

A guide for teams across the EU  
working on **implementing the  
Once-Only Principle**



# Who is this guidance for?

1. Teams responsible for the online public procedures in scope of the SDGR\* (*see next slide*) that need to make updates to those procedures to enable the once-only steps of the user journey.
2. This guidance is also for teams responsible for the systems that will provide the evidence citizens and businesses need to complete these online procedures (via automated exchange thanks to the Once-Only Principle).

# Table of contents

What does this guidance cover?

- A basic introduction to once-only
- A clickable prototype of the baseline to-be user experience
- High-level once-only requirements
- The high-level architectural design of the system
- A step by step walk through of once-only, with:

## Introduction to the Once-Only Principle

# The Once-Only Principle, reducing administrative burden for citizens and businesses.

From 2023, the Once-Only Principle will allow public administrations in Europe to reuse, or share, citizens' and businesses' data/documents upon request, in a transparent and secure way.

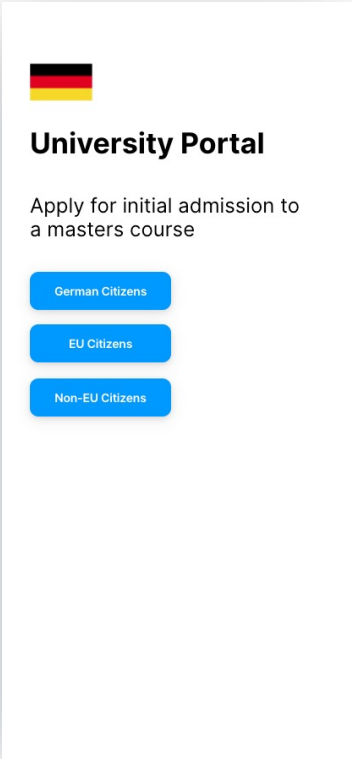
This means citizens (whether representing themselves or a business) won't have to find and upload data/documents themselves every time they do an online procedure.




**Once-Only** means users can request for docs/data to be retrieved from other Member States (MS) to complete online procedures in other MS



User: **Bianca** 



  
**University Portal**  
Apply for initial admission to a masters course

- German Citizens
- EU Citizens
- Non-EU Citizens

Evidence Requester: **Germany** 

Requests & responses for docs & data

Evidence provider



**Spain** 



## University Portal

Apply for initial admission to  
a masters course

German Citizens

EU Citizens

Non-EU Citizens

[Click through the User Experience](#) →

# 8 key requirements of the once-only system

## 1 Authenticate

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User can authenticate with an eIDAS eID

## 2 Locate evidence

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Portal can locate the evidence provider

## 3 User Request

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User can request their document(s)/data

## 4 Evidence Request

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Request for evidence is sent to the evidence provider

## 5 ID Matching

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Evidence provider can locate the user's evidence

## 6 Evidence response

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Evidence provider return the evidence

## 7 Preview

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User can preview the evidence in separate space

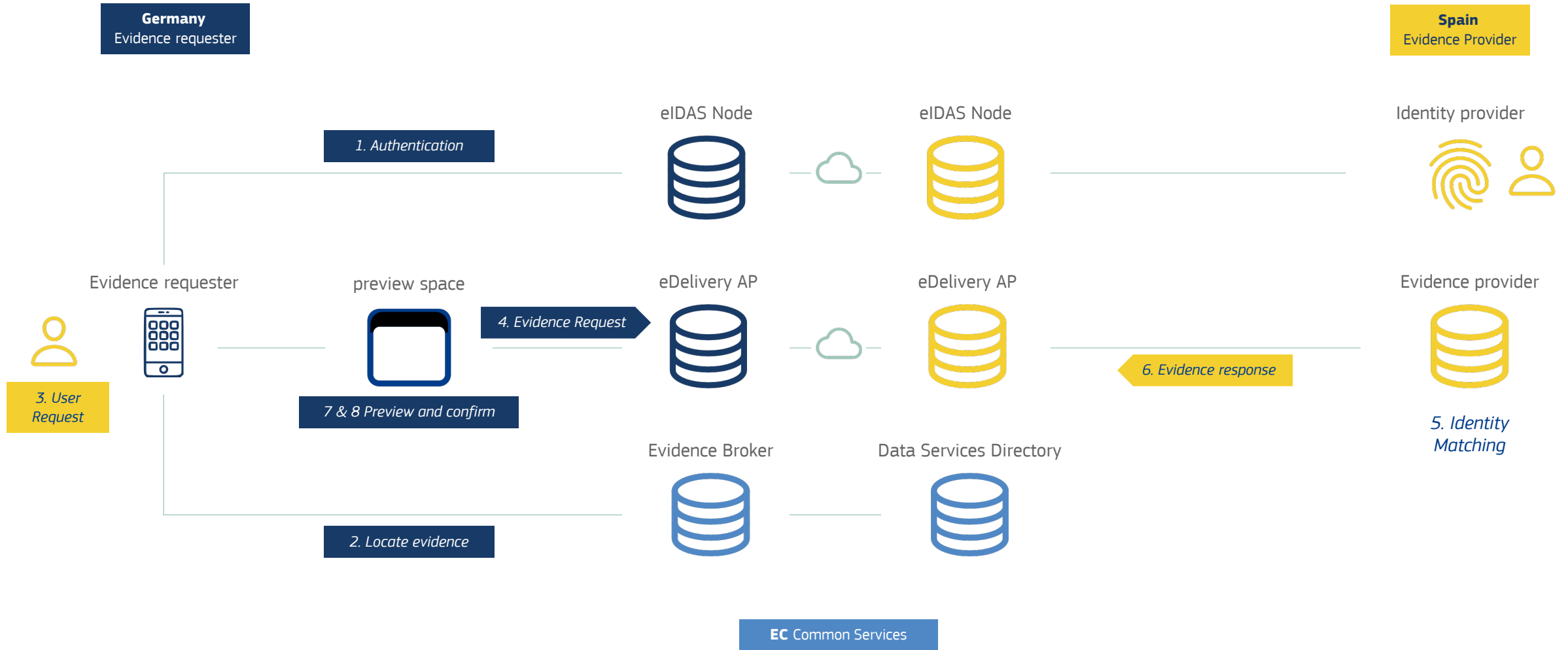
## 8 Confirm

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User can confirm if they want to use the evidence



# Architectural design of the once-only system



## A screen-by-screen walkthrough of OOP

# Key Once-Only steps

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Authenticate   Locate evidence   User request   Evidence request   ID Matching   Evidence response   Preview   Confirm

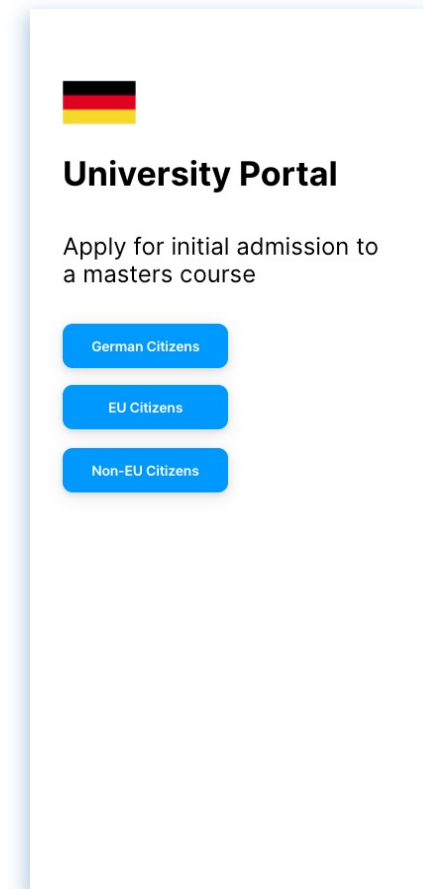
# 1 Authenticate

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Users must have an eIDAS enabled eID to exchange data or documents automatically through the OOP system

## Add a page to filter users' pre-authentication

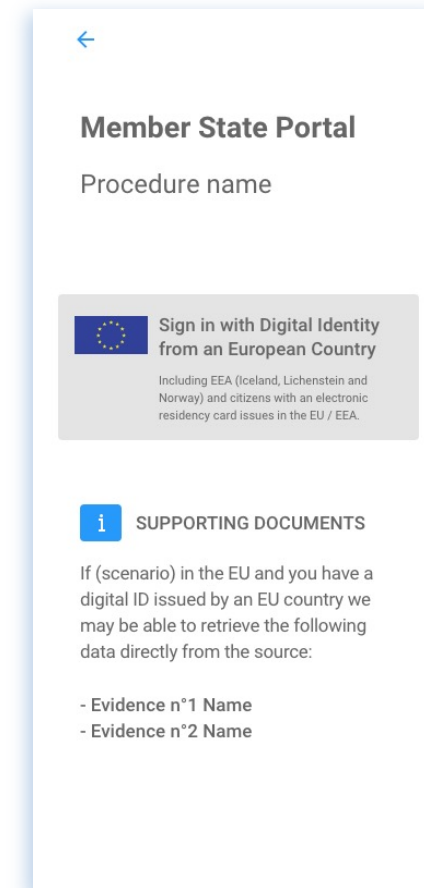
If designers are concerned that adding content for foreign nationals might diminish the experience for national users, consider adding a filter page so that you can tailor the following steps specifically to different user segments.



## Explain the Once-Only Principle to users' pre-authentication

Users may not start an online procedure if they don't think they have the document they need to complete it so inform users that your service may be available to retrieve evidence for them using the Once-Only Principle.

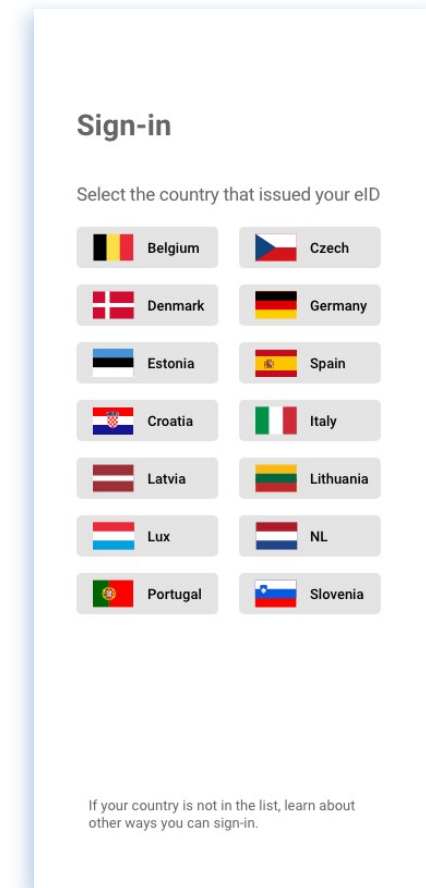
At this stage, users should also be made aware that evidence can only be retrieved if they authenticate with an eID.



## User selects country that issued eID

To start the authentication process, users must select the country that issued their eID so the procedure portal in MS A can re-direct them to their national authentication page in MS B.

Only countries with notified eID schemes will appear in the list.  
Learn about the [status of national eID schemes](#).



## Portal redirects users to eIDAS node

To retrieve this URL, the procedure portal service needs to send a request to its national eIDAS node in MS A, which will then forward the request to the eIDAS node in MS B and return its response (the correct URL) to the portal.

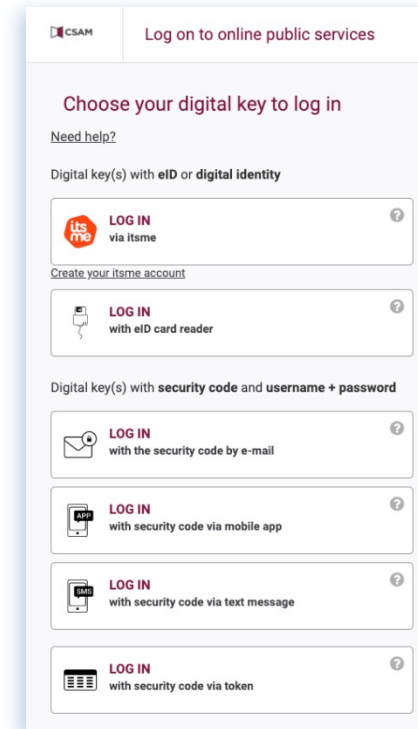




## Identity provider selector

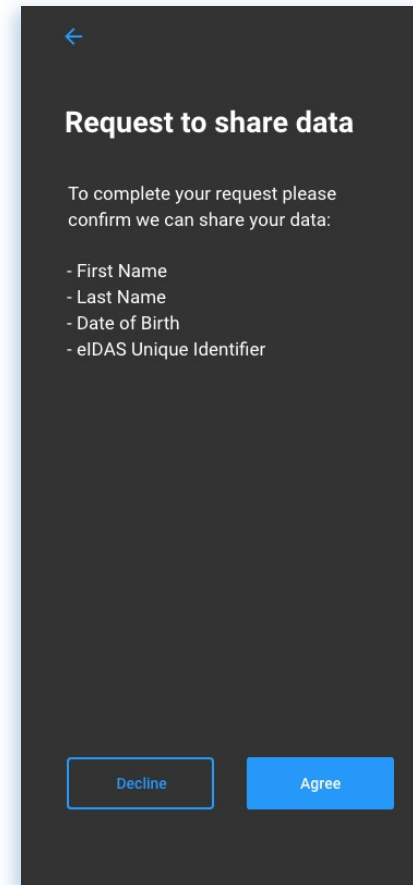
Users are re-directed to their national authentication sites where they may be more than one way they can authenticate themselves. If mobile authentication is not available, they'll have to stop and restart the process on another device.

If they've never used their eID before, they'll need to enroll with a specific eID provider to activate it. This can sometimes require a laptop and card-reader, or other means.



## Authenticating with their identity provider

Users are redirected to their identity provider in MS B. Once they have authenticated, they will be asked to consent to share their identity attributes with the portal in MS B to complete the authentication process. The user is then redirected 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*).

## Choose to use Once-Only

Using the Once-Only technical system is not obligatory – users can still choose to upload the required documents and data manually or choose to retrieve evidence through the Once-Only technical system.

### Evidence Requester

Complete your application

**Add your documents**

Retrieve documents for me. [Learn more.](#)

Or add documents yourself

Evidence name

Evidence name

Evidence name

## Selecting evidence for retrieval via OOP

The user needs to specify which evidence they would like the procedure portal to find for them. This does not necessarily guarantee successful retrieval, but it initiates the search.

With further user input, the procedure portal will find the equivalent of these evidences in the country where the evidence is located.

The screenshot shows a mobile application interface with a progress indicator at the top consisting of three steps: 1. Locate, 2. Request, and 3. Confirm. The 'Locate' step is currently active. Below the progress indicator, the text 'Locating your data' is displayed. Underneath, there is a prompt: 'Select the data you would like to retrieve:'. This is followed by a list of three items, each with a blue checkmark in a square box: 'Evidence name n°1', 'Evidence name n°2', and 'Evidence name n°3'. At the bottom of the screen, there is a large blue button labeled 'Next' and a smaller, lighter blue button labeled 'Cancel'.

## Select the MS holding the evidence

The user needs to input the MS where their evidence is located. For example, if they need proof of birth, they will say where they were born (MS B). If they need proof of higher education, they will say where they studied (this may be a third country, MS C).

The procedure portal in MS A then sends a query to the **Evidence Broker** to determine the evidence type in MS B and/or C.

1 2 3  
Locate Request Confirm

Locating your data

Select the country that issued the data:

Evidence 1  
Member State

Evidence 1  
Member State

Evidence 1  
Member State

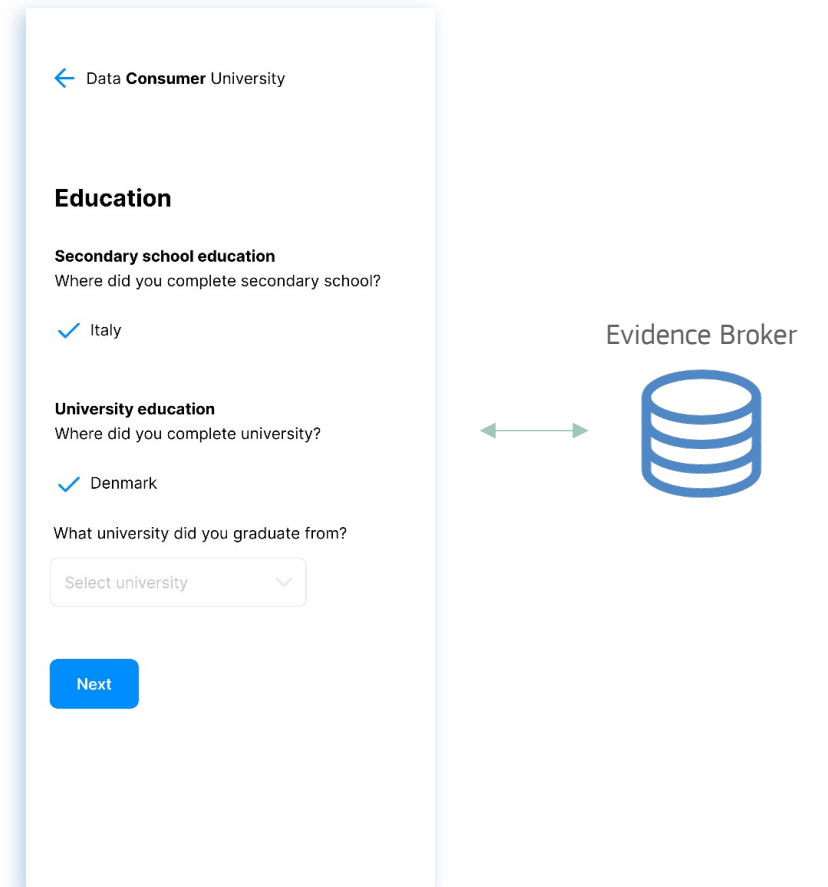
Next

Cancel

Evidence Broker

## More user input needed for Evidence Broker

Sometimes, the type of evidence used isn't the same throughout a whole country. For example, different regions might use a different type of document to prove somebody's marital status. In these cases, the user will be asked for more input, such as the region, city, post code, etc.



## Locating the evidence provider

To find out where to send the request for evidence the portal sends a query to the **Data Services Directory** with the evidence type (provided by the Evidence Broker) and Member State (plus any additional user given at the Evidence Broker stage).

If the evidence type is stored centrally in the Member State in question, the DSD returns the name of the evidence provider. Extra input may be required from the user if there are multiple providers of one evidence type in the evidence provider MS.

← Data **Consumer** University

### Education

We may be able to retrieve the following data for you, would you like us to try?

- Evidence:** Diplomi di scuola  
**Format:** Document  
**Provider:** Registro nazionale  
**Member State:** Italy
- Evidence:** Diploma Supplement  
**Format:** Document  
**Provider:** Københavns Universitet  
**Member State:** Denmark

[Request my data](#) [Cancel and upload](#)

[How we retrieve your data](#)

Data Service Directory



## More user input to identify evidence provider

If the Data Service Directory returns a list of potential evidence providers for an evidence type, depending on the length of this list the user will have:

- Relatively short list: the user selects the relevant evidence provider (e.g., from a dropdown list)
- Long list: based on the metadata in the DSD's list, the user is asked for more input to narrow down the list so they can then select from a shorter list in a dropdown menu

← Data **Consumer** University

**Education**

**Secondary school education**  
Where did you complete secondary school?

✓ Italy

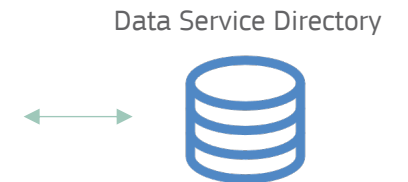
**University education**  
Where did you complete university?

✓ Denmark

What university did you graduate from?

Select university ▾

Next



# 3 User Request

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The user explicitly requests the portal to retrieve their evidence from another MS

## User request for evidence retrieval

The portal now knows what evidence to request and who to request it from. But the user still needs to explicitly request for the portal to do this. Once the portal has collected and logged the explicit request of the user the portal will then send the request for evidence to the relevant evidence provider.

The screenshot shows a three-step progress bar at the top: 1. Locate, 2. Request (highlighted in blue), and 3. Confirm. Below the progress bar, the heading 'Request your data' is followed by the instruction 'Select the date you would like to retrieve.' There are two data selection items, each with a checked checkbox. The first item is 'Data: Birth Certificate' issued by 'Ministry of Interior'. The second item is 'Data: My other evidence' also issued by 'Ministry of Interior'. At the bottom, there is a prominent blue button labeled 'Request my data' and a smaller, lighter blue link labeled 'Cancel'.

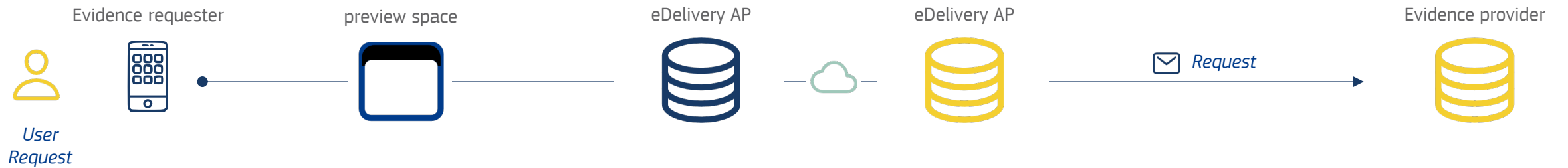
# 4 Evidence request

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The request for evidence is sent to the evidence provider

## Sending the request for evidence

The request for evidence is sent via an eDelivery message exchange network. This request contains the requested evidence type and the eIDAS attributes of the user.



# 5 ID Matching

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The evidence provider locates the evidence in their MS

## Identity Matching

Evidence providers locate evidence based on request containing

- Minimum
  - Certificate of evidence requester
  - User's minimum eIDAS attributes
    - First Name
    - Last Name
    - DOB
  - Request for evidence
- Potentially (in cases where record matching was needed)
  - Additional eIDAS attributes
  - Additional attributes requested from the user



# 6 Evidence response

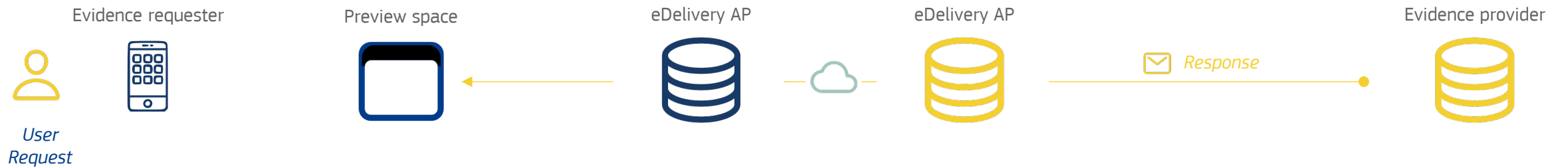
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The evidence provider responds to the evidence request



## Sending the response for evidence

The response for evidence is sent via an eDelivery message exchange network to the preview space.



# 7 Preview

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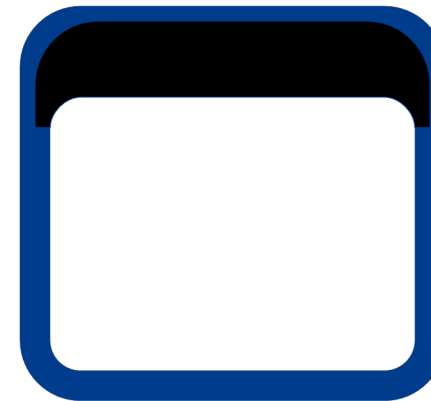
The user can check the evidence before they decide to use it

## Minimum requirements for the implementation of the Preview Space

1. Clerks cannot access the data in the preview space
2. It must be a separate logical component to the procedure portal
3. It must have its separate storage to the procedure portal
4. It must have a separate data retention period

Two alternatives for the implementation of the preview space are described on the next page.

Preview space



## Alternative 1: Delegate all the key once-only steps to the Preview Space

Delegate all the key once-only steps to the Preview Space. This would mean redirecting the user to the the Preview Space when they choose to retrieve evidence using the OOP. The Preview Space would then be responsible for all the requirements in bold below. The evidence would be transferred to the procedure portal when after the user has previewed and confirmed the use of the evidence

Authenticate   **Locate evidence**   **User request**   **Evidence Request**   ID Matching   Evidence response   **Preview**   **Confirm**

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## Alternative 2: A Preview Space with only the minimum requirements

The user would preview the evidence and confirm the use of the evidence in the preview space before it is transferred to the procedure portal. The required functionality for all other steps would remain with the procedure portal, including interactions with the common services, the request for evidence and receiving the response. The procedure portal would have to be configured to ensure that it transfers the evidence to the preview space on reception from the evidence provider.

Authenticate   Locate evidence   User request   Evidence Request   ID Matching   Evidence response   **Preview**   **Confirm**

## The preview space

The evidence provider does not send the requested evidence to the portal directly – it is sent to a dedicated Once-Only preview space. The user can preview it before deciding to use it in the procedure.

Nobody but the user can see the evidence at this stage. The preview space is separate from the procedure portal and has its own storage and retention period compliant with relevant data protection regulation (i.e., GDPR).

1 2 3  
Locate Request **Confirm**

### Confirm

Check your data and confirm if you want to use it in your application.

---

**Data:**  
John Doe Birth Certificate.pdf

**Issued by:**  
Ministry of Interior

---

**Data:**  
My other evidence

**Issued by:**  
Ministry of Interior

---

**Confirm**

Cancel

## User check

By previewing evidence, the user can check that the evidence is what they asked for and that it doesn't contain any errors. If the user cancels the evidence exchange at this stage the retrieved evidence is immediately deleted from the OOP preview space. The user can still choose to upload their own data manually.



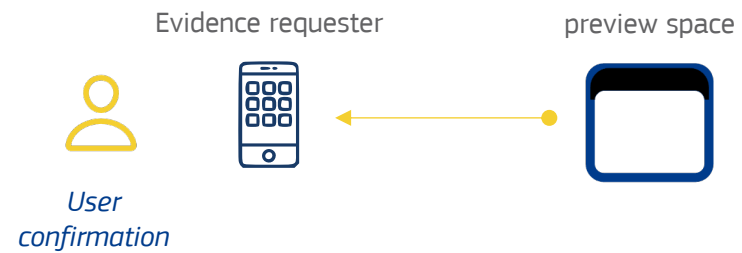
# 8 Confirm

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If the user is happy with the retrieved evidence, they confirm they want to use it in the procedure.

## Confirming use of evidence in procedure

If the user is happy with the retrieved evidence after previewing it, they confirm they want to use it in the procedure. It is now uploaded from the OOP preview space to the procedure portal. The portal logs the user's confirmation to use the evidence and the user returns to the original procedure portal.





## Completing the procedure

The user's evidence has now been exchanged through the OOP system. They return to the procedure portal and, perhaps after inputting some more information manually, they can complete the procedure.

### Evidence Requester

Complete your application


**Personal Details**


First Name

Last Name

Email

**Evidence**

Evidence name  



## Receiving confirmation

After submitting the procedure, it is good practice to send the user a confirmation message. This lets them know roughly when they can expect to hear the outcome of the procedure, and the details of a helpdesk they can contact if they have questions.

### Initial application complete

We will be in touch when we have processed your application.

**End.**