

Meeting Minutes – Webinar on the Catalogue of Services: Review of the CPSV-AP specification 02/03/2022

Catalogue of Services Action

Project	Catalogue of services action - Review of the CPSV-AP specification	Meeting Date/Time	02/03/2022 10:00-11:30 (GMT+1)
Meeting Type	Webinar	Meeting Location	Cisco Webex Meetings
Meeting Coordinator	Miguel Alvarez Rodriguez Florian Barthélemy Emidio Stani Nathan Ghesquière	Issue Date	02/03/2022

Meeting Agenda
<ol style="list-style-type: none"> 1. Introduction 2. Action roadmap and governance 3. Part 1: HTML Specification overview 4. Part 2: Overview of issues and changes made in CPSV-AP 5. Part 3: Alignment with other core vocabularies 6. Part 4: Recommended controlled vocabularies

7. Next steps and wrap-up

Webinar's participants

Attendee Name	Abbreviation	Organisation/Country
Alexandros Gerontas	AG	Greece
Ana Rosa Guzman	ARG	Spain
Antonella Lunelli	AL	Italy
Auke vd Gaast	AG	Netherlands
Cécile GUASCH	CG	European Commission
Christina Andersson	CA	Sweden
Costas Simotas	CS	

Dorina Harea	DH	
Emidio Stani	ES	PwC
Florian Barthélemy	FB	PwC
Giovanni Paolo Sellitto	GPS	Italy
Henrik Bengtsson	HB	Sweden
Igor Tričkovič Rifelj	IT	Slovenia
Iraklis Varlamis	IV	GRNET
Jim Yang	JY	Norway
Jürg Wüst	JW	
Kuldar Taveter	KT	Estonia
Lorenzo Iannone	LI	Italy
Marco Aarts	MA	Netherlands
Max De Wilde	MDW	European Commission

Michal Ohrablo	MO	Slovakia
Miguel Alvarez Rodriguez	MAR	European Commission
Miha	M	Slovenia
Nathan Ghesquière	NG	PwC
Norman Calleja	NC	Malta
Nuno Martins	NM	Portugal
Ondrej Kerka	OK	Czech Republic
Peter Bruhn Andersen	PBA	Denmark
Ricardo Sanchez Curiel	RSC	
Sander Van Dooren	SVD	Joinup
Silvia Tursi	ST	Intarella?
Tomas Sedivec	TS	Czech Republic
Zsofia Dudas	ZD	PwC

Summary of the meeting	
Introduction	<p>Miguel Alvarez Rodriguez (MAR) welcomed the audience and presented the agenda for the webinar.</p> <p>Next, an introduction was given on the Catalogue of Services Action.</p> <ul style="list-style-type: none"> • CPSV-AP and semantic interoperability • Activities and future webinars • Available tools within Catalogue of Services
Action roadmap and governance	<p>Emidio Stani (ES) presented the CPSV-AP Roadmap.</p> <ul style="list-style-type: none"> • The current version is CPSV-AP 2.2.1 • The objective of this and the next webinar is to move towards a new major release in May (CPSV-AP 3.0) <p>ES continued with presenting the SDG Search Service Model pilot.</p> <ul style="list-style-type: none"> • Exchanging public service descriptions in the repository of links <p>Next, the governance was presented.</p> <ul style="list-style-type: none"> • The same methodology is used as for SEMIC Process and methodology for developing semantic agreements. <p>Question from Tomas Sedivec (TS) about the link between CPSV-AP, the Search Service data model and the SDG OOTS:</p> <ul style="list-style-type: none"> • Florian Barthelemy (FB) and MAR clarified that CPSV-AP is not tackling the aspects covered by the SDG OOTS and is therefore not related to the OOTS DSD. The Search Service model tackles the part 1 of the SDGR about the repository of links and Your Europe portal. It is an optional model for which a pilot is conducted with some member states and that extends the first set of (mandatory) metadata to be shared with the repository of links. The objective is to improve the quality of information about public services in Your Europe as well as the findability of a service in the portal / from a search engine. The Search Service model reuses as much CPSV-AP as possible. <p>This model is not in scope of the current revision which focuses on CPSV-AP.</p>
Part 1: HTML specification overview	<p>ES introduced the new HTML specification and the main changes proposed so far based on the feedback received.</p> <p>In alignment with the core vocabularies, the new version of CPSV-AP will be released in HTML format. It will include the UML diagram, RDF representation, JSON-LD context and SHACL shapes.</p> <p>The following changes were presented:</p> <ul style="list-style-type: none"> • Replaced dct:Agent by foaf:Agent to align with other core vocabularies

	<p>and DCAT-AP</p> <ul style="list-style-type: none"> • Each class has optional and mandatory properties • 'Criterion requirement' class is deprecated into the 'Requirement' class • The relation with dcat:Dataset is more enforced in both directions • Location class is highlighted as a class • In alignment with core vocs, the schema.org namespace has been shifted towards the Core Vocabulary namespace (for the Contactpoint class). • 'Document' and 'LinguisticSystem' are highlighted as classes instead of properties <p>There were no further questions about part 1 of the webinar.</p>
<p>Part 2: Overview of issues and changes made in CPSV-AP</p>	<p>Nathan Ghesquière (NG) presented part 2 about open issues where feedback from the working group is required.</p> <p>#66: How to specify the "address" of a channel?</p> <p>Suggested solution from the CoS team is to use the Codelist from Europass. Alternatively, the already present classification mechanism in Channel could be used with subclasses.</p> <ul style="list-style-type: none"> • Jim Yang (JY): in favor of a codelist, there is a need to include address as a type of Channel. • Ana Rosa Guzman (ARG): also supporting the idea of a Channel type. We could have more than one "address" (several telephones, for instance). • Europass codelist doesn't include address as a type at the moment. • Confirmed need from the participants to recommend a Channel type codelist. <p>The editors will look into options of existing codelists.</p> <p>Comment by Sander van Dooren (SVD): "the europass controlled voc is managed by the europass team. Perhaps this can be promoted to a full OP taxonomy if no alternative can be found?"</p> <p>Several participants agreed with the proposition, with an additional suggestion of including a text field for information on when to use which address (e.g. language versions)</p> <p>#67: Lack of multilingual support for dct:title and dct:description</p> <p>Suggested solution from the CoS team is to extend the cardinality for these properties to [1..n].</p> <ul style="list-style-type: none"> • ARG commented that they have udt:Text with multilingual attributes ARG added that multilingual support is a must for these two properties, not only for cross-border language but also for countries with several national languages. <p>Multiple participants agreed with this comment</p>

- SVD suggested that it can be 1..n, but with a limit on the language. SVD also suggested In the SHACL definition set sh:uniqueLang ?

ES agreed that this is an option, and that the possibilities regarding this will be verified.

There is consensus for extending the cardinality.

[#71: Channels owned by non public organizations and costs defined by non public organizations](#)

This issue comprises of several aspects:

- The provision of the Public Service which today is limited in the model to Public Organisations (through the classes Channel and Cost)
- The delegation of this provision by a Public Organisation to another Organisation
- The scope of a Public Service and its definition

Three options were proposed preceding the discussion on this issue:

- 1) Private organisations are outside of the scope of CPSV-AP.
- 2) Create a superclass 'Service'
- 3) Add relation 'delegates' from PublicOrganisation to Agent

From the discussions, the following conclusions can be made:

1. Participants agreed that the provision of the Public Service can be partially or totally done by private organisations. Modelling the delegation by the public organisation to another organisation could satisfy several of the use cases presented by the participants. The Editorial team will investigate the options of modelling this relation.

2. This raised the question of what falls under the concept of a Public Service compared to the more general concept of a Service. There was no consensus around the need of Service or Sub Service during the webinar. The Editorial team will investigate further the options.

3. However, there was a clear understanding that, from one country to another, a specific service may fall under the denomination Public Service or Private Service. Some flexibility is required to accommodate the differences. The Editorial team will clarify what defines a Public Service, starting from the existing definition. The objective is not to redefine the existing concept.

The discussions are included in the tables below:

Discussion on who defines and manages the channels and costs related to the provision of a public service:

- Ricardo Sanchez Curiel (RSC) raised the question in chat if this wouldn't be solved "better" by sub-organisations.
- ES commented that in the Core Vocabularies, private organisations are better placed under the Core Business Vocabulary, as a subclass of foaf:Agent. ES added that the idea in option three is to link 'delegate' from a public organisation to an agent.
- ARG commented that delegation can happen at different levels, not only for the whole management of the public service. For example, you can propose the whole public service, but you can also delegate the channel. ARG added that we need to model reality.
- ES commented that we can look into option 2, which doesn't necessarily exclude option 3.
- ARG commented that there is a concern regarding option 2. If Public Service becomes a subclass of Service, we lose the focus of this vocabulary on public services. The other way around would be better: a public service can have sub services. Then we can distribute these sub services to private companies that receive delegated powers.
 - ES replied that if we are to provide sub services, the scope of these must be determined.
 - ARG replied that a superclass over Public Service is a different concept. ARG added that we should analyse the commonalities between a public service and the sub services. The example of funeral services is very similar to the case of health services discussed earlier. Not every public service is run by a public administration. That doesn't mean that private companies regulate these services. They are always regulated by a Legal resource. It can then be delegated (as whole or partly) to a company. ARG added that it is a problem that we need to analyse, without losing the focus on public services.
- Alexandros Gerontas (AG) commented that we can also look at the definitions of Public Organisation as the Competent Authority and Agent as the Service Provider.
- JY commented that the problem with opt. 3 is "delegation"

- Peter Bruhn Andersen (PBA) commented that if we use 'delegation' it will have to be a qualified delegation. Like <https://www.w3.org/TR/prov-o/#qualifiedDelegation>
- Miha SLO (MS) commented that the difference between public and private is competency and delegation thereof
- AG commented that the provision of Public Service by a private organisation still does not change the Public Service to a (Private) Service.
 - ES replied that we will not change to a private service. ES added that we need to specify the relation better, either as a delegation and/or sub organisations.
- JY commented about "delegation" that funeral services are not delegated by any publ.org. (in Norway). Banking services needed in doing business are not delegated. Many non-public services are needed to handle life events / business events.
- MS commented that if they are regulated by law, they are delegated to specific actors who meet specific conditions
- AG commented that we have to define the meaning of delegation.

Discussion on what falls under a Public Service and the legal responsibility behind it:

Comment from :

- Cécile GUASCH (CG) elaborated why she was voting for 2. CG commented that the borders between public and private services may change over time, also public private partnerships create a not clearly defined border (like electricity). CG added that adding an abstract class is adding flexibility. CG added that of course, we don't need to model the whole private world.
 - JY agreed with this comment
- FB commented that right now - the direct mandatory relationship between Public Service and Public Organisation is solely about

hasCompetentAuthority. As from the moment we start looking into other types of participations, we have Agent and the Participation classes which can be used (e.g. for the provision, for the citizens/businesses). FB added that the question here is really about the delegation of authority.

- ARG commented that indeed, this happens. ARG added that this is why we need to define what exactly is a public service. It is essential to have a regulatory framework. Telecommunications and electricity are private businesses, but they are not entirely free. There are rules set by the government.
- CG commented that all organisations are under regulatory frameworks. There is a very important reflection on the difference between private and public services. CG raised the question if it is about common goods that are provided by these private organisations? In that case, even the regulatory framework would not give the full answer.
- ES asked ARG whether they already model such delegation in Spain?
 - ARG replied that they don't consider private organisations in any way.
 - CG asked if electricity is part of public services in Spain?
 - ARG replied that there are public services provided by private companies such as electricity, funeral, health, education.. But in their catalogue of public services, they don't have a catalogue of services that are provided by private organisations like hospitals and schools. They only have the catalogue of public services and a catalogue on 'the general administrative procedures'. Private organisations are under a different regulatory framework.
 - MAR commented that the example of the funeral has been mentioned twice, and what we are modelling here are not commercial activities. MAR added that what is in the scope is the administrative procedure of when someone dies, you need to communicate this to public administrations. The commercial service is outside of scope.
 - ARG agreed with this comment, replying that commercial activity should be out of the scope.

#78: Need of 1-to-many relationship between Public Service and Public Organization

Two options are proposed by the editorial team:

- 1) Classify public service (type..) to put a list of such services in a dataset (e.g. about University enrollment)
- 2) Create a public service dataset ('Dataset' class) about university enrollment

From the discussions, the following conclusions can be made:

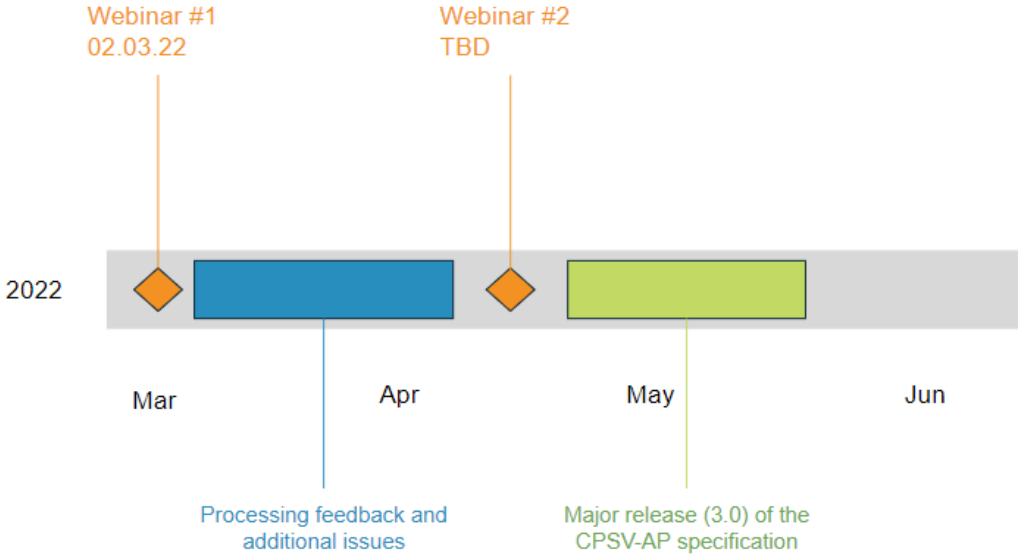
- Several Member State countries organise certain public services as a jointly managed public service. This 'common framework' can be on the level of Channel or Public Organisation, depending on the specific instance. The definition of how the common framework relates to the concept of a Public Service should be investigated.
- Independently from the Channel, the delivery of a Public Service can have different phases. There can be more complex cases where there are different steps/phases in the delivery of a public service. A clear line between a Public Service and such 'sub-services' should be defined. The Working Group also needs to decide whether the delivery of a Public Service should be part of this model or not.
- The editorial team will analyse the different examples brought forward by the participants to assess different modelling options that can address these needs. Possible solutions will be presented during the next webinar (06/04/2022).

Discussion on the needs and use cases for a one-to-many relationship

- JY commented that there is a need for classifications/types anyway, so the proposed solutions do not solve the issue.
- RSC commented that a service is not capability. How the same capability is offered by two organisations, creates two services.
- HB gives the example of Sweden, where more than 50 universities have a jointly managed public service for enrollment to different university enrollment. This is an example of the one-to-many relationship. Within the model as it is right now, they need to create the public service for every organisation.
 - MAR raises a question to HB: is the same service not provided individually, but by each university?

- HB replied that it is a service they created together, so one instance that is shared by all universities. It is like a common channel for universities. They also have private universities connected to the service.
 - JY commented that Norway has the same example as in Sweden. There is the same portal where you apply and are notified on university enrollment.
 - MAR confirmed that indeed the entrypoint is common, but raised the question whether Sweden/Norway then specialises on different universities.
 - JY confirmed that the Competent authority (and not the channel) is the university. The application is channel. They also have services that are the same on type level, but provided by different municipalities (like a kindergarten). The services are many copies.
 - MAR asked whether the one-to-many relationship should be defined on the Channel level?
 - JY replied that it depends on what we understand by service. At the type level, or the concrete instances of the type? JY argued that a common understanding is important.
- ES commented that granularity is decided by the member states and that a channel can be owned by different organisations.
 - ARG agreed with JY. Additionally, ARG added that a service is one thing, a common framework another. In Spain, they have common ground for all services. Each authority implements the public service. In some cases, they can provide specific things that are not in the general framework (such as a requesting a payment). ARG argued that It is important to have this common framework. However, there is still a one-to-many relationship for each municipality.
 - FB raised the question towards JY, HB and ARG whether in their cases, are the organisations (kindergartens, universities) responsible for delivery of the service, or are they just the ones providing it, but not ultimately responsible for it?
 - JY replied that it is the school that is also responsible for it.
 - FB commented the definition of hasCompetentAuthority in chat:
Definition: "This property links a Public Service to a Public Organization, which is the responsible Agent for the delivery of the Public Service. Whether the particular Public Organization provides the public service directly or outsources it is not relevant. The Public

	<p>Organization that is the Competent Authority of the service is the one that is ultimately responsible for managing and providing the public service.”</p> <ul style="list-style-type: none"> • ARG commented that the delivery of a public service has different phases (application, decision..). These examples have a common first phase, but the next phase depends on the individual competent authority. ARG continued that again, it comes back to what the definition is of a public service. • MAR commented that it is important that the granularity is based on the ability of the citizen to request a public service electronically. If there is a common portal or framework that can provide a service to citizens, it doesn't need to be modelled in a very fine detail. So there is no one size-fits-all. • Lorenzo Iannone (LI) commented that in Italy it's not a single channel and that every university can have its own portal • Norman Calleja (NC) commented that a similar system exists in Malta for Nursery Schools. NC sees it as a public service offered to Nurseries and not to the citizens. The difference is whom the payer for the service will be Government or Citizen.
<p>Part 3: Alignment with other core vocabularies</p>	<p>#61: Legal Resource: Alignment with CCCEV and CPOV</p> <p>Proposed solutions by the CoS team:</p> <ol style="list-style-type: none"> 1) Replace 'Legal Resource' in CPSV-AP with 'Reference Framework' 2) Keep both using generalisation (Legal Resource would be a subclass of Reference Framework). Needs to be verified by the Public Office. Optional: replace ELI Legal Resource with CV Legal Resource and make CV Legal Resource a subclass of reference framework and equivalent to ELI Legal Resource 3) Keep ELI 'Legal resource' and make 'Rule' a subclass of 'Requirement' <ul style="list-style-type: none"> • ARG commented in the chat that CCCEV 2.0 uses Reference Framework meaning legal and non-legal specifications. For public

	<p>services provided by Public Administrations the reference framework should be a legal specification.</p> <p>Several other participants were in favour of option 3.</p> <p>The editors will implement option 3 in the next release of CPSV-AP.</p>
<p>Part 4: Recommended controlled vocabularies</p>	<p>This part was skipped during the webinar because of the lack of time. It will be presented and discussed during the next webinar.</p>
<p>Next steps and wrap-up</p>	<p>ES presented the next steps and roadmap for CPSV-AP.</p>  <p>MAR presented other upcoming initiatives for the Catalogue of Services action and wrapped-up the webinar.</p> <ul style="list-style-type: none"> • Publication and accompanying webinar for the study on Natural Language Processing for Public Services • Upcoming online and interactive course on CPSV-AP on EU Academy <p>MAR thanked the participants for their attendance and involvement and wrapped-up the webinar.</p>

Recording of the chat:

from Alexandros GERONTAS to everyone: 10:12 AM
 Good morning! Will the presentation be available in Joinup?

from Florian Barthelemy to everyone: 10:12 AM

Hi Alexandros! Yes, we will publish the support materials on Github and Joinup

from Alexandros GERONTAS to everyone: 10:13 AM

Thank you!

from ES - Ana Rosa to everyone: 10:15 AM

CPSV-AP is not related to OOTS DSD

from ES - Ana Rosa to everyone: 10:15 AM

Data service is not public service

from Henrik Bengtsson SE to everyone: 10:15 AM

SDG Search Service Model is related to the repository of links, not in the DSD

from Marco Aarts to everyone: 10:26 AM

could you post the link to the documentation in the chat?

from Emidio Stani to everyone: 10:26 AM

https://catalogue-of-services-isa.github.io/CPSV-AP/releases/3.0.0/index_en.html#uml

from Marco Aarts to everyone: 10:26 AM

thanks!

from Jim Yang to everyone: 10:31 AM

Yes, we need a codelist for type. We need in addition the address/url/phonenummer/etc.

from ES - Ana Rosa to everyone: 10:31 AM

According to the channel type, we could have more than one "address" (several telephones, for instance)

from ES - Ana Rosa to everyone: 10:32 AM

+1 Jim

from Sander Van Dooren to everyone: 10:33 AM

A governance remark: the europass controlled voc is managed by the europass team. Perhaps this can be promoted to a full OP taxonomy if no alternative can be found?

from ES - Ana Rosa to everyone: 10:33 AM

+1 Sander

from SK - Michal Ohrablo to everyone: 10:33 AM

+1 Ana Rosa, plus a text field for info on when to use which address (e.g. language versions)

from ES - Ana Rosa to everyone: 10:34 AM

+1 Michal. Language for the channel is indeed needed

from Emidio Stani to everyone: 10:34 AM

thanks we take in account in the analysis

from ES - Ana Rosa to everyone: 10:35 AM

We have udt:Text with multilingual attributes

from ES - Ana Rosa to everyone: 10:35 AM

Multilingual support is a must for these two properties, not only for cross-border language but also for countries with several national languages.

from Jim Yang to everyone: 10:35 AM

+1 to ANa Rosa

from Giovanni Paolo Sellitto IT to everyone: 10:35 AM

+1

from MT - Norman Calleja to everyone: 10:35 AM

+1

from Peter Bruhn Andersen to everyone: 10:35 AM

+1

from Miha SLO to everyone: 10:35 AM

+1

from Sander Van Dooren to everyone: 10:36 AM

It can be 1..n, but with a limit on the language? In the SHACL definition set sh:uniqueLang ?

from Emidio Stani to everyone: 10:37 AM

yes we could introduce such attribute

from Emidio Stani to everyone: 10:37 AM

to check on the unique language tag

from Jim Yang to everyone: 10:37 AM

+1 to option 2

from Miha SLO to everyone: 10:39 AM

+2 option 3; +1 option 2

from Peter Bruhn Andersen to everyone: 10:39 AM

+1 to option 2

from Cécile GUASCH to everyone: 10:39 AM

+1 option 2

from ES - Ana Rosa to everyone: 10:39 AM

Delegation can happen at different levels, not only for the whole managing of the public service

from Alexandros GERONTAS to everyone: 10:40 AM

+1 option 3

from SK - Michal Ohrablo to everyone: 10:40 AM

+1 Option 3 so that we don't open territory far beyond the intended purpose of the vocabulary

from Ricardo Sanchez Curiel to everyone: 10:41 AM

Wouldn't this be solved "better" by sub-organizations?

from MT - Norman Calleja to everyone: 10:42 AM

option 3

from Alexandros GERONTAS to everyone: 10:43 AM

Maybe we can also look at the definitions of Public Organisation as the Competent Authority and Agent as the Service Provider.

from Jim Yang to everyone: 10:43 AM

The problem with opt. 3 is "delegation"

from Peter Bruhn Andersen to everyone: 10:44 AM

IF we use 'delegation' it will have to be a qualified delegation. Like

<https://www.w3.org/TR/prov-o/#qualifiedDelegation>

from Cécile GUASCH to everyone: 10:44 AM

Why I was voting for 2 is that the borders between public and private services may change over time, also public private partnerships create a not clearly defined border. I see this as adding flexibility.

from Ricardo Sanchez Curiel to everyone: 10:44 AM

Option 2 AND option 3. If only one, then 3

from Jim Yang to everyone: 10:45 AM

+1 to Celile

from Ricardo Sanchez Curiel to everyone: 10:45 AM

2 is about service, 3 is about implementer, in my opinion

from Miha SLO to everyone: 10:45 AM

but difference between public and private is competency and delegation thereof

from Florian Barthelemy to everyone: 10:47 AM

Right now - the direct mandatory relationship between Public Service and Public Organisation is solely about hasCompetentAuthority. As from the moment we start looking into other types of participations, we have Agent and the Participation classes which can be used (e.g. for the provision, for the citizens/businesses). The question here is really about the delegation of the authority.

from Alexandros GERONTAS to everyone: 10:47 AM

I think that the provision of Public Service by a private organisation still does not change the Public Service to a (Private) Service.

from Jim Yang to everyone: 10:50 AM

About "delegation": funeral services are not delegated by any publ.org. (in Norway)

from Jim Yang to everyone: 10:51 AM

banking services need in doing business are not delegated

from Jim Yang to everyone: 10:54 AM

many non-public services are needed to handle life events / business events

from Miha SLO to everyone: 10:54 AM

if they are regulated by law, they are delegated to specific actors who meet specific conditions

from Alexandros GERONTAS to everyone: 10:55 AM

Maybe we have to define the meaning of delegation.

from ES - Ana Rosa to everyone: 10:55 AM

Yes. Miguel is right.

from ES - Ana Rosa to everyone: 10:56 AM

Commercial activity should be out of the scope.

from Jim Yang to everyone: 10:59 AM

We need classifications/types anyway, so I don't see this solves the issue

from Cécile GUASCH to everyone: 10:59 AM

Very interesting issues discussion. I need to leave. Bye.

from Marco Aarts to everyone: 11:00 AM

I have to leave as well, thanks all!

from Henrik Bengtsson SE to everyone: 11:01 AM

In Sweden, more than 50 universities have a jointly managed public service

from Ricardo Sanchez Curiel to everyone: 11:01 AM

Service is not capability. How the same capability is offered by two organizations, creates two services, I think...

from Jim Yang to everyone: 11:02 AM

Same in Norway as in Sweden

from Lorenzo Iannone to everyone: 11:04 AM

In Italy it's not a single channel, every university can have its own portal

from Florian Barthelemy to everyone: 11:13 AM

This property links a Public Service to a Public Organization, which is the responsible Agent for the delivery of the Public Service. Whether the particular Public Organization provides the public service directly or outsources it is not relevant. The Public Organization that is the Competent Authority of the service is the one that is ultimately responsible for managing and providing the public service.

from MT - Norman Calleja to everyone: 11:14 AM

We have something similar in Malta for Nursery Schools. I tend to see it as a public service offered to Nurseries and not to the citizen. The difference is whom the payer for the service will be Government or Citizen.

from ES - Ana Rosa to everyone: 11:24 AM

CCCEV 2.0 uses Reference Framework meaning legal and non-legal specifications. For public services provided by Public Administrations the reference framework should be a legal specification.

from Jim Yang to everyone: 11:25 AM

+1 to opt. 1

from ES - Ana Rosa to everyone: 11:26 AM

We cannot miss the ELI reference

from Jim Yang to everyone: 11:26 AM

sorry, I read opt. 1 wrong

from Miha SLO to everyone: 11:27 AM

option 3

from Jim Yang to everyone: 11:27 AM

opt 3

from Giovanni Paolo Sellitto IT to everyone: 11:28 AM

thanks for the webinar

from Alexandros GERONTAS to everyone: 11:30 AM

Thank you for the webinar!

from Jim Yang to everyone: 11:31 AM

Thanks and bye!

from Henrik Bengtsson SE to everyone: 11:31 AM

Thank you

from MT - Norman Calleja to everyone: 11:31 AM

thank you

from Florian Barthelemy to everyone: 11:31 AM

Thank you all!

from Miha SLO to everyone: 11:31 AM

bye

from ES - Ana Rosa to everyone: 11:31 AM

Thank you!!

from Alexandros GERONTAS to everyone: 11:31 AM

Bye!

from SK - Michal Ohrablo to everyone: 11:31 AM

thx, bye