



20 June  
2024

# Webinar on CPSV-AP

**interoperable**  
europe  
innovation ∞ govtech ∞ community

# Workshop practicalities

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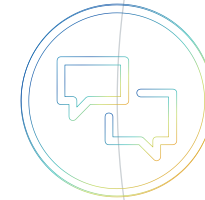
## **Audio**

Click on 'connect audio' but please mute your microphones



## **Chat**

You can also share your questions for the Q&A session via the chat



## **Recording**

The workshop will be recorded



# Agenda



**Introduction**



**CPSV-AP update and survey**



**The Finnish Catalogue of Services**



**MITOS: the Greek National Registry of Procedures**

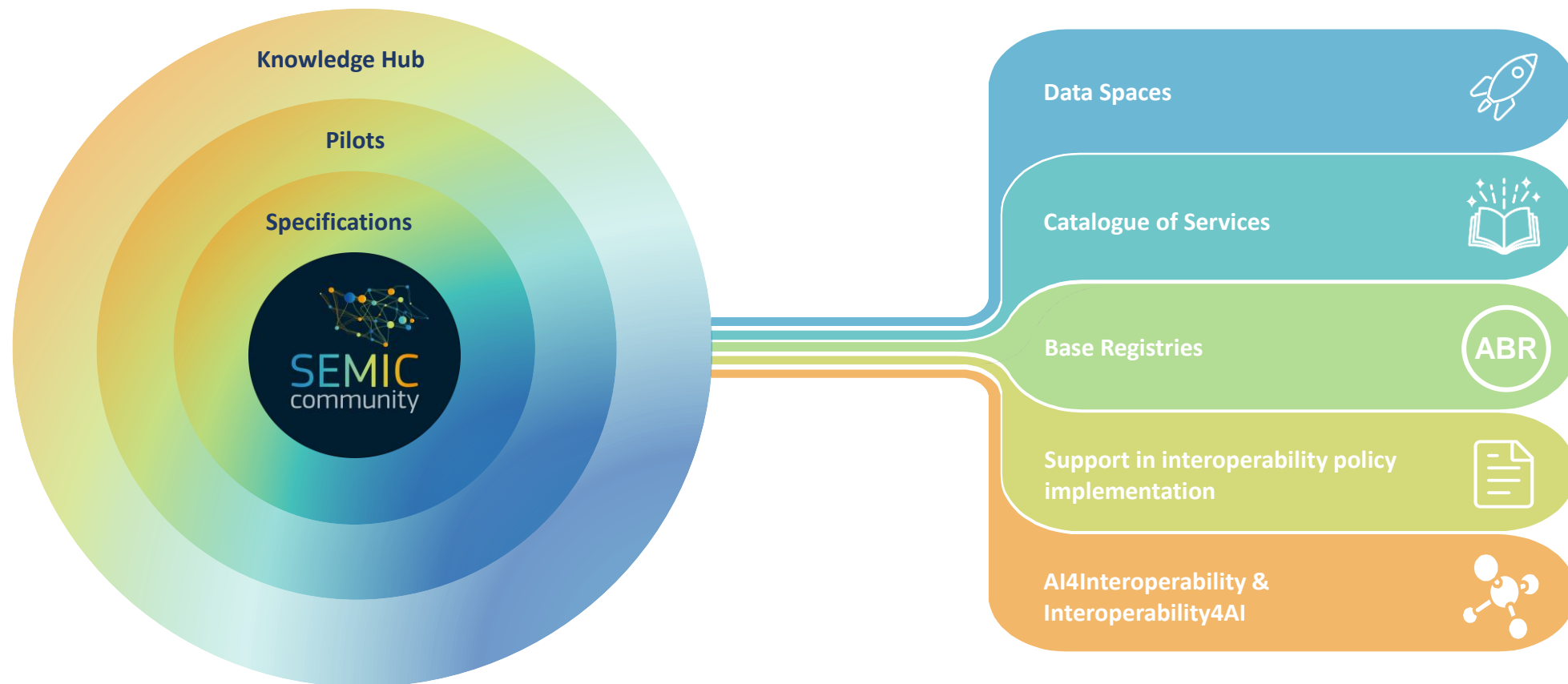


**Q&A**



# Introduction

# SEMIC Focus Areas



# SEMIC specifications



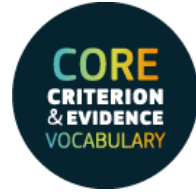
A person's name(s), date and place of birth/death, identifier, addresses, citizenship, etc.



The legal name, address, identifier, company type, and activities of a legal entity.



The different ways of describing a location, e.g. via an address, a geographic name, or a geometry, in alignment with INSPIRE.



The requirements and evidence of a procedure or formal process.



The administrative information, hierarchy, identifiers, events and classification of a public organisation.



A public event, its time, audience, location, etc.

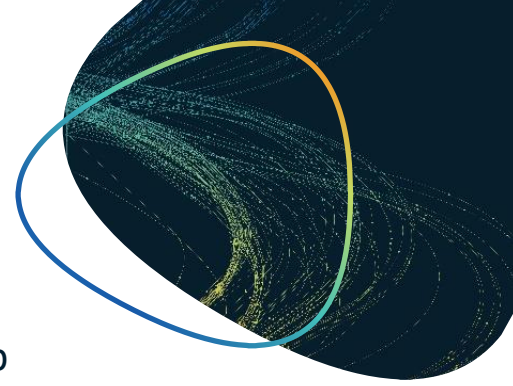



## Vocabularies

## Application Profiles








# Objectives of CPSV-AP



 CPSV-AP is a model for describing public services related to business and life events, to facilitate the set-up of catalogues of services oriented to businesses and citizens.

## CPSV-AP use cases:

-  finding information of generic and specialised public services
-  facilitating the access to public service information
-  managing portfolios of public services

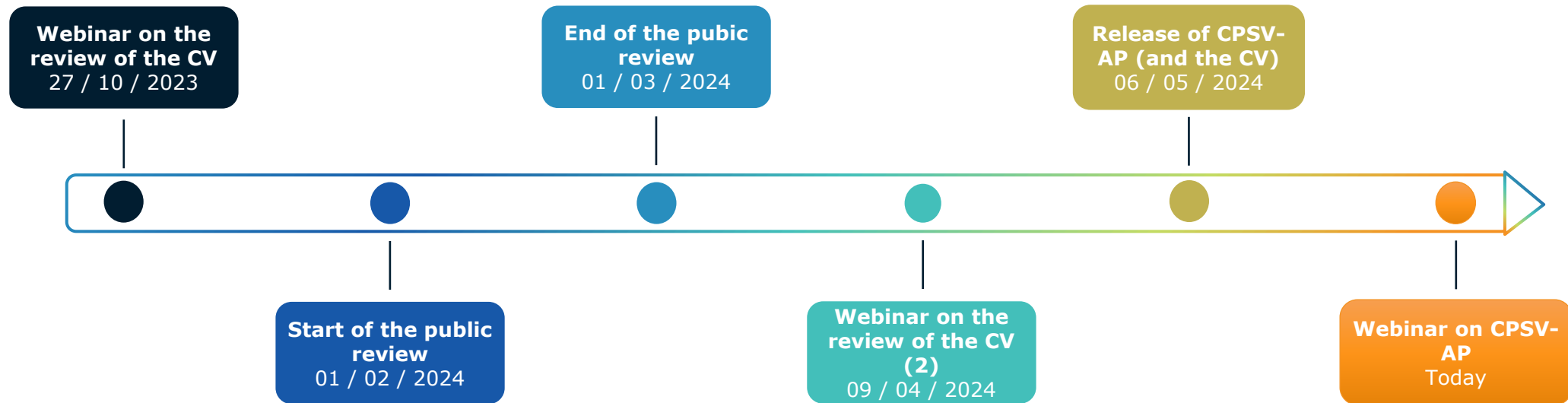
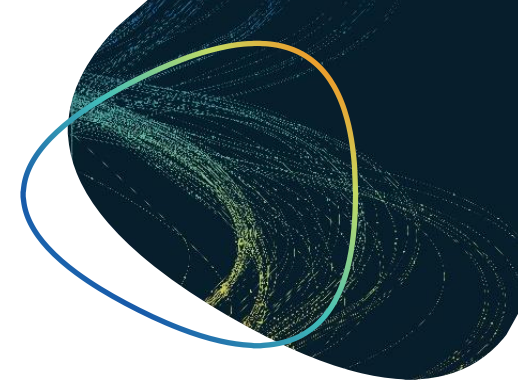
-  the execution of a public service, i.e.; when a public service is performed and produces a physical object
-  building user-centric catalogues of public services at all levels from regional to a European federated catalogue



# CPSV-AP update



# CPSV-AP Timeline



# CPSV-AP 3.2.0



The following changes were applied from version 3.1.1 to version 3.2.0:

- The ReSpec Styling was applied to CPSV-AP v3.2.0 specification.
- Changes in classes, relationships, and properties were made to comply with authoritative sources, provide additional clarification, and move properties to different classes.
- Updates were made to the introduction and usage notes of the specification to explicitly add the "execution" use case, update the language definition, and make certain usage notes more generic.

The full changelog can be found on [GitHub](#).

The specification can be found under: <https://semiceu.github.io/CPSV-AP/releases/3.2.0/>



# Survey on the adoption of CPSV-AP

# Survey results

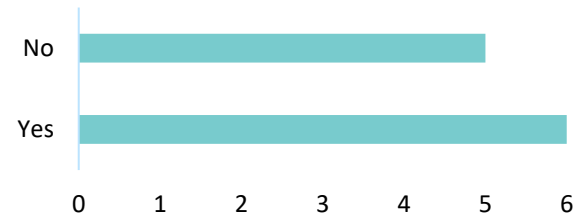
## Questions

1. Do you currently use CPSV-AP?
  - What is the current status/level of implementation?
  - Which version are you using?
  - Have you extended the version of CPSV-AP as provided by SEMIC?
2. Did you consider using CPSV-AP?
3. What barriers do you face for adopting/implementing CPSV-AP, which constraints are holding you back?
4. Are you currently using tools to describe and publish public services?
  - Which tools do you use and for what purpose?
5. Are you using other SEMIC specification in the context of describing public services (next to CPSV-AP)?
6. Would you be interested in receiving support from SEMIC on using and implementing CPSV-AP in your Catalogue of Services (CoS)?
7. How can SEMIC best support the development of your organisation's Catalogue of Services in the future?

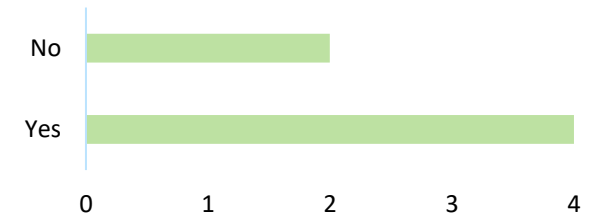
## Result overview

In total **11 responses** from NO, PT, GR, NL, CH, MT, DK and ES.

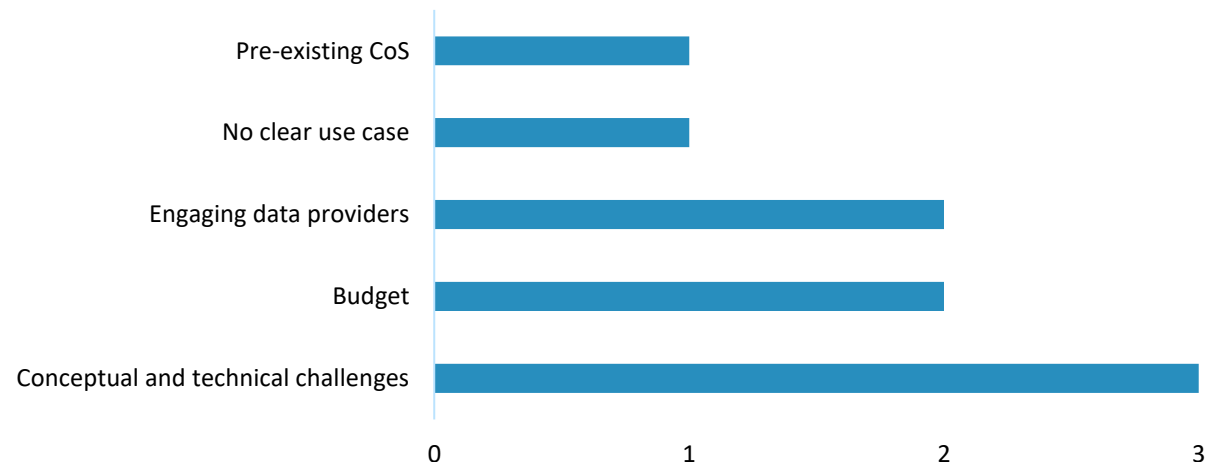
### Reusing CPSV-AP



### Extending CPSV-AP



### Barriers for use



Click [here](#) for a link to the survey



# The Finnish Service Catalogue



# Suomi.fi Finnish Service Catalogue

20.6.2024

Finnish Digital Agency

Business Owner, Chief Specialist Terhi Tuokkola

Chief Specialist Marko Latvanen

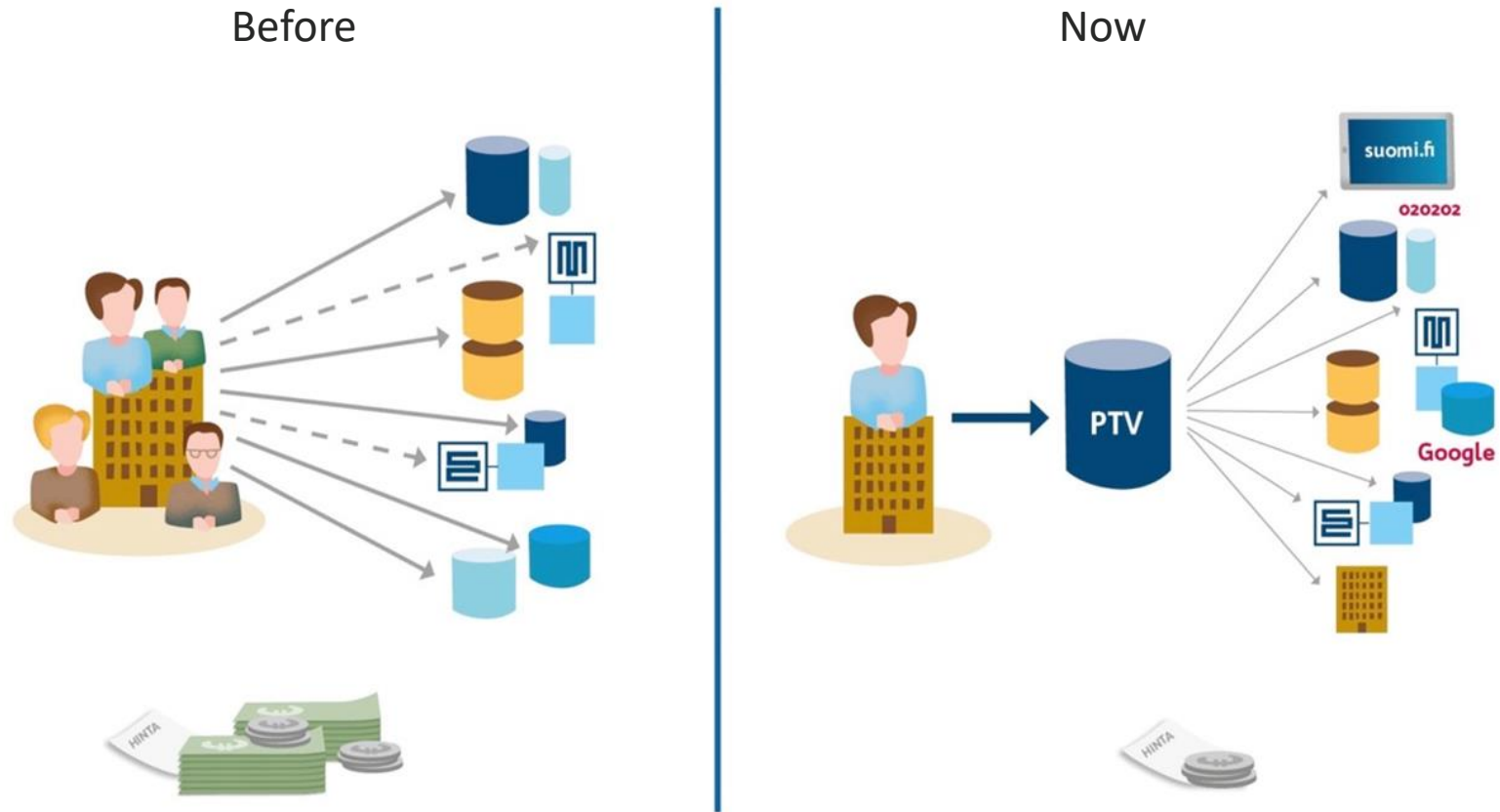


# The Suomi.fi Finnish Service Catalogue

- The Suomi.fi Finnish Service Catalogue (FSC) is a national centralised data repository in which organisations describe their services and service channels in a customer-oriented manner.
- The Act on Central Government's Joint e-Service Support Services (571/2016) obligates public administration organisations to describe their services in the FSC.
  - municipalities
  - wellbeing regions (public health care services)
  - central government
- FSC contains open data: it can be accessed across a public API.
  - Organisations can utilize data for their online services.
- [More information about Finnish Service Catalogue](#)



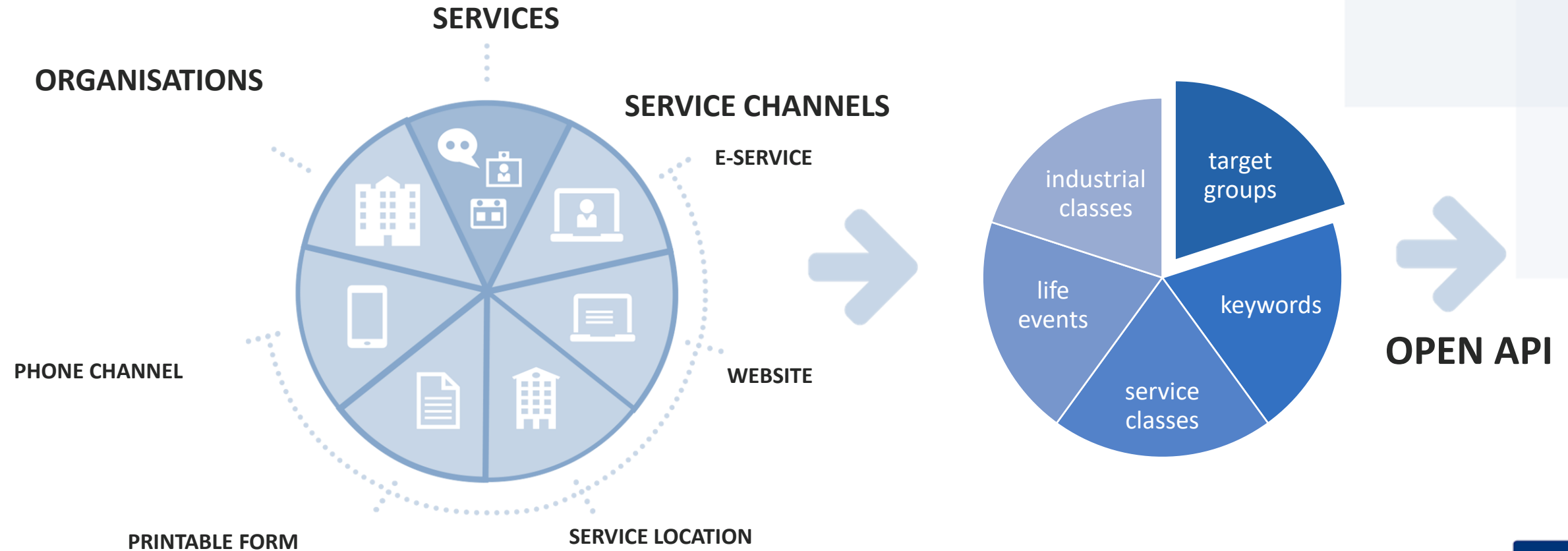
# Concept of the Finnish Service Catalogue



PTV = FSC



# Finnish Service Catalogue: centralised data repository





# FSC key figures

- 26 500 services
- 63 700 service channels
  
- 1500 organisations
- 7800 users (public service officials) that update the data
  
- 358 million API requests in a year
- 139 web services that use data



# FSC and CPSV-AP

- FSC is based on Core Public Service Vocabulary Application Profile (CPSV-AP) with some modifications.
- FSC's data model was created in 2015–2016
  - At first (in 2014-2015), data model was attempted in cooperation with the city of Helsinki, but the Helsinki's model was strongly based on service locations and a strict hierarchy.
  - FSC has a modular model, not a hierarchical one > this attempt didn't succeed.
- When CPSV-AP's version 2 was made, Finland was asked to participate.
  - So FSC's data model has also had an impact on CPSV-AP.
- [FSC's data model](#)



# FSC and CPSV-AP

- There are no big differences with FSC and CPSV-AP, but in FSC we haven't used all the parts of CPSV-AP.
  - Basic parts are quite similar: services, channels
  - FSC contains only services, not events = temporary real-world events such as campaigns, cultural events, etc.
- FSC has parts that are not in CPSV-AP
  - general descriptions (text template) for services that every municipality and wellbeing region offers
  - accessibility information = physical accessibility in service locations
  - service collection



## FSC and CPSV-AP: challenges

- CPSV-AP was only in its initial stage and the FSC model had already been under development for longer.
- In FSC, more of the end user's point of view has been included. In CPSV-AP EU-level Interoperability is the focus.
- Making changes to FSC's data model is challenging because so many organisations use FSC's data, and it would be a big job (and expensive) for them if we made big changes to the data model.
  - FSC's data model has remained the same in recent years: the goal is not to make major changes to it.



# Interoperability

- FSC promotes interoperability in a broad sense:
  - uniform model for describing services: structure, data elements, metadata
  - all public administration service data in one place
- FSC uses the Finnish interoperability platform:
  - [Code lists FSC uses](#)
  - [FSC's data model](#)
  - [Finnish Service Catalogue Glossary](#)



# Examples: How FSC data is used in different webservices

- Over 66 municipalities use FSC's data in their websites.
  - Example: City of Tampere, tampere.fi
- Public health care services (wellbeing regions): 17/21 organisations use FSC's data in their websites.
  - Example: wellbeing region of Central Uusimaa, keusote.fi

The screenshot shows the Tampere City website. The header includes the Tampere logo, navigation links for visitors, decision-making, and organization, and a search bar. The main content area features a banner for 'Libraries' opening hours and contact information, accompanied by a photo of a person in a library. Below the banner, there is a section titled 'Libraries' with a dropdown menu for 'Main Library Metso'. The details for 'Main Library Metso' include the address (Pirkankatu 2, 33210 Tampere), website ( tampere.fi/en/mainibrarymetso ), and opening hours for 2024: Monday (09:00-20:00), Tuesday (09:00-20:00), Wednesday (09:00-20:00), Thursday (09:00-20:00), Friday (09:00-20:00), Saturday (10:00-16:00), and Sunday (11:00-17:00).

The logo for KEUSOTE Keski-Uudenmaan hyvinvointialue is displayed. It features a stylized graphic of a person or a group of people in blue and red, followed by the text 'KEUSOTE' in a bold, sans-serif font, and 'Keski-Uudenmaan hyvinvointialue' in a smaller font below it. The logo is set against a dark blue background with the text 'Suomi | Svenska' above it.

Health services

Advice and guidance

Crisis counselling and emergency social services

Disability services

Infections and contagious diseases

Mental health services

Oral and dental health

Rescue services

Services for children, youth and families

Service for immigrants

Social services

Specialised medical care

Substance abuse services



# Example: Suomi.fi's Permits- wizard

- Suomi.fi is a public web service that brings together all the data from FSC.
- FSC's data helps to answer requirements that come from The SDG regulation, Services Directive and Professional Qualifications Directive.
- For example, in Permits-wizard a starting entrepreneur can find out what permits are needed.
- The wizard uses the FSC data: the user receives direct links and phone numbers to use the service, but the actual service use takes place in the authorities' own services.

The screenshot shows the Suomi.fi website interface for the Permits-wizard. The top navigation bar includes the Suomi.fi logo, a search bar, and language options. The main navigation menu has links for Home, Information and services, Messages, e-Authorizations, Your data, and Instructions and support. The breadcrumb trail indicates the user is in Home > Companies and organisations > Permits.

**Stages**

- 1 Find out your company's permits
- 2 Industry
- 3 Area
- 4 Results

**Stage 1/4: Find out your company's permits**

Are you about to launch business activities or a new project? Tell us about your activities and we will help you find out what permits you need.

Does your company have any employees?

Yes  
 No

Does your company import or export any raw materials, goods or services?

Yes  
 No

**Stage 4/4: Results**

Click the name of the permit to see more detailed information about it. Verify from the authorities responsible for the permits that the permits are sufficient for your operations. You should also check that you or your employees have the required professional qualifications.

Industry: **Cafés and coffee bars**  
Area: **Oulu**

If you don't find all required permits on your municipal permits, check the basic information on municipal permits. There you will find general information from permits which you have to apply from your company's municipality.

**Restaurants and accommodation**

Cafés and coffee bars Open all

Permits applied from agencies	2 pcs	▼
Professional qualifications	0 pcs	▼
Municipal permits: Oulu	1 pcs	▼
Basic information on municipal permits	2 pcs	▼

**Other permits** Open all

Employer's permits	9 pcs	▼
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# Data quality

- Because FSC's data is used in many web services, it sets requirements for data quality.
- Tools that help users to create quality data:
  - Text checking tool that gives correction suggestions for spelling mistakes, grammar mistakes and text that do not follow data model.
  - Automatic email notifications once a month, so that users remember to update the data.
  - General descriptions about those services that every municipalities and public health care services (wellbeing regions) offer.
  - Reports about data's quantity and quality.



# Thank you!

Business Owner, Chief Specialist Terhi Tuokkola, [terhi.tuokkola@dvv.fi](mailto:terhi.tuokkola@dvv.fi)

Chief Specialist Marko Latvanen, [marko.latvanen@dvv.fi](mailto:marko.latvanen@dvv.fi)

Finnish Digital Agency



MITOS: the Greek  
National Registry of  
Procedures





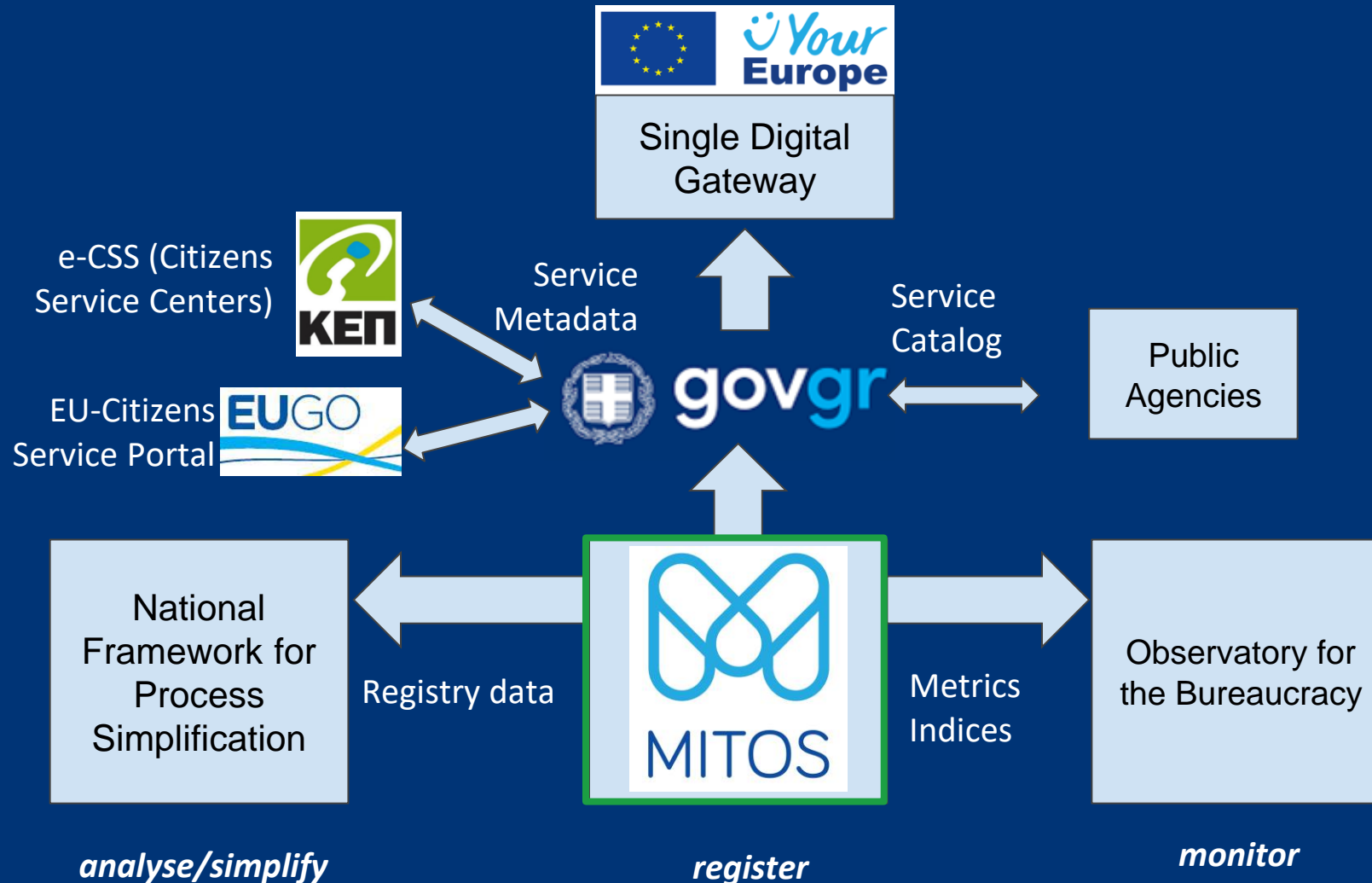
# The Greek National Registry of Procedures

Iraklis Varlamis<sup>1,2</sup>

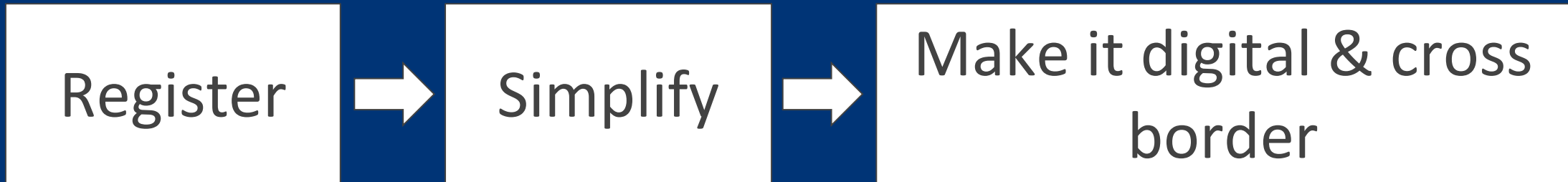
<sup>1</sup>Directorate of Digital Transformation and Digital Competencies, GRNET S.A. – National Infrastructures for Research and Technology, Ministry of Digital Governance

<sup>2</sup>Harokopio University of Athens (HUA), Athens, Greece  
varlamis@admin.grnet.gr

# A holistic approach to Public Services, Procedures and Life Events



# Work plan



National Registry of  
Public Procedures  
[mitos.gov.gr](http://mitos.gov.gr)

National Framework for  
Simplification of  
Procedures

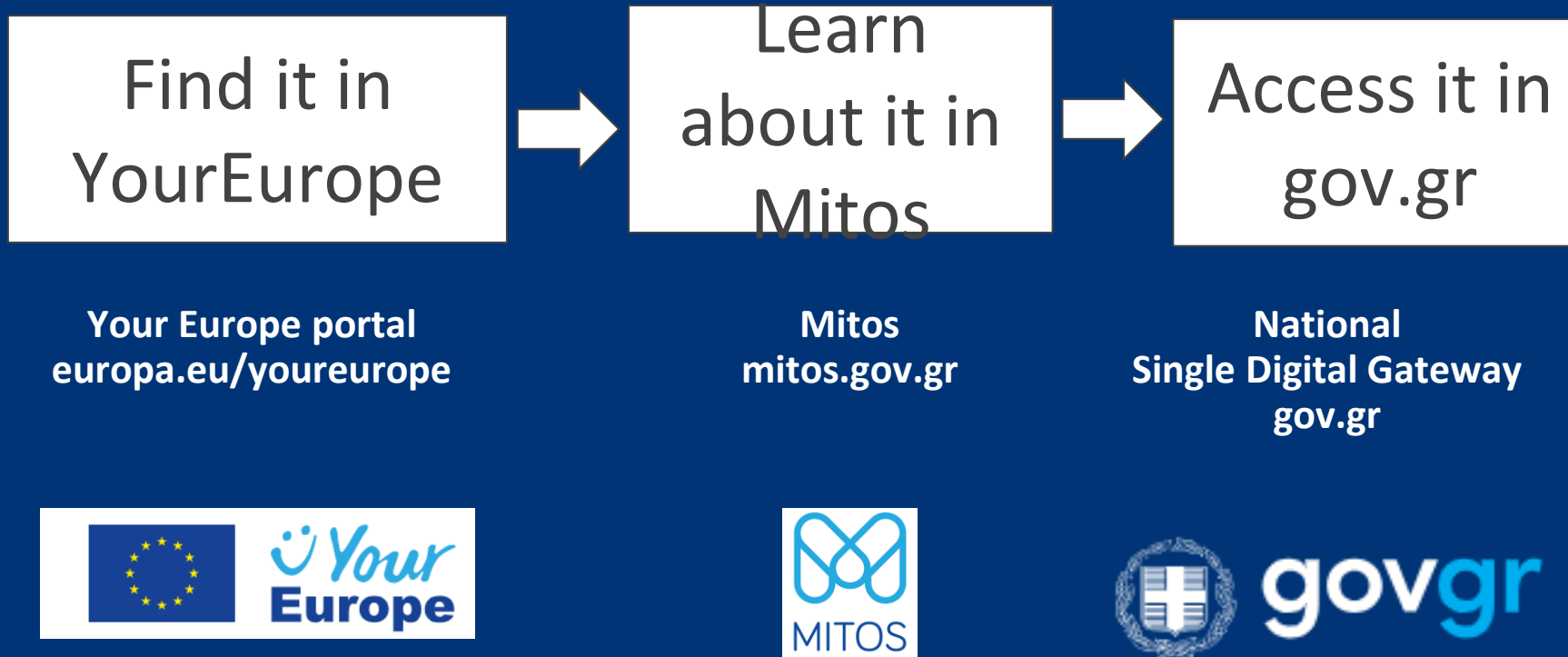
National  
Procedure Portals  
[gov.gr/eugo.gov.gr](http://gov.gr/eugo.gov.gr)



govgr



# The (EU) citizen journey



## Questions on your rights in the EU? Or your obligations?

Your Europe guides you to the most relevant EU and national websites.

Browse our pages for [citizens](#) and [businesses](#), or try our [search form](#):



Are you a citizen/consumer or a business? \*

Citizen/consumer

What country are you interested in? \*

Greece

What topic are you interested in? \*

Education or traineeship in another EU country

What specific information are you looking for? \*

- Education systems in other EU countries
- Volunteering in another EU country
- Traineeships in another EU country
- Research in another EU country as part of an education programme



Results (15)

### Recognition of third-cycle foreign academic degrees (doctorate) - National Registry of Administrative Public Services

[en.mitos.gov.gr/index.php/ΔΔ:Recognition\\_of\\_third-cycle\\_foreign\\_academic\\_degrees\\_\(doctorate\)](http://en.mitos.gov.gr/index.php/ΔΔ:Recognition_of_third-cycle_foreign_academic_degrees_(doctorate))

Procedure -



#### Details



##### Information type

- Procedure

##### Location

- National coverage

##### Category

- Education systems in other EU countries

### Admission of pupils to experimental kindergartens, primary schools, secondary schools and high schools - National Registry of Administrative Public Services

[en.mitos.gov.gr/index.php/ΔΔ:Admission\\_of\\_pupils\\_to\\_experimental\\_kindergartens\\_primary\\_schools\\_secondary\\_schools\\_and\\_h...](http://en.mitos.gov.gr/index.php/ΔΔ:Admission_of_pupils_to_experimental_kindergartens_primary_schools_secondary_schools_and_h...)

Procedure +



### Admission of pupils to standard lower and upper secondary schools - National Registry of Administrative Public Services

[en.mitos.gov.gr/index.php/ΔΔ:Admission\\_of\\_pupils\\_to\\_standard\\_lower\\_and\\_upper\\_secondary\\_schools](http://en.mitos.gov.gr/index.php/ΔΔ:Admission_of_pupils_to_standard_lower_and_upper_secondary_schools)

Procedure +



#### Filters

##### Country / EU

Greece

EU

##### Language

ελληνικά

English

##### Location

National Coverage

##### Type

General rules

Procedure

Print

Receive Notifications

Feedback

## 814359 Recognition of third-cycle foreign academic degrees (doctorate)

### At a Glance

Basic information

Application

What you will need

Requirements

Fees

Related

Output

Steps

Other information

Legislation

Categories

Show Procedure

Steps

### At a glance

#### Points of service

Directorate for Academic Recognition, HELLENIC NATIONAL RECOGNITION AND INFORMATION CENTER (HELLENIC N.A.R.I.C.)

#### Digital provision points

National Single Digital Gateway – gov.gr Access via gov.gr

Number of required documents	Fees	Deadline of completion
4 to 13	133.12 €	3 months

#### Description

The procedure concerns the recognition of foreign academic degrees of third-cycle education. The interested parties submit their applications electronically using the platform: <https://e-doatap.doatap.gr>. Following the entry into the platform, interested parties may apply for the necessary supporting documents and be informed of the evolution and history of their applications. The recognition procedure is addressed to PhD holders of foreign academic institutions and consists of the equivalence of qualifications in relation to the doctoral degrees awarded by Greek higher educational institutions.

### Basic information

#### Competent body

MINISTRY OF EDUCATION, SPORTS AND RELIGIOUS AFFAIRS

#### Related links

[Forms and instructions](#)

#### Authority responsible for the provision of the procedure

HELLENIC NATIONAL RECOGNITION AND INFORMATION CENTER (HELLENIC N.A.R.I.C.)

#### Service / organizational unit of a authority entity

Directorate for Academic Recognition

#### Provided to

Citizens

#### Related links



500.000+ CONVERSATIONS



mAigov

BETA

The digital assistant for gov.gr [Home](#) > [Education](#) > [Recognition of academic qualification](#) > [Recognise your academic degree](#)

## Recognise your academic degree


You can apply online for the recognition of your degree (basic degree, master's or doctorate).

You will need:

- your personal Taxisnet credentials, if you are a Greek citizen
- a valid passport or residence permit, if you are a foreigner

Then you can:

- submit supporting documents
- be informed by e-mail about the progress of your application
- view your application history

[Start Now](#) 

### Useful links

- › [Contact](#)
- › [Instructions and forms](#)



National Registry of  
Administrative Public  
Services

Visit [mitos.gov.gr](https://mitos.gov.gr) for a detailed  
description of the process.

### Service Information

**Last updated:** Tuesday 01 August, 2023

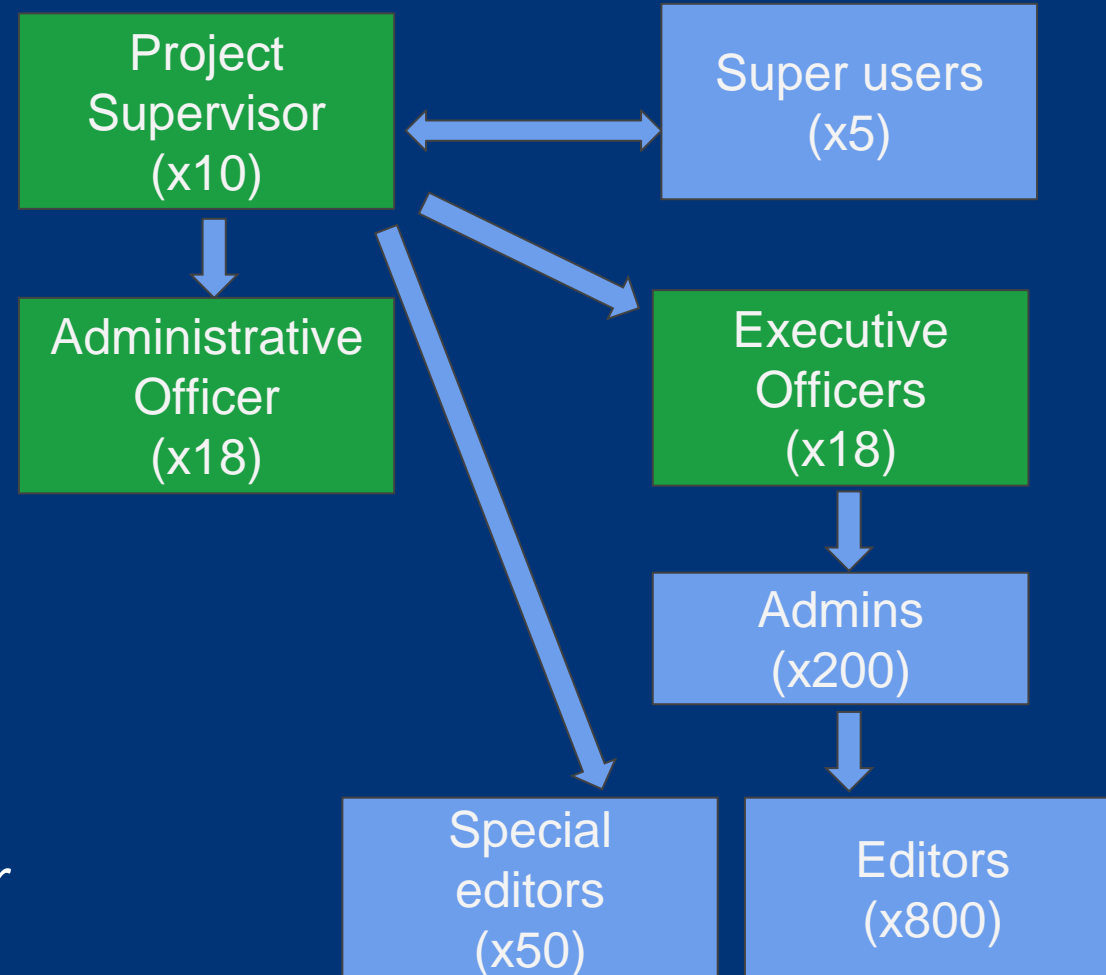
**Competent authority:** [Hellenic National Academic Recognition and Information Center](#)

**Created and maintained by:** [Hellenic National Academic Recognition and Information Center](#)

How all this has been achieved?

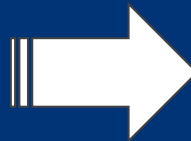
## The governance model

- Project Supervisors: *Prioritize tasks and activities*
- Administrative Officer: *Resolves high-level issues (including regulatory, legislative issues)*
- Executive Officer: *Select the Admins*
- Administrators: *Define and supervise the editors, Compile the catalog of procedures, Finalize changes/updates*
- Editor: *Register and update a small number of procedures*
- Special Editors: *Quickly register procedures of special interest*



## The collaborative platform - MediaWiki

- MediaWiki is the platform used by Wikipedia.
- It is open source, it supports version and update control
- It is written in PHP so any extensions/customizations have to be in PHP
- For supporting the non tech-expert editors we use the Page Forms extension of MediaWiki
- For querying the data within MediaWiki, we use the Semantic MediaWiki extension



Επεξεργασία Διαδικασίας: ΔΔ:Δήλωση Προσωρινής και Περιστασιακής Παροχής Υπηρεσιών του Επαγγέλματος Τεχνολόγου Ακτινοβολίας Ακτινοθεραπείας

<b>Γενικές Πληροφορίες</b>	Καταχωρήστε τις βασικές πληροφορίες της διαδικασίας. Οι διάφοροι εναλλακτικοί τίτλοι που συμπληρώνετε βοηθούν στην αναζήτηση από τον πολίτη. Συμπληρώστε είτε την προθεσμία υλοποίησης είτε τον εκτιμώμενο χρόνο (όταν δεν προβλέπει ο νόμος προθεσμία υλοποίησης). Δείτε στο howto την αντίστοιχη ενότητα.
Κατηγορίες	
Εννομα μέσα	
Ειδικά πεδία	
NACE	
SDG	
Προϋποθέσεις	
Παράβολα-Τέλη	
Δικαιολογητικά	
Νομοθεσία	
Βήματα	
	*Επίσημος Τίτλος: <input type="text" value="Δήλωση Προσωρινής και Περιστασιακής Παροχής Υπηρεσιών του Επαγγέλματος Τεχνολόγου Ακτινοβολίας Ακτινοθεραπείας"/>
	*Εναλλακτικοί Τίτλοι: <input type="text"/>
	*Περιγραφή: <input type="text" value="Η διαδικασία αφορά στην δήλωση προσωρινής και περιστασιακής παροχής υπηρεσιών του επαγγέλματος τεχνολόγου ακτινοβολίας ακτινοθεραπείας."/>
	Ο αρμόδιος φορέας είναι ιδιωτικός: <input type="checkbox"/>
	Αρμόδιος ιδιωτικός φορέας: <input type="text"/>

# The advantages of MediaWiki and PageForms

## MediaWiki

- A procedure can be changed as many times as we want, before it gets published
- At any moment we can get back to a previous version of a procedure
- We can change the status of a procedure (edited, published, revised etc) and this affects its visibility

## PageForms

- Certain fields use vocabularies instead of free text ⇒ fewer typos and controlled values
- Validation rules are applied to certain fields (consistency)
- We can run software bots that correct or homogenise values in a bulk way

# MediaWiki

- For rendering the MediaWiki content, we employ custom CSS

**435858 Declaration of Temporary and Occasional Provision of Services of Mechanical Engineer and Aircraft Builder Engineer**

Προβολή στα Ελληνικά

- At a Glance**
- Basic Information
- Documents
- Requirements
- Fees
- Legislation
- Steps
- Output
- Other Information
- Related
- Categories
- Show Procedure
- Manual

At a Glance		
<b>Points of Service</b> Reported Body, Points of Single Contact (ΚΕΠ – ΕΚΕ), Digital Portals Directorate of Professional Activities Locally Competent Department of T.C.G. - Technical Chamber of Greece  - MINISTRY OF INFRASTRUCTURE AND TRANSPORTATION		<b>Digital Provision Points</b> Points of Single Contact - EUGO portal TCG - MyTEE portal
<b>Number of Required Documents</b> 11	<b>Fees</b> 76.00 €	<b>Deadline of completion</b> 2 Months
<b>Description</b> The procedure concerns the granting of a license to practice the profession of Mechanical Engineer and Aircraft Builder Engineer based on Directive 2005/36 / EC. (Issuance of a license to practice a profession based on Directive 2005/36 / EC)		

**Basic Information**

Related Links

Προβολή στα Ελληνικά

- At a Glance
- Basic Information
- Documents
- Requirements
- Fees
- Legislation
- Steps
- Output**
- Other Information
- Related
- Categories
- Show Procedure
- Manual

**Output & Results**

<b>Output</b> Administrative Act, Registry update	<b>Usage</b> Supporting document
--	-------------------------------------

**Other Information**

**Official Title**  
Declaration of Temporary and Occasional Provision of Services of Mechanical Engineer and Aircraft Builder Engineer

<b>Authorities/Public bodies responsible for the procedure-&lt;</b> TECHNICAL CHAMBER OF GREECE	<b>Deadline of Implementation</b> 2 Months
<b>Languages supporte</b> English	<b>Ways of provision</b> Cross-border

**Related**

**NACE**

- 71.1 Architectural and engineering activities and related technical consultancy

**Categories**

<b>Type</b> Outgoing	<b>Provided to</b> Citizens
<b>Type of procedure</b> Permits	<b>Trigger</b> Applied for
<b>Life events</b>	



## The data quality control

- Mitos interoperates with several external registries to retrieve values for:
  - Organizations (National registry of public organizations - apografi.gov.gr)
  - Fees (National registry of state fees)
  - Life-events (Vocabulary from gov.gr)
- Mitos maintains several side registries for:
  - Evidences
  - Service delivery points
  - Third party registries
  - Procedure steps
- We have developed a set of scripts that run on the background to check for errors and inconsistencies

# The adoption of CPSV-AP by Mitos

## Mitos contents

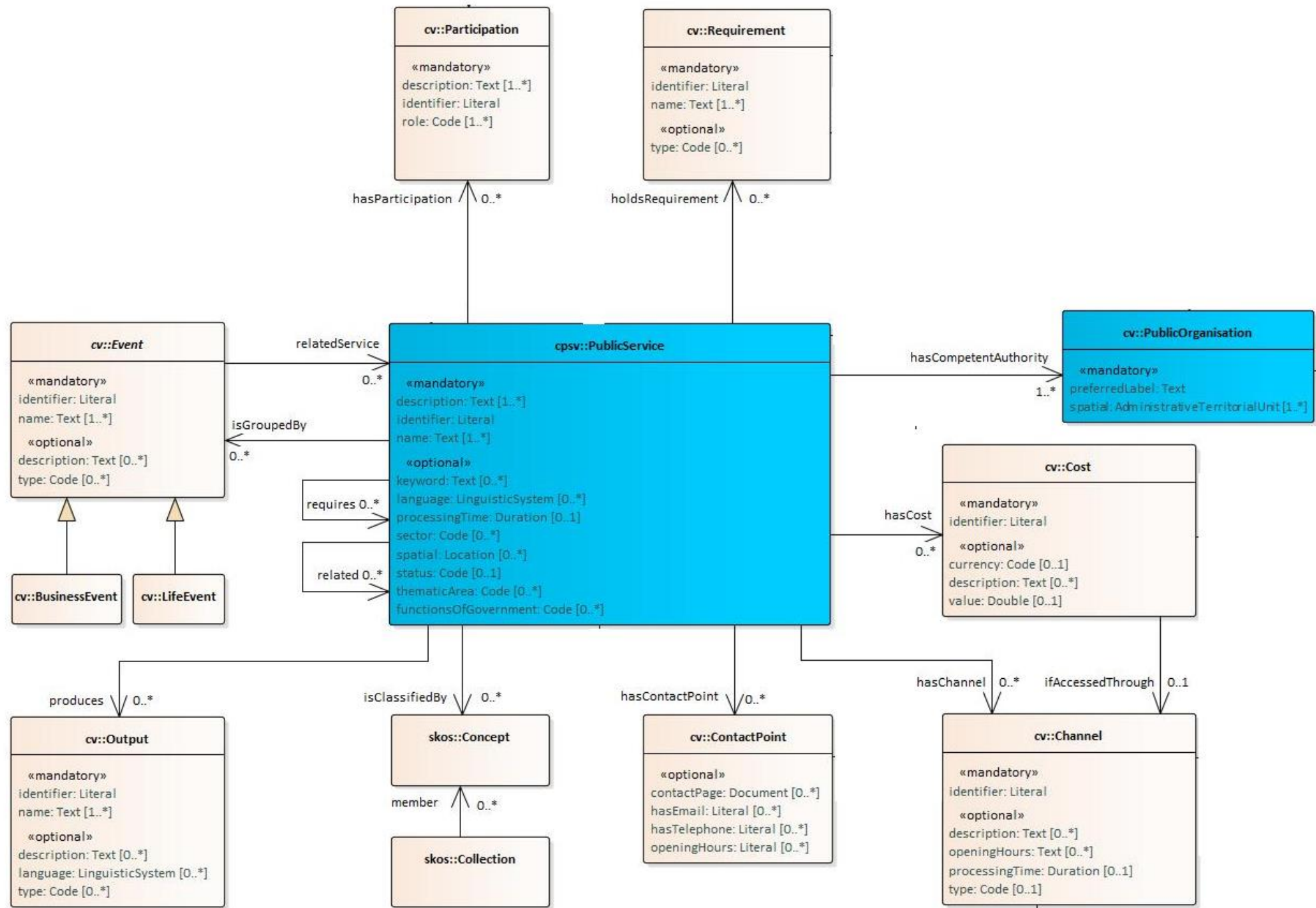
- More than 3400 published procedures in Greek, more than 500 procedures in English
- Around 500 procedures before (as is) and after (to be) simplification
- For each procedure:
  - Information on the input, output, costs, points of service, legislation etc. following the CPSV-AP standard
  - Information about the execution steps, and a visualisation of the procedure in BPMN 2.0 (auto-generated) format

**3406** Published

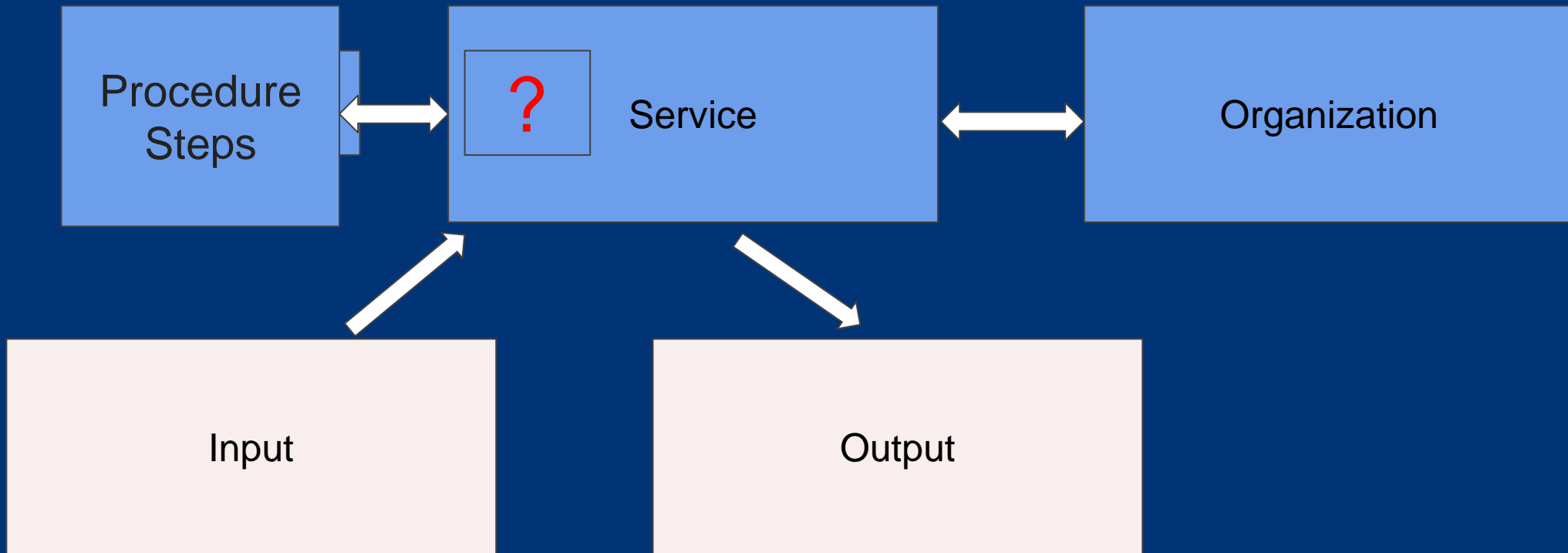
Procedures that any interested person may seek in the Registry based on type or on life events.

**1000** Under Process

Procedures, that are at the initial stage of registration by the competent authorities.



At an abstraction level



## How we describe the procedure steps

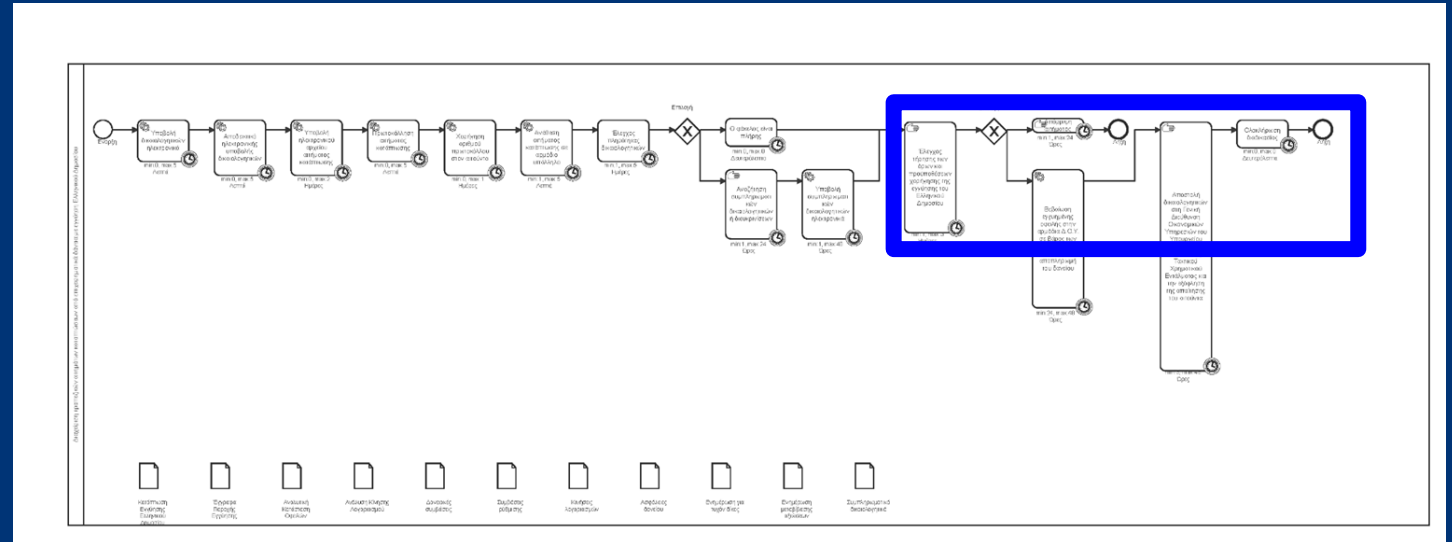
### Using Business Process Model and Notation (BPMN) v.2.0

- BPMN: Graphical notation depicting the steps of a business process
- BPMN can be employed to describe the workflow of a procedure, with all the conditions, alternative actions, actors etc. from start to finish.
  - **Simple and static BPMN** can depict the flow of a service both for citizens and the public administration employees
  - **Executable BPMN** workflows
    - can be fed to BPMN simulation engines with several workload parameters and provide an estimation for the execution cost of a service
    - can be fed to BPMN execution engines and allow the full execution of the service

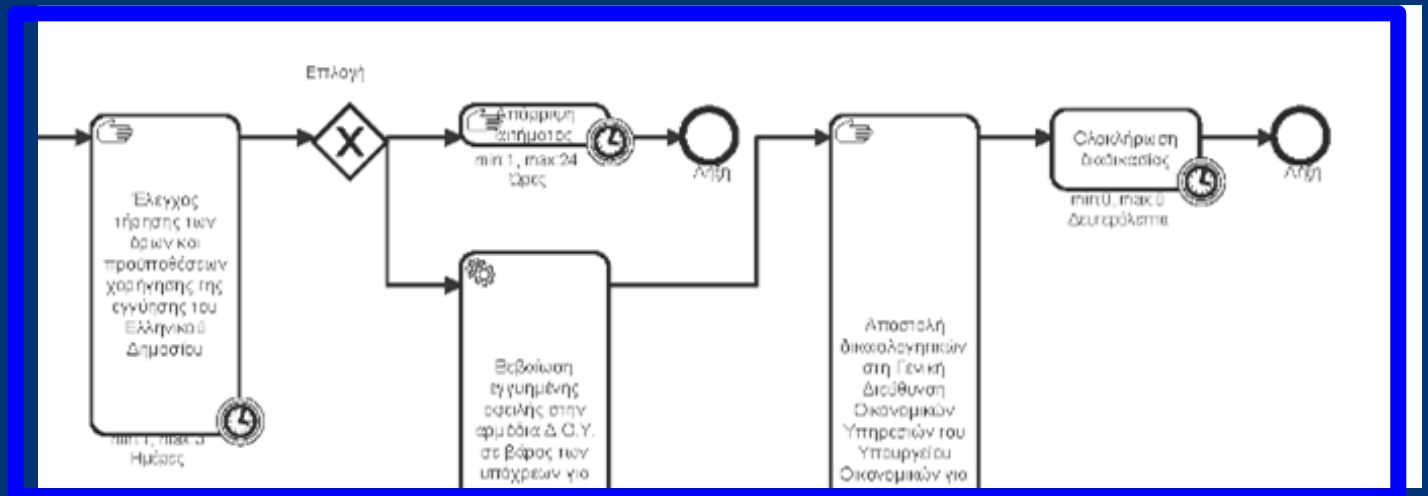
# We replace drawing...

with simple forms that describe each step

<b>Βήμα:</b>	1
<b>Αποτελεί βήμα διακλάδωσης:</b>	<input type="checkbox"/>
<b>Προηγούμενο βήμα διακλάδωσης:</b>	
<b>Περιγραφή:</b>	Υποβολή αίτησης
<b>Αρμόδιος διεκπεραίωσης:</b>	Αρμόδιος Υπάλληλος
<b>Συναρμόδιος Φορέας:</b>	
<b>Απαιτούμενος χρόνος διεκπεραίωσης (min):</b>	23
<b>Απαιτούμενος χρόνος διεκπεραίωσης (max):</b>	234
<b>Απαιτούμενος χρόνος διεκπεραίωσης (μονάδα):</b>	Λεπτά
<b>Σημειώσεις:</b>	



and automatically generate the XML file of the BPMN



## 227120 European Health Insurance Card

### At a Glance

Basic information

Application

What you will need

Requirements

Output

Steps

Digital steps

Other information

Legislation

Categories

Show Procedure

Steps

Digital Steps

### At a glance

#### Points of service

Single Social Security Entity (EFKA), KEP (ΚΕΠ)

#### Digital provision points

National Single Digital Gateway – gov.gr

#### Remote Points of service

myEFKALive, myKEPLive

#### Number of required documents

(1)

#### Fees

Provided without cost

#### Estimated Time

10 days

#### Estimated Time (digitally)

21 minutes

#### Description

The procedure concerns the issuing of a European Health Insurance Card (EHIC), a free card, which is provided to those who are actively insured by e-EFKA, in order to have access to medically necessary state care during their temporary stay in one of the 27 EU countries, Iceland, Liechtenstein, Norway and Switzerland, with the same conditions and at the same cost (in some countries, free of charge) as insured persons in that country.



# Data sharing and interoperability

## How we share data - Mitos API

- <https://api.mitos.gov.gr/info/>
- Certain API endpoints also allow to populate or update the registry in a batch manner
- The result of an API call for a service is JSON formatted

```
{
  "result": {
    "fields": {
      "Process": {
        "1": {
          "process_border_provision": "Εγκατάστασης",
          "process_bpmn_digital_source": "EUGO",
          "process_bpmn_source": "EUGO",
          "process_cost_max": "76",
          "process_cost_min": "76",
          "process_deadline": "2",
          "process_deadline_type": "Μήνες",
          "process_description": "Η διαδικασία αφορά στη χορήγηση",
          "process_evidence_cost_total_number": "3",
          "process_evidence_step_digital_total_number": "0",
          "process_evidence_step_total_number": "12",
          "process_evidence_total_number": "11",
          "process_id": "435858",
          "process_life_events": "Αδειοδοτήσεις και συμμόρφωση",
          "process_official_title": "Δήλωση Προσωρινής και Περιε",
          "process_org_owner": "Φορέας:ΥΠΟΥΡΓΕΙΟ ΥΠΟΔΟΜΩΝ ΚΑΙ ΜΕ",
          "process_org_owner_is_private": "Όχι",
          "process_output_type": "Διοικητική πράξη, Ενημέρωση Μη
```

```
"Process evidences": {
  "1": {
    "process_evidence_alternative": "Όχι",
    "process_evidence_description": "Αίτηση - Υπεύθυ",
    "process_evidence_identification_type": "Ταυτοπο",
    "process_evidence_num_id": "1",
    "process_evidence_owner": "Φυσικά πρόσωπα",
    "process_evidence_submission_type": "Κατάθεση από",
    "process_evidence_type": "Αίτηση"
  },
```

```
"Process conditions": {
  "1": {
    "process_conditions_alternative": "Όχι",
    "process_conditions_name": "Ο ενδιαφερόμενος",
    "process_conditions_type": "Δικαστικές"
```

```
"Process steps": {
  "1": {
    "process_step_child": "Όχι",
    "process_step_duration_max": "0",
    "process_step_duration_min": "0",
    "process_step_duration_type": "Δευτερόλεπτο",
    "process_step_exit": "Όχι",
    "process_step_implementation": "Ενέργεια μ",
    "process_step_num_id": "1",
    "process_step_title": "Εκκίνηση διαδικασία"
```

# Interoperability

<https://api.mitos.gov.gr/info/>

Γενικές Πληροφορίες

Πρόσβαση - Αυθεντικοποίηση

API BASE URL

Παραδείγματα CURL

Εμφάνιση όλων των διαδικασιών

Εμφάνιση συγκεκριμένης διαδικασίας β...

Εμφάνιση συγκεκριμένης διαδικασίας β...

Εμφάνιση συγκεκριμένης διαδικασίας με...

Τεχνικά Links

**Γενικές Πληροφορίες**

Στο παρόν κείμενο γίνεται αναφορά σε ένα υποσύνολο των λειτουργιών που διατίθενται από το API του Εθνικού Μητρώου Διαδικασιών του Ελληνικού Δημοσίου.

**Πρόσβαση - Αυθεντικοποίηση**

Το Mitos API προσφέρει μια μορφή ελέγχου ταυτότητας:

- Api Key Authentication

Για να αποκτήσετε πρόσβαση, θα πρέπει να αποστείλετε e-mail στο [api@mitos.gov.gr](mailto:api@mitos.gov.gr)

**API BASE URL**

Σε κάθε απόλυτη λειτουργία του συστήματος θα παρέχεται η μέθοδος ανάκτησης εντός δύο αγκυλών, ακολουθούμενη από το url στο οποίο πρέπει να σταλεί το αίτημα HTTP:

```
[GET] API_BASE_URL/v1
```

Όπου αναφέρεται το API\_BASE\_URL αυτό είναι το <https://api.digigov.gr/emd> για την παραγωγική έκδοση της εφαρμογής.

**Παραδείγματα CURL**

**Εμφάνιση όλων των διαδικασιών**

```
curl -X GET "API_BASE_URL/v1/services"
```

Search results for "Recognition of third-cycle foreign academic degrees (doctorate) - National Registry of Administrative Public Services".

Results (15)

Procedure -

**Details**

Information type

- Procedure

Location

- National coverage

Category

- Education systems in other EU countries

Admission of pupils to experimental kindergartens, primary schools, s high schools - National Registry of Administrative Public Services

Admission of pupils to standard lower and upper secondary schools - Administrative Public Services

135604 - Αλλαγή διεύθυνσης αποστολής λογαριασμού της ΔΕΗ

Με μια ματιά

Σημεία εξυπηρέτησης: ΚΕΠ

Ψηφιακά σημεία παροχής: Αλλαγή διεύθυνσης αποστολής λογαριασμού

Τελευταία ενημέρωση: 27 Σεπτεμβρίου 2023

**Προϋποθέσεις**

Σε αίτηση για αλλαγή διεύθυνσης αποστολής του λογαριασμού μπορεί να προβεί το πρόσωπο του ονόμα του οποίου είναι η παροχή ή τρίτο πρόσωπο με εξουσιοδότηση του συμβαλλόμενου.

**Δικαιολογητικά**

- 1 Ταυτοποιητικό έγγραφο - Ταυτοποιητικό έγγραφο.
- 2 Αποδεικτικό ΑΦΜ - Αποδεικτικό ΑΦΜ.
- 3 Έγγραφο - Φωτοαντίγραφο πρόσφατου λογαριασμού ΔΕΗ

Εξουσιοδότηση - Εξουσιοδότηση ή συμβολαιογραφικό πληρεξούσιο τρίτου προσώπου από τον (υπό προϋπόθεση)

Approval for the Establishment and Operation of Habitats for Animals

**Basic information**

Institutional Body  
MINISTRY OF INTERIOR

Description  
The procedure concerns the approval of the establishment and operation of accommodation facilities for animals, where hospitality, care and - if needed - preventive and therapeutic treatment is provided.

**At a glance**

Points of Service	Regions, Points of Single Contact (ΚΕΠ - ΕΚΕ), Regional Departments of Rural Economy and Veterinary Medicine - DAOK - <a href="#">MINISTRY OF RURAL DEVELOPMENT AND FOOD</a>
Number of Documents	6
Cost	~ 15€
Deadline of	

mAigov BETA

Ρωτήστε τον ψηφιακό βοηθό του gov.gr

προδιαγραφές, την ιδιοκτησία ή μίσθωση οικήματος και την δήλωση του προγραμματιζόμενου χρόνου ίδρυσης του Κέντρου. Θα χρειαστεί επίσης να παράχετε διάφορα δικαιολογητικά, όπως υπεύθυνες δηλώσεις, κατάσταση προσωπικού/συνεργατών, οικονομική μελέτη, άδεια δόμησης, σχέδιο δράσης/υλοποίησης και νομιμοποιητικά έγγραφα νομικών προσώπων. Περισσότερες πληροφορίες μπορείτε να βρείτε στην αντίστοιχη ενότητα της ιστοσελίδας της Ελληνικής Κυβέρνησης: [Σύνδεσμος](#).

Ανανέωση χρόνου

Γράψτε την ερώτησή σας

Η συνομιλία θα λήξει 09:04

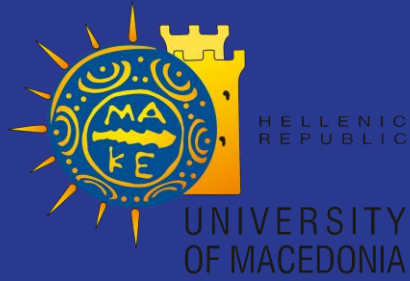
Mitos is the **single point of truth** for CSSs, EUGO, YourEurope, gov.gr as well as for the Document/Case Management Systems of Public Administration

Publish Mitos data in RDF format

....in a moment

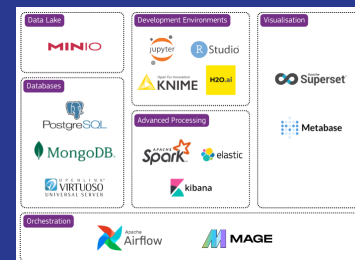
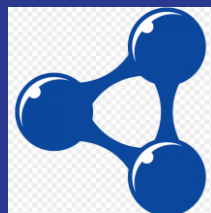
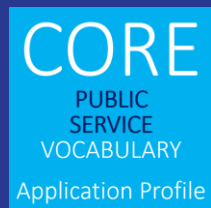
Thank you for your attention

[varlamis@admin.grnet.gr](mailto:varlamis@admin.grnet.gr)



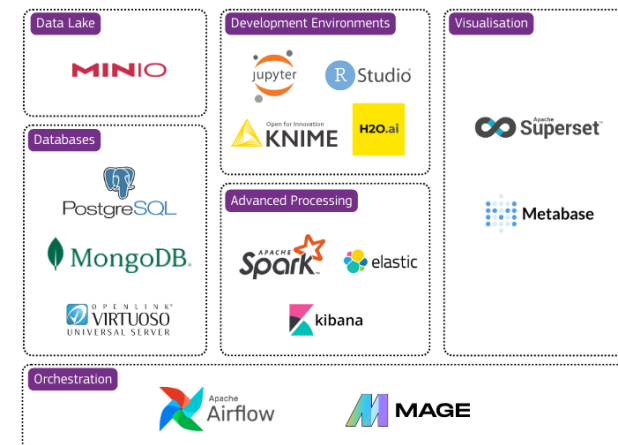
# The Mitos Linked Open Data (Mitos LOD) project

Prof. Efthimios Tambouris  
University of Macedonia

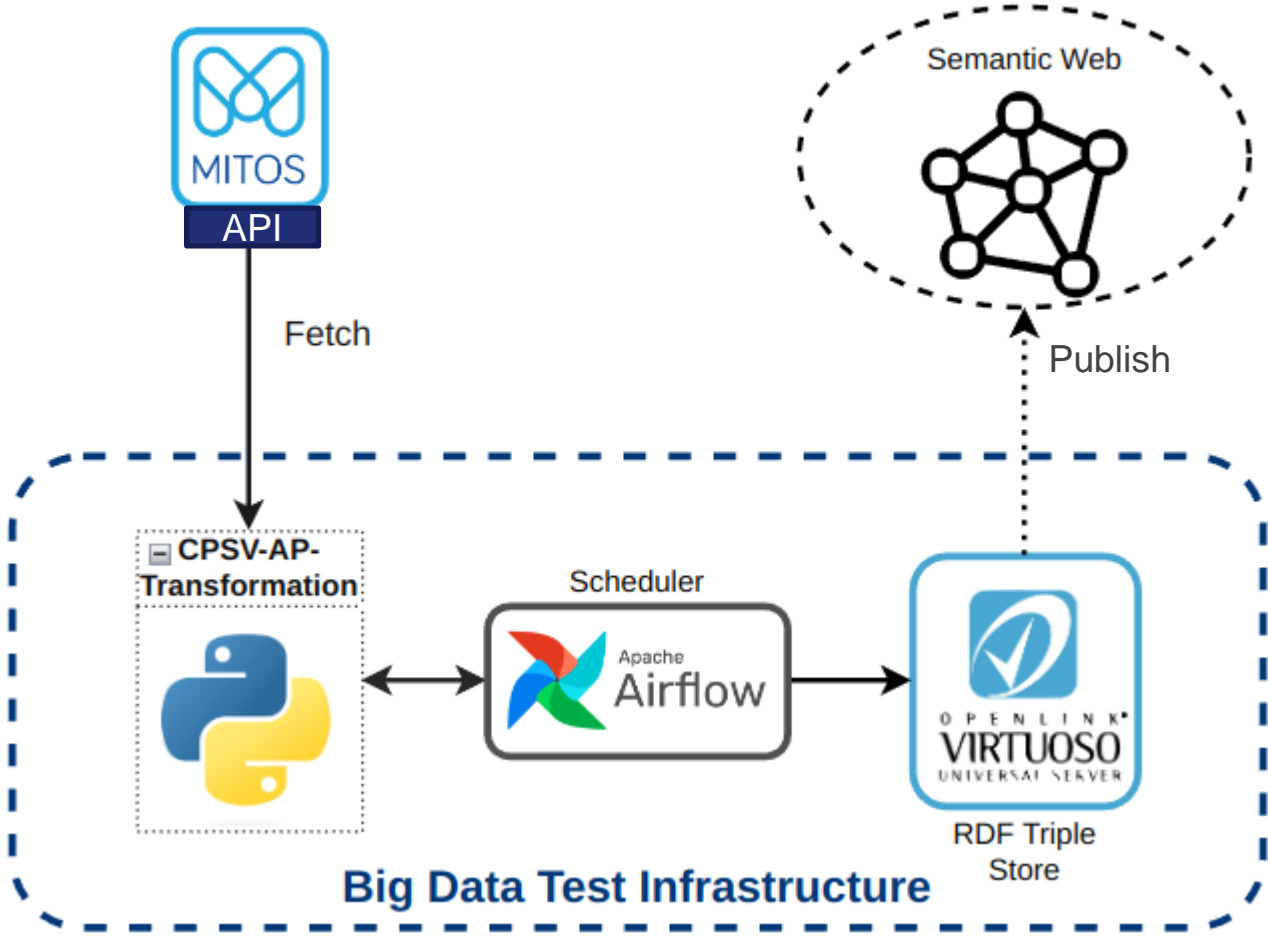


# MITOS LOD project objectives

- MITOS LOD is a joint RTD project of grnet and UoM supported by BDTI
- Its aim is to publish public service descriptions of MITOS as Linked Open Data aligned with CPSV-AP
  - **MITOS**: is the official National Registry of Administrative Procedures in Greece including ~3500 public services
  - **CPSV-AP** is used to transform the data of MITOS to Linked Open Data
  - The project used free cloud-based resources and tools provided by the **Big Data Test Infrastructure (BDTI)** framework, which are essential for the data transformation pipeline

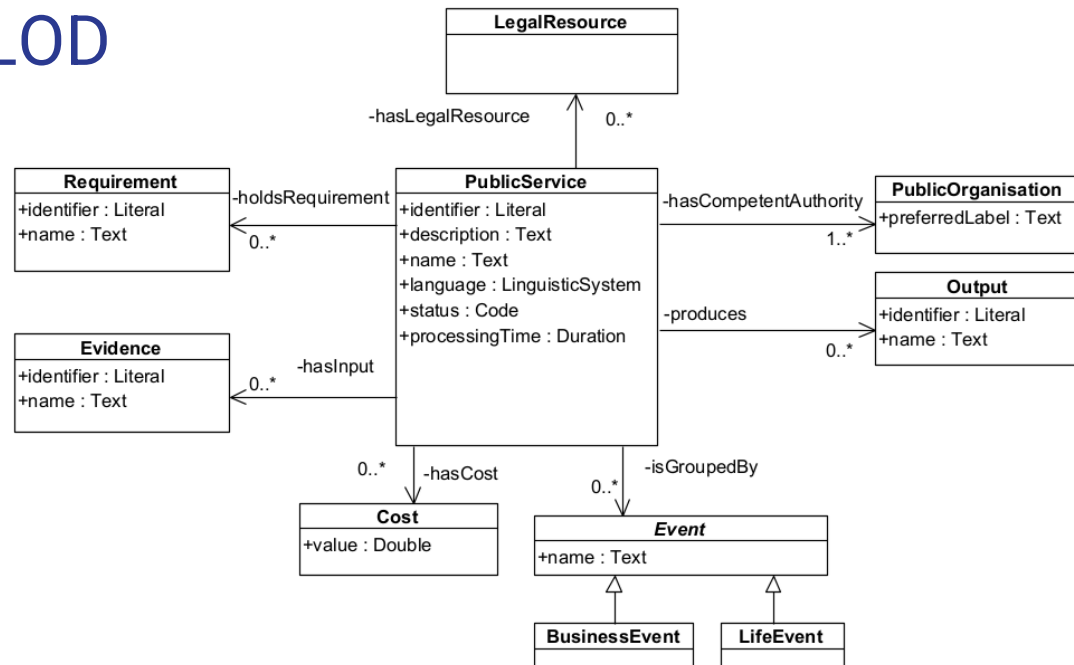


# MITOS LOD Architecture





# Subset of CPSV-AP for LOD transformation



```

<https://mitos.gov.gr:8890/id/ps/963466> a cpsv:PublicService ;
  dct:identifier "5fd82410-1a65-4a08-a35f-6ec32601e944" ;
  dct:title "Άδεια εργασίας προσωπικού ασφαλείας Ιδιωτικών Επιχειρήσεων Παροχής Υπηρεσιών Ασφαλείας (Ι.Ε.Π.Υ.Α.)" ;
  skos:altLabel "Άδεια εργασίας προσωπικού για ιδιωτικές υπηρεσίες ασφάλειας" ;
  dct:description "Η διαδικασία αφορά στην έκδοση άδειας εργασίας σε προσωπικό ασφαλείας Ιδιωτικών Επιχειρήσεων Παροχής Υπηρεσιών Ασφαλείας (Ι.Ε.Π.Υ.Α.)." ;
  cv:hasCost <https://mitos.gov.gr:8890/PublicServices/id/cost/cost963466> ;
  cv:holdsRequirement <https://mitos.gov.gr:8890/PublicServices/id/requirement/requirement963466> ;
  cv:hasInput <https://mitos.gov.gr:8890/PublicServices/id/evidence/evidence963466> ;
  cv:hasLegalResource <https://mitos.gov.gr:8890/PublicServices/id/rule/rule963466> ;
  cv:isGroupedBy<https://mitos.gov.gr:8890/PublicServices/id/event/event8> ;
  cv:isGroupedBy<https://mitos.gov.gr:8890/PublicServices/id/event/event9> ;
  cpsv:produces <https://mitos.gov.gr:8890/PublicServices/id/praxis/praxis963466>.
  
```

Subset of  
produced RDF

```

<https://mitos.gov.gr:8890/id/ps/814359> a cpsv:PublicService ;
  dct:identifier "81a435ce-b9ff-4775-afdd-d19fd30dc5de" ;
  dct:title "Αναγνώριση Ακαδημαϊκών Τίτλων Σπουδών Αλλοδαπής τρίτου (3ου) κύκλου." ;
  skos:altLabel "Αναγνώριση ακαδημαϊκής ισοδυναμίας διδακτορικών τίτλων αλλοδαπής τρίτου (3ου) κύκλου σπουδών" ;
  dct:description "Η διαδικασία αφορά στην αναγνώριση Ακαδημαϊκών Τίτλων Σπουδών Αλλοδαπής τρίτου (3ου) κύκλου και οι ενδιαφερόμενοι υποβάλλουν τις αιτήσεις τους ηλεκτρονικά μέσω της πλατφόρμας: https://e-doatap.doatap.gr. " ;
  cv:hasCost <https://mitos.gov.gr:8890/PublicServices/id/cost/cost814359> ;
  dct:language "Αγγλικά" ;
  cv:holdsRequirement <https://mitos.gov.gr:8890/PublicServices/id/requirement/requirement814359> ;
  cv:hasInput <https://mitos.gov.gr:8890/PublicServices/id/evidence/evidence814359> ;
  cv:hasLegalResource <https://mitos.gov.gr:8890/PublicServices/id/rule/rule814359> ;
  cv:isGroupedBy<https://mitos.gov.gr:8890/PublicServices/id/event/event14> ;
  cv:isGroupedBy<https://mitos.gov.gr:8890/PublicServices/id/event/event15> ;
  cpsv:produces <https://mitos.gov.gr:8890/PublicServices/id/praxis/praxis814359>.
  
```

# SPARQL Queries

```
prefix cv: <http://data.europa.eu/m8g/>
select ?name, (count(*) as ?total) where {
  ?x cv:isGroupedBy ?event.
  ?event cv:name ?name }
GROUP BY ?name
ORDER BY DESC (?total)
```



Get the number of Public Services per life event (e.g., child birth).

name	total
"Απασχόληση στο δημόσιο τομέα"	1427
"Αδειοδοτήσεις και συμμόρφωση"	1179
"Οικοδομικές άδειες / μηχανικοί"	973
"Διαθέσιμη παραγωγή"	806
"Νομοθεσία και αποφάσεις"	773
"Πολίτης και καθημερινότητα"	768
"Τουρισμός"	739
"Εξ αποστάσεως εξυπηρέτηση πολιτών"	688
"Ναυτιλία"	688
"Επιχειρηματική δραστηριότητα"	682

```
prefix cv: <http://data.europa.eu/m8g/>
select ?name, (count(*) as ?total) where {
  ?x cv:hasInput ?input.
  ?input cv:name ?name }
GROUP BY ?name
ORDER BY DESC (?total)
```



## Most used Evidences by Public Services

name	total
"Η διαδικασία αφορά στην έκδοση ηλεκτρονικής υπεύθυνης δήλωσης από τον ενδιαφερόμενο, χωρ'	1787
"Εξουσιοδότηση από τον/την άμεσα ενδιαφερόμενο/η προς το πρόσωπο που εξουσιοδοτεί για να ε	887
"Η διαδικασία αφορά στην έκδοση ηλεκτρονικής υπεύθυνης δήλωσης από τον ενδιαφερόμενο, χωρ'	795
"Εξουσιοδότηση ή συμβολαιογραφικό πληρεξούσιο τρίτου προσώπου από τον άμεσα ενδιαφερόμενο.	750
"Αποδεικτικό πληρωμής/ ηλεκτρονικό παράβολο κωδικός \"2033\" αξίας 2€"	748
"Έγγραφο εννόμου συμφέροντος, σε περίπτωση που ο/η ατών/ούσα δεν είναι διάδικος."	742
"Η διαδικασία αφορά την έκδοση πιστοποιητικού οικογενειακής κατάστασης από το Δημοτολόγιο	655
"Η διαδικασία αφορά στην έκδοση εξουσιοδότησης από τον άμεσα ενδιαφερόμενο προς το πρόσωπο	589
"Η διαδικασία αφορά στη χορήγηση αποσπάσματος Ληξιαρχικής Πράξης θανάτου, η οποία χορηγείτ	538
"Πιστοποιητικό οικογενειακής κατάστασης"	482

Thank you for your attention!!

More info:  
[tambouris@uom.edu.gr](mailto:tambouris@uom.edu.gr)

We will be at EGOV conference:

Using the EU Big Data Test Infrastructure to Publish MITOS Public  
Service Descriptions as Linked Open Data

by E. Tambouris<sup>1</sup>, D. Zeginis G. Matziaras, N. Stefanidis,  
R. Promikyridis, K. Tarabanis, K. Doutsos Oikonomou,  
I. Varlamis and M. C. Bodino

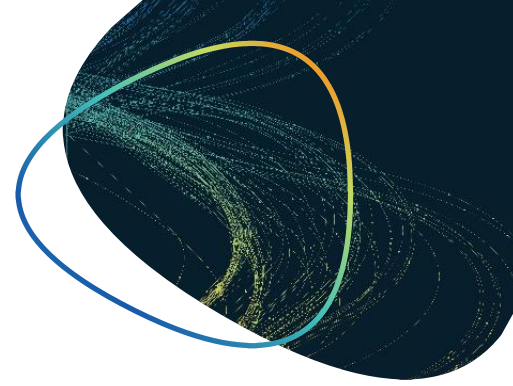


Q&A



# Survey on the adoption of CPSV-AP

## Objective of the survey



The survey aimed at analysing **who** of the Member States **is using CPSV-AP** to describe their Catalogue of Services, **how** they are doing it, what **barriers** they face, and which **support** of SEMIC they might need.

# Questions

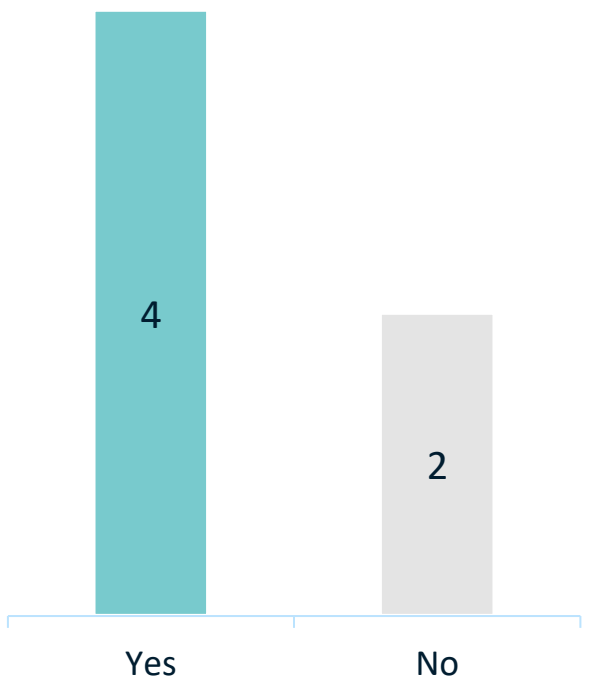


1. Do you currently use CPSV-AP?
  - What is the current status/level of implementation?
  - Which version are you using?
  - Have you extended the version of CPSV-AP as provided by SEMIC?
2. Did you consider using CPSV-AP?
3. What barriers do you face for adopting/implementing CPSV-AP, which constraints are holding you back?
4. Are you currently using tools to describe and publish public services?
  - Which tools do you use and for what purpose?
5. Are you using other SEMIC specification in the context of describing public services (next to CPSV-AP)?
6. Would you be interested in receiving support from SEMIC on using and implementing CPSV-AP in your Catalogue of Services (CoS)?
7. How can SEMIC best support the development of your organisation's Catalogue of Services in the future?

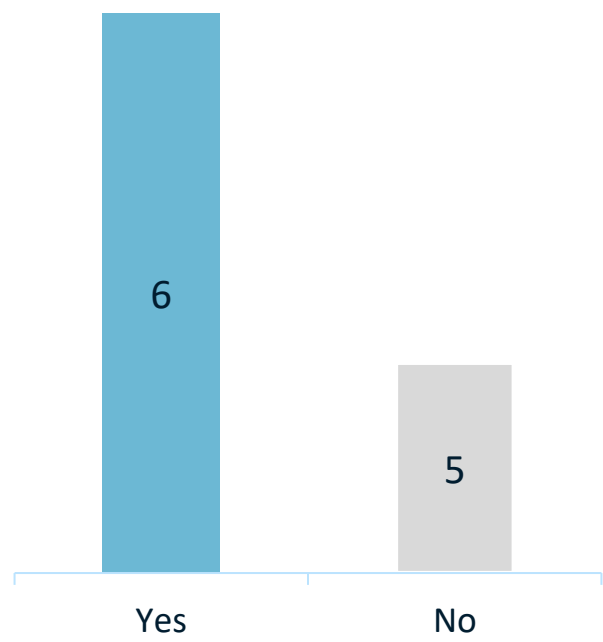
# Results (1)



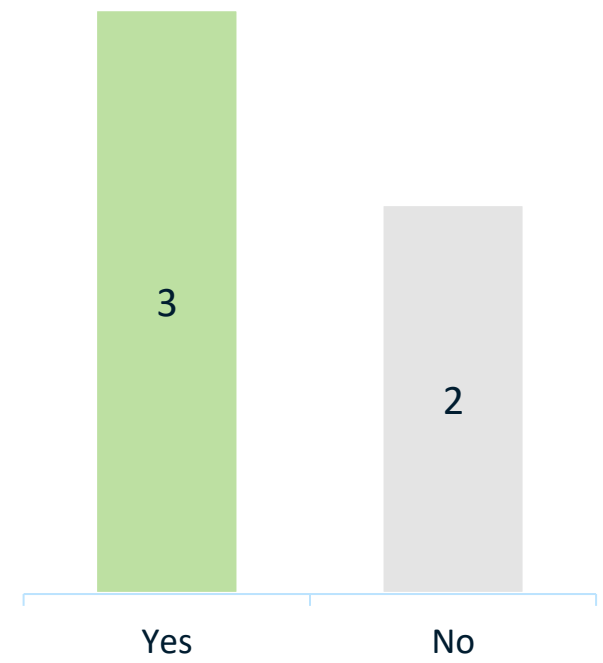
Did you extend CPSV-AP?



Are you currently using CPSV-AP?



Did you consider CPSV-AP?

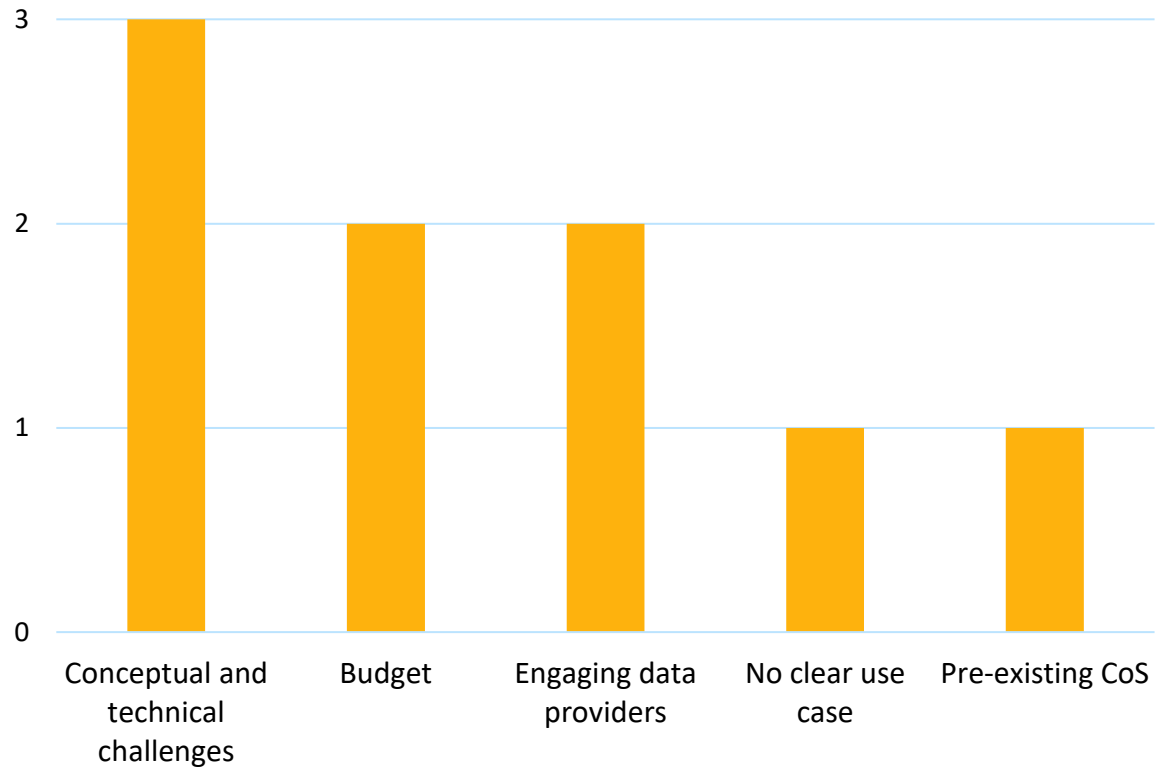




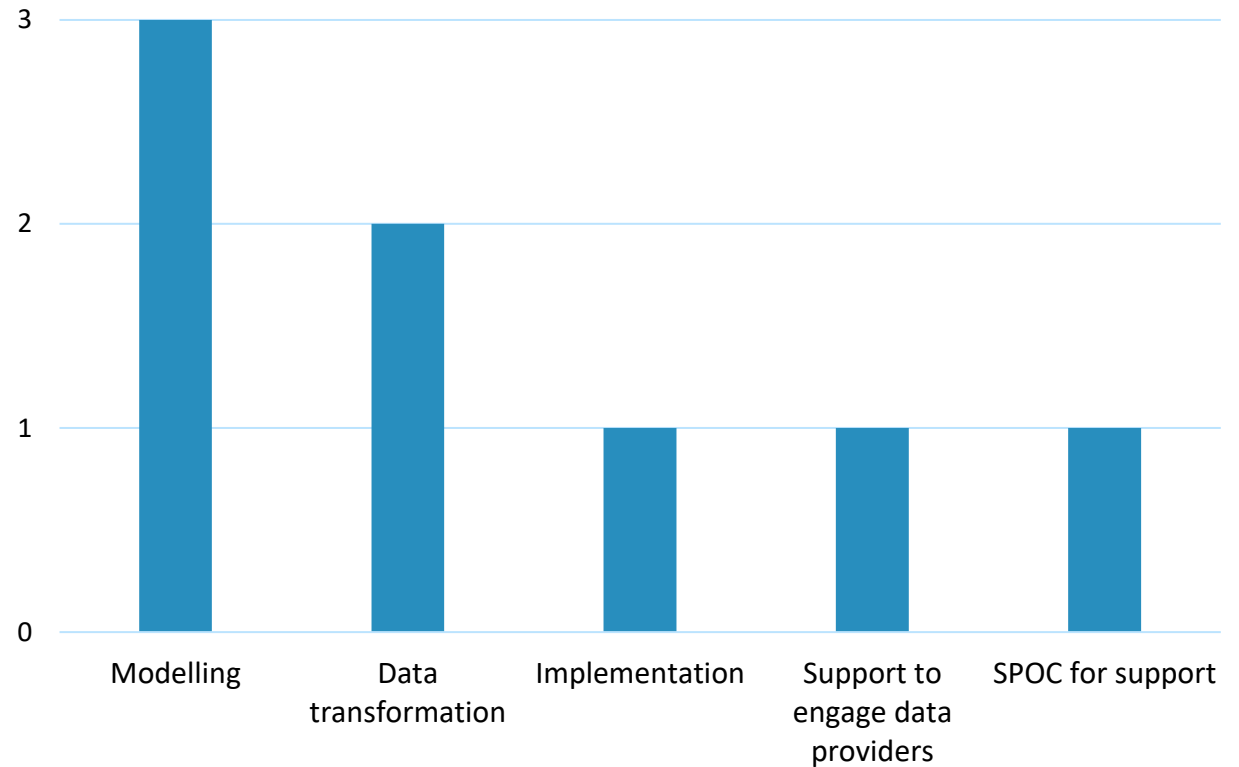
# Results (2)



**What barriers do you face for adopting/implementing CPSV-AP, which constraints are holding you back?**



**Would you be interested in receiving support from SEMIC on using and implementing CPSV-AP in your Catalogue of Services (CoS)?**



# Results (3)



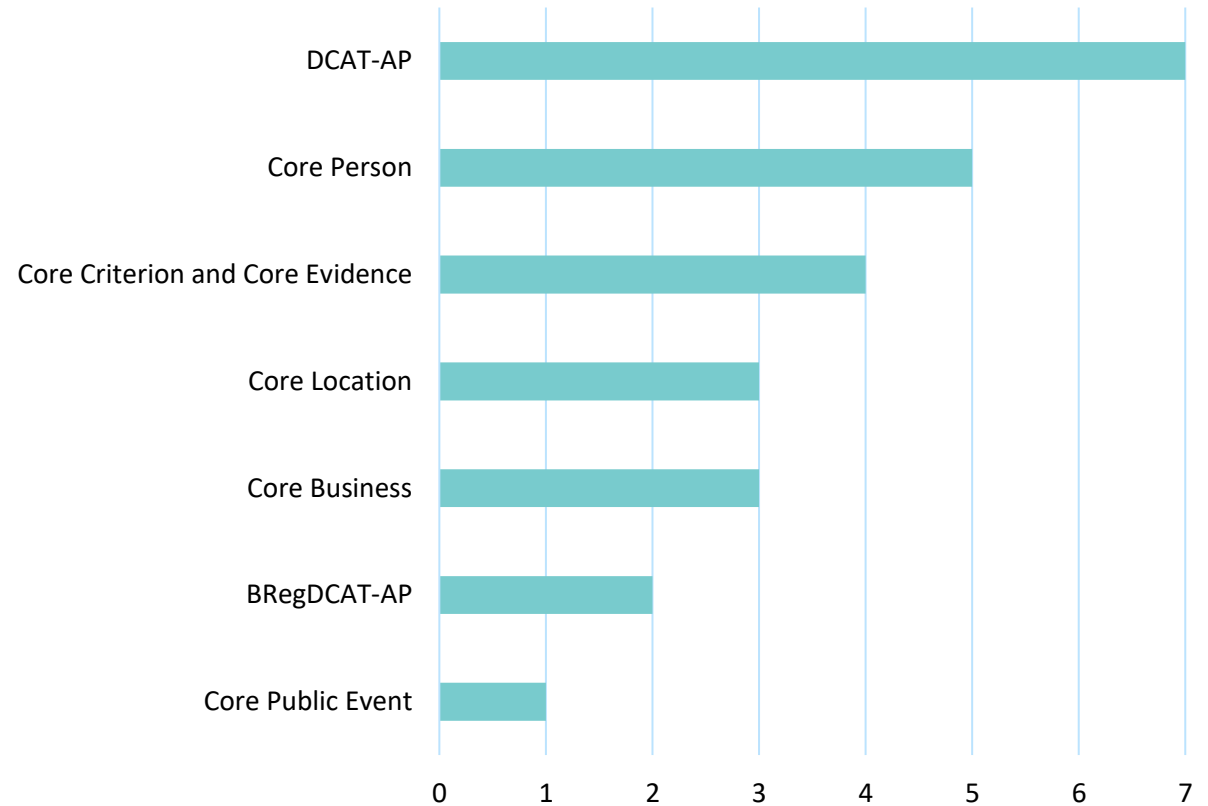
## Are you currently using tools to describe and publish public services?

- 6 out 11 respondents use tooling
- In every case the tooling is custom

## How can SEMIC best support the development of your organisation's Catalogue of Services in the future?

- Tools and guidelines for describing and publishing the (extended) model
- Promote local adoption by showing local use cases
- Centralised portal for European Public Services
- Compatibility between specifications
- Mapping of CPSV-AP to schema.org

## Use of other SEMIC assets:



A network visualization on a dark blue background. A central node is highlighted in bright orange. From this central node, numerous lines radiate outwards, connecting to other nodes. The lines are color-coded, transitioning from orange near the center to green and then to light blue as they extend further. The overall structure is symmetrical and resembles a starburst or a complex network graph.

Thank you



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[DIGIT-INTEROPERABILITY@ec.europa.eu](mailto:DIGIT-INTEROPERABILITY@ec.europa.eu)



<https://joinup.ec.europa.eu/collection/interoperable-europe/interoperable-europe>