

## Webinar on the Catalogue of Services annual roadmap and maintenance of the CPSV-AP specification

Wednesday 09-12-2020

14:00-16:00 (GMT+1)

Organised by the Catalogue of Services Action of the ISA<sup>2</sup> programme





#### **Webinar practicalities**

- Click on « connect audio » but please mute your microphones.
- You can share your questions and comments via the chat.
- The webinar will be recorded.





#### **Project introduction**

1.	Welcome	5'
2.	Action roadmap	10'
3.	Existing resources	<b>5</b> ′
4.	Governance	10'
5.	Open issues	40′
6.	Recommended controlled vocabularies	15′
7.	Knowledge sharing by Poland and Germany	30′
8.	Q&A	5′





## 1. Welcome

**Speaker: Miguel Alvarez-Rodriguez** 





The Catalogue of Services Action supports public administrations in building digital catalogues of public services allowing the exchange of information between citizens, businesses and public administrations across Europe.

Make your service descriptions fit for exchange

Help you create your catalogue of services

**Exchange knowledge** 

Test and validate your solutions

Advise you in adopting standards and technologies







#### **Data model**



**Controlled Vocabularies** 

<u>CPSV-AP</u>, <u>SDG data model</u>, <u>taxonomy of</u> <u>public services</u>



**Tools** 



**Pilots** 

Harvester, Editor, pilot activities



Raising awareness activities



Studies & reports

Webinars, workshops, studies, Joinup, GitHub

## Check out the new handout!



https://joinup.ec.europa.eu/collection/catalogue-services

European



# Join at slido.com #21649





## 2. Action roadmap

**Speaker: Maxime Pittomvils and Michiel De Keyzer** 





#### **Catalogue of Services 2020 - 2021**

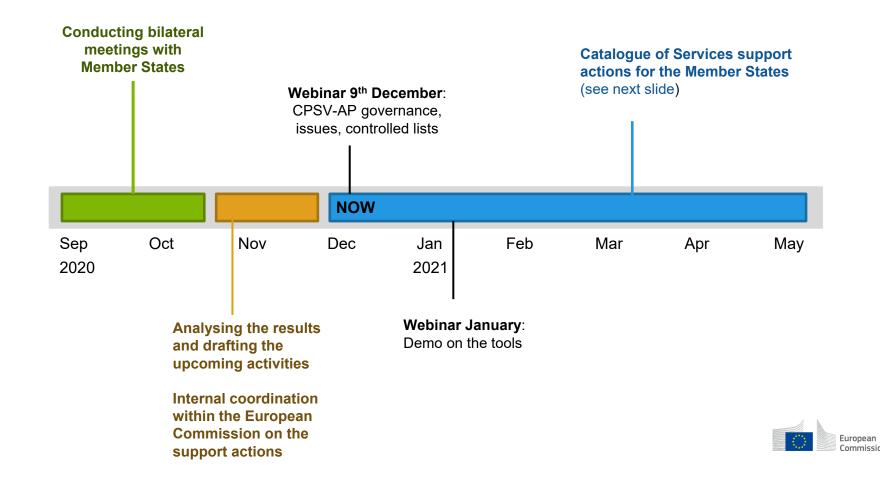
We are conducting bilateral meetings with national technical teams working on digital public services to get an overview of the needs related to the Catalogue of Services Action.

Based on these needs, **future actions** were drafted for the coming months.





#### **Roadmap 2020-2021**





#### **Actions 2020-2021**

Number	Description
1	Support on building a <b>national catalogue of services</b> based on a common data model compliant with EU specifications(s)
2	Maintenance and improvement of the common EU data model, <b>CPSV-AP</b>
3	Definition of a roadmap for further tailoring CPSV-AP to the SDG needs ( <b>SDG data model</b> )
4	<b>Technical support</b> to the Member States for implementing a catalogue of services
5	Documenting the <b>service offering</b> and assets





#### **Detailed actions 2020-2021**

Number	Description	
1.1	Help Member States comply with CPSV-AP through mapping activities.	
1.2	Help Member States in creating a national data model compliant with CPSV-AP.	
1.3	Support Member States in building a catalogue of services which transforms data coming from different sources into a common usable format based on a common data model.	
2.1	Resolve open semantic issues.	
2.2	Present the current methodology for reaching semantic agreements and, if needed, customize how this is applied for CPSV-AP and code lists.	
2.3	Assess needs regarding code lists and publish recommendations.	
3.1	Definition of a roadmap for further tailoring CPSV-AP to the SDG needs (SDG data model)	
4.1	Demo on the tools of the Catalogue of Services Action and TestBed.	
4.2	Technical support to the Member States for implementing a catalogue of services	
5.1	Improve the documentation of the service offering and assets.	





## 3. Existing resources

**Speaker: Alexandre Beaufays** 





#### Overview of available resources



Platform to discover and contact the CoS Action about its supporting activities such as pilots, tools, events and more.

Joinup link



Platform to report, discuss and resolve semantic and technical issues, as well as potential extensions, relating to CPSV-AP.

GitHub link





## 4. Governance

**Speaker: Florian Barthélemy** 





#### **Principles**

- Openness via public workshops and public collaborative spaces
- Consensus-building via co-creation
- Transparency via open tools
- Applicability via stakeholder requirement analysis
- Quality via expert review





#### Governance

- The governance applied for CPSV-AP is the same as the one also applied for other Core Vocabularies: <u>ISA<sup>2</sup> Process and</u> <u>methodology for developing semantic agreements</u>
- Describes the approach, activities, stakeholders, actors, products, etc. to create core vocabularies that can serve as a base for semantic interoperability between diverse organisations.
- Governance for controlled vocabularies.
  - If created by CPSV-AP working group: same governance as CPSV-AP.
  - If created externally (e.g. OP): their governance.

Controlled vocabularies are only recommended by CPSV-AP.

Do you have specific needs to customize this governance?

such as: frequency, decision-making, distribution(s)





#### Frequency of meetings and releases

 During the bilaterals, MS emphasized the importance of the stability of the specification.

Do you feel the need for less/more contact points?

We refer to the <u>Change and Release Management Policy for DCAT-AP</u> for an example.

Do you feel the need for a similar policy for CPSV-AP?





## 5. Open issues

**Speaker: Dimitri Schepers** 



#### Overview of the issue reporting process

- Issues are logged on <u>GitHub</u>
- Classification of the issues into 6 distinct categories: fix, minor semantic issue, major semantic issue, extension, controlled vocabulary and other.
- (CoS team proposes a resolution if none is given.)
- Issues are discussed with the WG via GitHub and workshops/webinar.
- Depending on the outcome of the discussion: change request is implemented reason for no change is formulated
- Final decision is logged on GitHub.



#### Overview of the issues



#	Title	Category
9	Public Service - Type - authoritative source of the codelist COFOG is not accessible for now	Controlled voc
11	Spatial - use of the Administrative Territorial Units by local public authorities	Controlled voc
32	Link public service to UN 2030 Sustainable Development Goals	Extension
44	Link to the policy objectives of a service	Extension
35	Add a relation from Public Service Dataset to Public Service	Extension
48	Rule: please optional add dct:type[01]	Extension
49	Channel	Extension
57	Contact point: link to contact form?	Extension
39	RDF Schema: dct:status does not exist, adms:status yes	Fix
40	RDF Schema: add subclass relation for BusinessEvent and LifeEvent	Fix
63	dct:relation has multiple ranges in the rdf schema	Fix
36	Agent: Alignment with DCAT-AP and CCCEV	Major semantic
37	Relation with Core Criterion	Major semantic
62	cv:PublicServiceDataset does not exist, consider change to DCAT-AP dataset	Major semantic
22	Definition of Participation class is unclear	Minor semantic
41	Definition of the property hasParticipation is no longer up-to-date	Minor semantic
38	RDF Schema: add ISA Open Metadata license	Other
50	Attributes and Annex II of SDG	Other
51	Filling out of attributes	Other
52	Variants of procedures	Other
61	Legal Resource: Alignment with CCCEV and CPOV	Other





## **#32 Link public service to UN 2030 Sustainable Development Goals**



#### #44 Link to the policy objectives of a service

 Would MS find it helpful to have an extension point in the model that would allow a service to be linked to the policy objectives that it is designed to meet?

#### Have you yet experienced this need?

Do you have use cases that Legal Resource does not cover?







#### #48 Rule: please optional add dct:type[0..1]

• Do MS want to classify the Rules that a Public Service follows?

Are you currently using the Rule class?

Do you agree to add the type property?

Which controlled vocabulary can we recommend?







#### **#57 Contact Point: Link to contact form**

- The Contact Point class in the current version of CPSV-AP only contains the *telephone* and *email* attributes.
- A MS proposed to add the link to a contact page as well: <a href="https://schema.org/url">https://schema.org/url</a>

Do you agree with this extension?



## Extension

#### **#49 Channel**

There is a proposition to use channel as "a means for secured communication and exchange of information" via a *Data Service* end-point URI attribute.

At the same time, we are also investigating to add a Link class as a subclass of the Channel class, for the Repository of Links data model, in the context of the SDG.

We are looking into this, and invite you to follow the latest developments via the issue in GitHub.





#39 RDF Schema: dct:status does not exist, adms:status yes

**#40 RDF Schema: add subclass relation for BusinessEvent and LifeEvent** 

#63 dct:relation has multiple ranges in the rdf schema

These "technical" issues will be fixed accordingly.









#### **#36 Agent: Alignment with DCAT-AP and CCCEV**

- The current version of CPSV-AP is using dct:Agent while other SEMIC assets use foaf:Agent.
- FOAF has explicitly expressed the equivalence of foaf:Agent to dct:Agent.
- Proposition to use foaf:Agent within CPSV-AP.

Do you agree with this change?



#### Major semantic

#### **#37 Relation with Core Criterion**

- CCCEV is currently undergoing major changes. After the new version is officially published, we will re-evaluate the relationship with CPSV-AP.
- Nevertheless, CPSV-AP is considered as an important use case for the new version of CCCEV. We therefore invite MS to provide us with their use cases for Criteria and/or Requirements in the context of Public Services.





## #62 cv:PublicServiceDataset does not exist, consider change to DCAT-AP dataset



- Proposition to make the reuse of DCAT-AP by CPSV-AP more explicit by replacing PublicServiceDataset by DCAT-AP Dataset.
- [TO DO] Look at DCAT-AP attributes and keep the ones that are relevant for CPSV-AP.

Do you agree with this change?





## **#35 Add a relation from Public Service Dataset to Public Service**



- Currently, the relationship is from Public Service to Public Service dataset is unidirectional.
- During the pilot for The Netherlands, a need was identified to have a bidirectional relationship. dct:hasPart was used for this.

Have you also experienced this need?





#### **#22 Definition of Participation class is unclear**



## #41 Definition of the property hasParticipation is no longer up-to-date

- The Participation class is defined within CPOV according to CPSV-AP. This is however not the case.
- We propose to add the Participation class to the CPSV vocabulary.
- We invite Member States to provide us with their use cases for the Participation class.

Do you agree with this change?





Other

#### **#38 RDF Schema: add ISA Open Metadata license**

Similar to other SEMIC assets, we propose to add the CC BY
 4.0 open license, to the CPSV-AP RDF schema.

Do you agree with this change?





## 6. Recommended controlled vocabularies

**Speaker: Florian Barthélemy** 





## Recommended controlled vocabularies

The specification of CPSV-AP lists a number of recommended vocabularies for some attributes (datatype is "Code").

## These controlled vocabularies are either:

- Created by the Catalogue of Services Action
- Created by an external source, e.g. the Publications Office
- Not yet decided upon (see TBC)

## Which are the ones not yet decided upon?

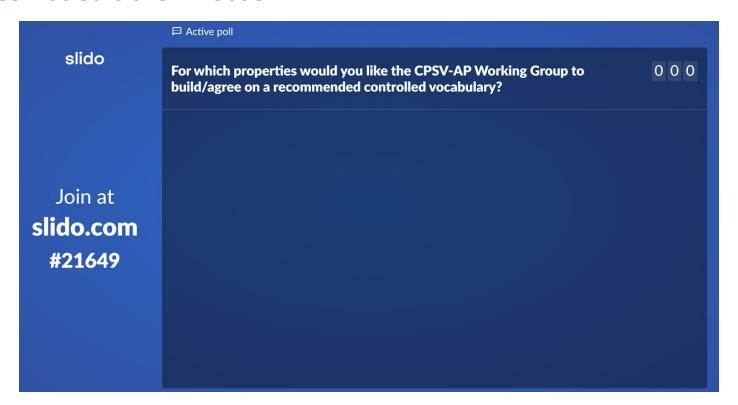
- Public Service type
- Public Service thematic area
- Criterion Requirement type
- Evidence type
- Participation role





European

Some Member States create their own controlled vocabularies, when (1) there is no recommended one or (2) if the recommended one does not suit their needs.



Please share with us the controlled vocabularies you use or would need, so we can start discussions with the Working Group on creating a mutual, agreed-upon controlled vocabulary.



#### **Public Service - thematic Area**

Who uses a controlled vocabulary for this?

What is the purpose?

Which recommended controlled vocabulary would you need at EU level?

Existing Controlled Vocabularies	Examples	Purpose
Themes in the taxonomy of public services based on dcat:theme, World Bank, NACE, Annex I SDG, Spain, Scotland, Norway, Bulgaria, Flanders, UK, Wikipedia	Agriculture & food Animal Border control Culture, sport and leisure	Themes used to categorise public services
<u>EuroVoc</u>	Politics International relations European Union Law Economics	"multidisciplinary thesaurus covering the activities of the EU"
Data theme NAL	Agriculture, fisheries, forestry and food Economy and finance Energy	"various themes used for dataset classification"



### **#9 Public Service - Type - authoritative source** of the codelist COFOG is not accessible for now

Editorial issue

- CPSV-AP used to refer to the COFOG codelist, created by the OECD but published by the United Nations. This distribution has however been removed from their website.
- The OP also published the top level of COFOG as <u>controlled</u> <u>vocabulary</u>. We are currently in discussion with the OP to decide on the next steps (e.g. publish the full COFOG taxonomy and, if needed, extend it)



#### **Public Service - type**

Who uses a controlled vocabulary for this?

What is the purpose?

Which recommended controlled vocabulary would you need at EU level?

Could you provide us with your requirements on GitHub?

Existing Controlled Vocabularies	Examples	Purpose
Patterns in the taxonomy of public services based on ESD, GEA, Iran	Framework Information Registration Certification Financing Production Feedback Control & monitoring Taxation	Define generic public services which are transversal and make abstraction of the specific themes, domains or organisations providing it.
ESD Processes (discontinued)	Administration and Government Advice and benefits Business and employment Community safety Education and learning Environmental protection Health and social care Housing Leisure and culture Licences, permits and permissions Planning and building control Transport and highways	"Hierarchy of service groups or activities that a public sector body performs to support information referenced at service group level, rather than in the detail of the full Service List. It transcends organisational structure and gathers similar activities into a logical collection that would be globally understood."
COFOG	General public services Defence Public order and safety Economic affairs Environmental protection Housing and community amenities Health Recreation, culture and religion Education Social protection	"Classification of the Functions of Government"

### #11 Spatial - use of the Administrative Territorial Units by local public authorities

Editorial issue

- The issue was raised by multiple MS that the controlled vocabularies that are currently recommended for the spatial property do not cover their needs.
- For the spatial aspect, we therefore suggest to use the controlled vocabularies in the following order:
  - ATU
  - NUTS or LAU (depending on needs)
  - NAL Place
  - Geonames
  - Define yourself

#### Could you give us your feedback on this order?

 We are also looking into the need to hierarchically link Public Services.





### 7. Knowledge sharing

**Speakers: Krystyna Michalik and Christoph Harnoth** 





# 7.1. Knowledge sharing by Poland

**Speaker: Michalik Krystyna** 





### **Public Service Model**

9<sup>th</sup> December 2020

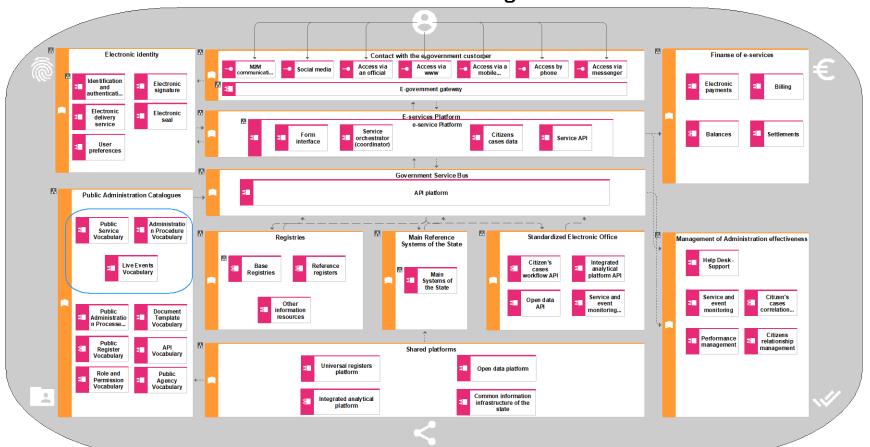






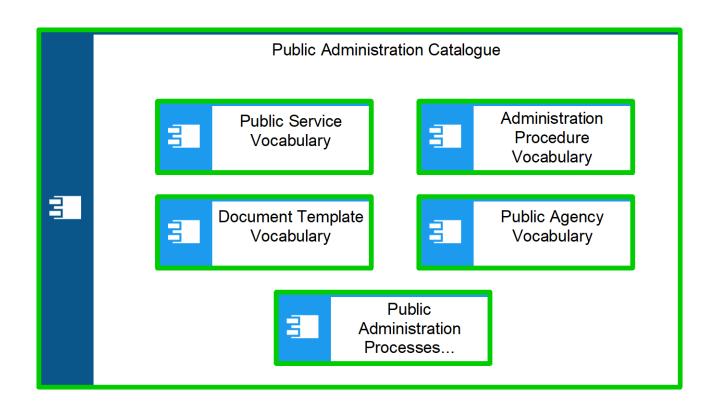
### **Architecture vision**

**National Architecture for Digital Services** 





# Public Administration Catalogue – system implementing the concept of CPSV-AP







## **GOAL of Public Administration Catalogue system**

Improving the State Information Architecture in the area of public e-services by building, implementing and making available its Centralized catalogues:

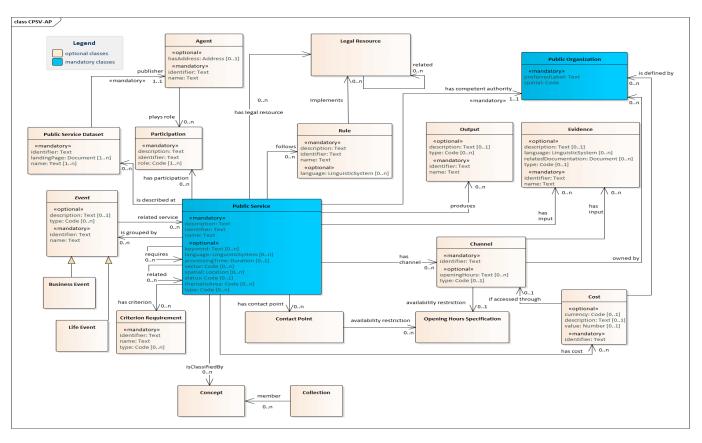
- Administration Procedure Vocabulary
- Public Service Vocabulary
- Public AgencyVocabulary
- Document Template Cataloque
- Public Administration Processe Catalogue

In the course of the project CPSV-AP model was used as a starting point for our catalogues design.





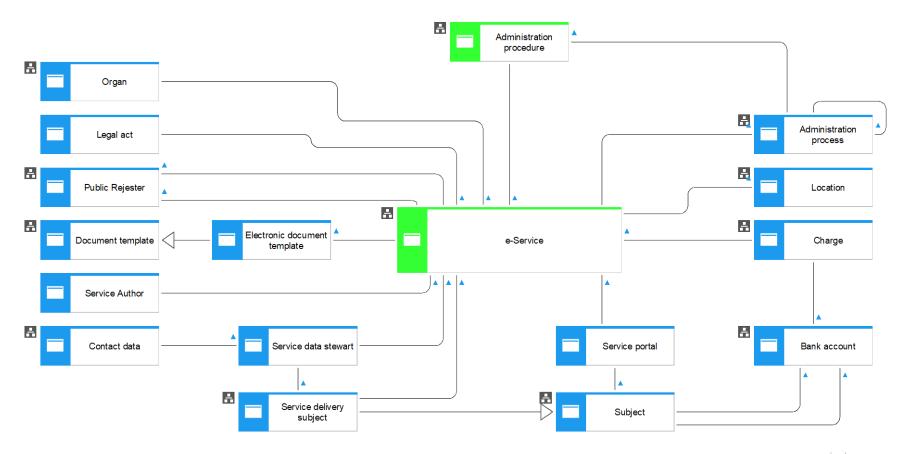
### **Model CPSV-AP**







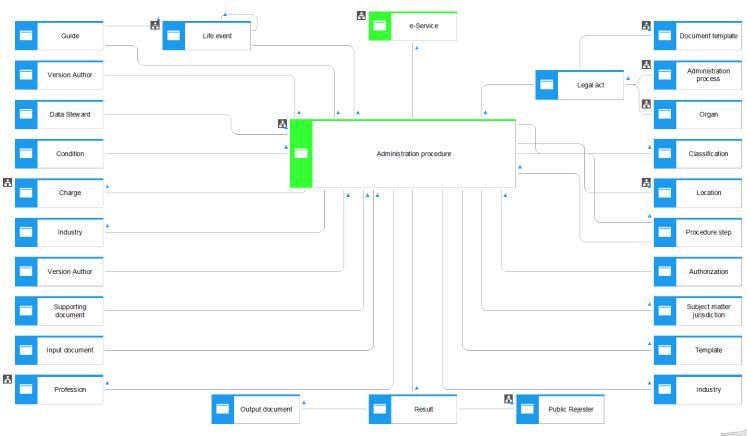
#### **E-service model**







### **Administration Procedure Model**





#### Benefits for business and citizens

- Reducing time and costs of public services for citizens and businesses
- Access to up-to-date, comprehensive and understandable information e-services
- Consistent form and content of the information provided by the administration and reduction of differences in interpretation of the rules
- Improving access to public service information for foreigners by providing translations of service descriptions
- Reducing citizens/businesses need to contact public administrations





# 7.2. Knowledge sharing by Germany

**Speaker: Volker Schmitz** 





### **XZuFi & CPSV-AP**

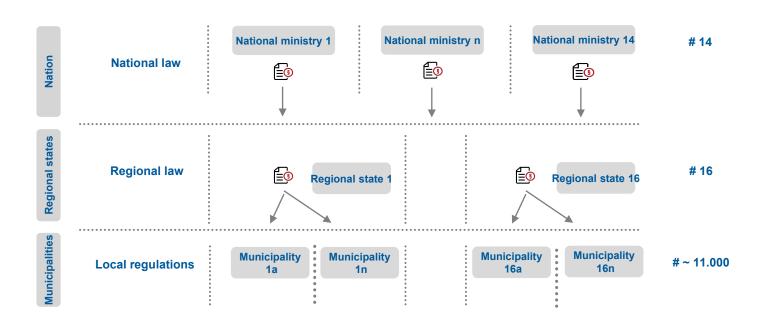
9<sup>th</sup> December 2020







### Presentation of the federal structure in Germany: overview







## Presentation of the federal structure in Germany:

#### **Consequences:**

- The majority of services based on uniform national law but is structured individually in regional states and municipalities
- Each layer of the federal systems offers individually services for citizens and companies
- Therefore the search for services requires the input of a location

#### **Challenges:**

- High editorial effort on municipality level (also for implementation of SDG-project)
- Heterogeneous execution and description of services
- Higher error susceptibility

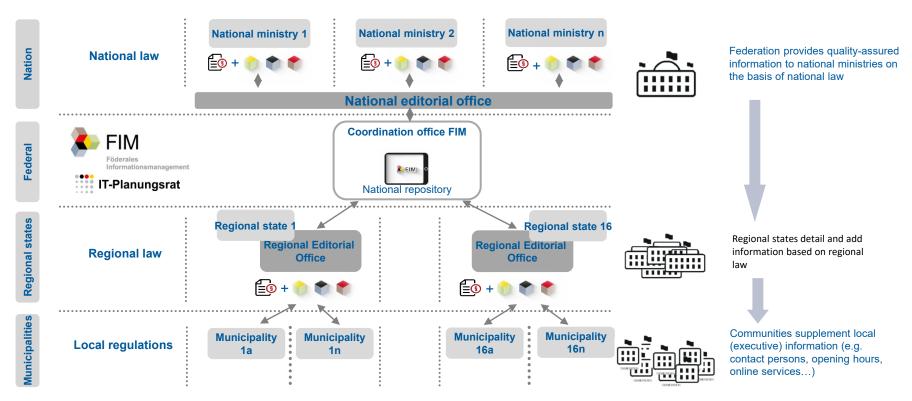
Conclusion: FIM methodology as solution





## FIM methodology (Federal Information Management)

Use of master information and extensions





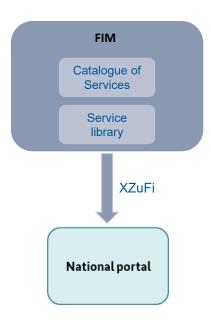


## FIM methodology (Federal Information Management)

Relation between FIM and XZuFi

- FIM is the national editorial office for service descriptions in Germany
- FIM specifies a data model for service descriptions within the FIM-methodology
- FIM data model consists of:
  - Catalogue of services (Nationwide index of all services)
  - Service library
- Data transmission standard for FIM data model is XZuFi









### Degree of coverage between FIM/XZuFi and CPSV-AP

Similar

Partial coverage

Not available in FIM

Additional available in FIM

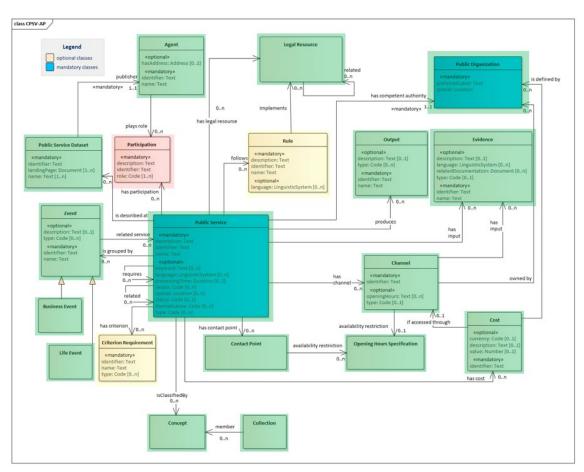
Deadlines

duration of processing

SDG requirements

...

Conclusion: FIM data model is largely compatible with CPSV-AP





## Portalverbund Online-Gateway (PVOG)

#### Aims of PVOG

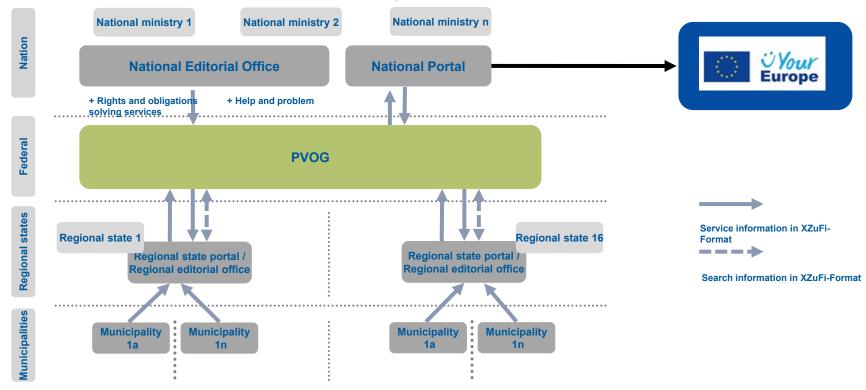
- Provision of a data pool of all service descriptions on nation, regional state and municipality layer
- Ensuring that all services are found from any portal, regardless of their local and organizational responsibility
- Support of the implementation of SDG requirements
- Perspective: Use of the data pool for further services (e.g. to implement an uniform "Single Point of Contact")





## Integration of PVOG into federal structure in Germany

Structure and function in the context of SDG-implementation







### 8. Q&A



### Upcoming activity on the SDG data model for describing public services



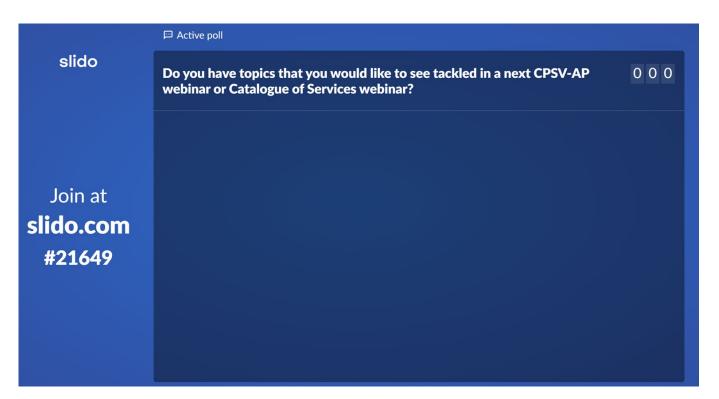
:≡ Active poll slido 000 Do you think there is a potential in reusing and tailoring the CPSV-AP to the business needs of the Single Digital Gateway, as presented preliminary during the workshop of February 2020? Yes, if this does not require changes to our national data model. 0% Yes, if it includes mandatory and optional cardinalities. Join at 0% slido.com Yes, if it is aligned with CPSV-AP. 0% #21649 Yes, if the exact position of the model is clarified within the other SDG data models. 0% Yes, for other reasons. 0% No, because it goes beyond the regulation. 0% No, because CPSV-AP is too different from my national data model. 0% No, for other reasons. 0%





#### Do you have any further questions to be shared?









### ISA<sup>2</sup> programme

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Run by the Interoperability Unit at DIGIT (European Commission) with 131€M budget, the <u>ISA</u><sup>2</sup> programme provides public administrations, businesses and citizens with specifications and standards, software and services to reduce administrative burdens.



# Annex - Overview of the controlled vocabularies



CPSV-AP class and property	Examples	Existing Controlled Vocabularies	Purpose
	AUT_EIT Eis enstadt	Continents NAL, Countries NAL, Places NAL, Geonames	Authority tables with mapping to ISO (3166), IANA and TIR (Transport International par la Route).
Public Service - Spatial	AUT_BLD_BURG (Federal province of Burgenland)	ATU NAL, ATU Type NAL	"The lists of codes represent the administrative territorial units, based on national official / legal information and the ISO 3166-2 standard. Differences can be noticed due to the rapid changes occurring in the countries. The codes have been created, as far as possible, by integrating the code used in UNECE http://www.unece.org/cefact/locode/service/location.htmlThe administrative territorial units must not be confused with the Nomenclature of Territorial Units for Statistics (NUTS). The NUTS is delineated according to the population living in the territorial unit and is used in an economical / statistical environment. More information can be found on <a href="http://ec.europa.eu/eurostat/web/nuts/principles-and-characteristics">http://ec.europa.eu/eurostat/web/nuts/principles-and-characteristics</a> . The administrative territorial units must not be confused with the jurisdiction territories designed for the competence area of Courts. In certain countries, the subdivisions may be the same for the administrative, economical, statistical and jurisdiction units."
	(NUTS 3) AT112 (LAU) 10101 Eis enstadt	<u>NUTS</u> <u>LAU</u>	"To meet the demand for statistics at a local level, Eurostat maintains a system of Local Administrative Units (LAUs) compatible with NUTS. These LAUs are the building blocks of the NUTS, and comprise the municipalities and communes of the European Union."

CPSV-AP class and property	Examples	Existing Controlled Vocabularies	Purpose
Business and Life Events - Types	Starting business Doing business Having a child Becoming a (social) caretaker Starting education Looking for a new job	CPSV-AP	"a specific situation or event in the lifecycle of a business that fulfils one or more needs or (legal) obligations of that business at this specific point in time." "important event or situations in a citizen's life where public services may be required."
	Framework Information Registration Certification Financing Production Feedback Control & monitoring Taxation	Patterns in the taxonomy of public services based on ESD, GEA, Iran	Define generic public services which are transversal and make abstraction of the specific themes, domains or organisations providing it.
Public Service - Type	Administration and Government Advice and benefits Business and employment Community safety Education and learning Environmental protection Health and social care Housing Leisure and culture Licences, permits and permissions Planning and building control Transport and highways	ESD Processes (discontinued)	"Hierarchy of service groups or activities that a public sector body performs to support information referenced at service group level, rather than in the detail of the full Service List. It transcends organisational structure and gathers similar activities into a logical collection that would be globally understood."

CPSV-AP class and property	Examples	Existing Controlled Vocabularies	Purpose
	Agriculture & food Animal Border control Culture, sport and leisure	Themes in the taxonomy of public services based on dcat:theme, World Bank, NACE, Annex I SDG, Spain, Scotland, Norway, Bulgaria, Flanders, UK, Wikipedia	
Public Service - Thematic Area	Politics International relations European Union Law Economics Trade	<u>EuroVoc</u>	"multidisciplinary thesaurus covering the activities of the EU"
	Agriculture, fisheries, forestry and food Economy and finance Energy	<u>Data theme NAL</u>	"various themes used for dataset classification"
Public Service - Language Evidence - Language Rule - Language	ENG	European Publications Office's  Languages Named Authority List  (NAL)	
Public Service - Sector	Agriculture, forestry and fishing  Mining and quarrying  Manufacturing  Electricity, gas, steam and air  conditioning supply	<u>NACE</u>	"Statistical Classification of Economic Activities in the European Community"

CPSV-AP class and property	Examples	Existing Controlled Vocabularies	Purpose	
Public Service - Status	Under Development Withdrawn Deprecated Completed	<u>ADMS</u>	"Indicates whether a Public Service is active, inactive, under development etc."	
Participation - Role	resourceProvider owner publisher editor	CI_RoleCode based on ISO19115	"function performed by the responsible party"	
Criterion Requirement - Type	Selection ground: Economic and financial standing Exclusion Ground: Grounds related to criminal convictions		"eCertis helps contracting authorities and businesses operating in the EU identify the certificates	
Evidence - Type	Certificate Declaration on oath Online evidence Self-declaration	<u>eCertis</u>	and other types of evidence requested in public procurement procedures across the Member States and EEA countries"	
Evidence - Language		European Publications Office's Languages Named Authority List (NAL)		
Output - Type	Declaration Physical object Code Financial obligation Financial benefit Recognition Permit	CPSV-AP	Describe the type of output a public service may provide.	

CPSV-AP class and property	Examples	Existing Controlled Vocabularies	Purpose
Cost - Currency	EUR, USD	European Publications Office's Currencies  Named Authority List (NAL) based on the  ISO standard ISO 4217	CPSV-AP: "currency in which the Cost needs to be paid"
Channel - Type	E-mail Homepage Fax Assistant Telephone Mobile App Digital TV Mail Service Bureau Client's Location	CPSV-AP	The type of Channel
	Face to face Web site Telephone Non-electronic Other electronic media > E-mail, Texting, Video conferencing, Interactive Digital Television	ESD Channel (discontinued)	The type of Channel
Rule - Language		European Publications Office's Languages  Named Authority List (NAL)	