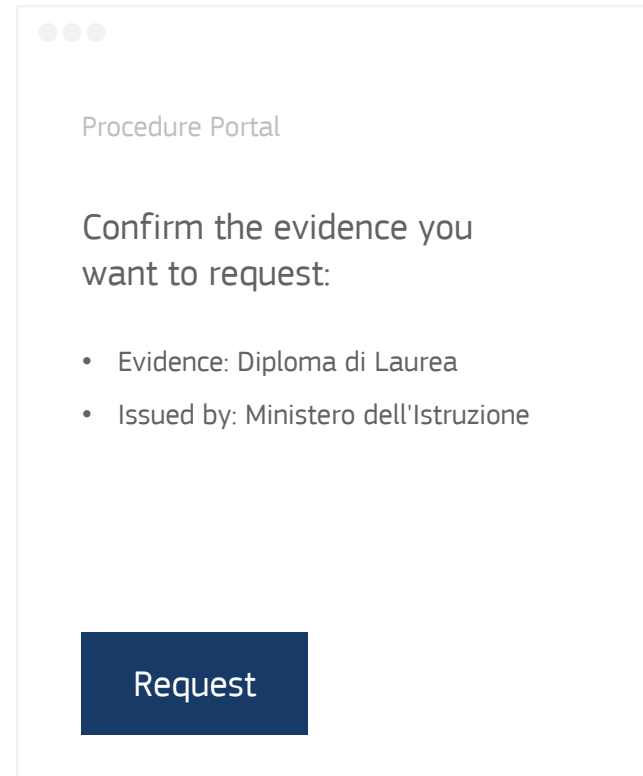
2) Structured evidence that complies with an OOTS data model relevant for the evidence type.



3) Structured evidence that does not comply with an OOTS data model must be accompanied by a human-readable version of the evidence (e.g., a PDF).

## User retrieves other evidences

If the user wants to retrieve evidences from different Member States or if Member States have multiple preview areas, the user must repeat the steps 'redirect' and 'preview' for each evidence. Once the user has collected and confirmed all the evidences they want to use in their procedure they will be redirected back to the procedure portal.



Procedure Portal

Confirm the evidence you want to request:

- Evidence: Diploma di Laurea
- Issued by: Ministero dell'Istruzione

Request

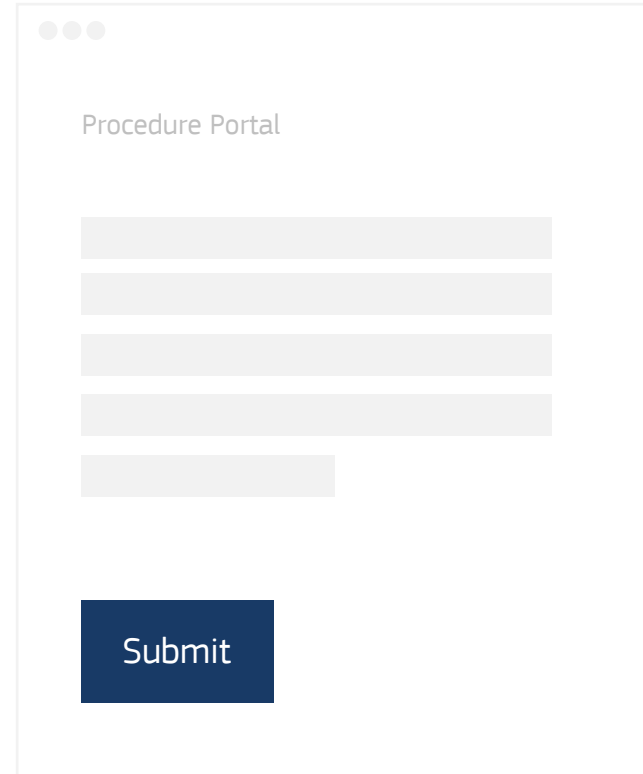
# 7 Submit

---

User completes submits their procedural form

## User submits their form

The user has completed the once only part of the procedure and can now provide additional information if required and submit their procedure for processing.



The image shows a web form interface. At the top left, there are three small grey circles. Below them, the text "Procedure Portal" is displayed. The form contains five horizontal input fields, each represented by a light grey bar. The first four bars are of equal length, while the fifth bar is shorter. At the bottom of the form is a dark blue rectangular button with the word "Submit" written in white text.

**Ready to get started?**

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# Useful links

## Access

If you need access to the OOTS documentation, request it via [our service desk](#).

## Legal

Read the [Single Digital Gateway Regulation](#)

Read the [Implementing Regulation](#)

## Documentation

[Visit the public OOTS website](#)

Read the [Technical Design Documents](#)

Access the [work of the sub-groups](#)

## Services

- [eDelivery services](#)
- [eID services](#)
- [OOTS Testing Services](#)

## Support

Contact us by email if you have any questions:

[EC-OOTS-SUPPORT@ec.europa.eu](mailto:EC-OOTS-SUPPORT@ec.europa.eu)

**Thanks for watching.**