



27 OCTOBER
2022

SEMIC Webinar

DIGIT.D2 - Interoperability.

interoperable
europe

Objective of this 1st webinar



Discussing latest issues on Core Location and Core Public Organisation



Presenting Core Public Event

Agenda

1

Welcome

2

Context of the Core Vocabularies

3

**Updates on Core Location
and Core Public Organisation**

4

Short break

5

Presenting Core Public Event

6

Wrap up and next steps

Workshop practicalities



Please mute your microphones



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



The workshop will be recorded



Context of the Core Vocabularies

Introduction to SEMIC

The objectives of the SEMIC action is to promote Semantic Interoperability amongst the EU Member States by:

- Promoting, share and reuse of semantic assets, experience and tools and facilitating agreements in key areas.
- Identifying opportunities for alignment on semantic definitions, metadata and reference data sources with special focus on identification and definitions of Core Concepts / Vocabularies.
- Raising awareness on the importance of data and metadata management.



Objectives of the Core Vocabularies

The e-Government Core Vocabularies are

- **simplified**,
- **re-usable**, and
- **extensible**

data models that capture the **fundamental** characteristics of a data entity in a context-neutral and syntax-neutral fashion.

Current SEMIC assets

CORE
PERSON
VOCABULARY

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

CORE
BUSINESS
VOCABULARY

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

CORE
LOCATION
VOCABULARY

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

CORE
PUBLIC
ORGANISATION
VOCABULARY

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

CORE
CRITERION &
EVIDENCE
VOCABULARY

The requirements and evidence of a procedure or formal process.

Vocabularies

Application Profiles

CORE
PUBLIC
SERVICE
VOCABULARY
Application Profile

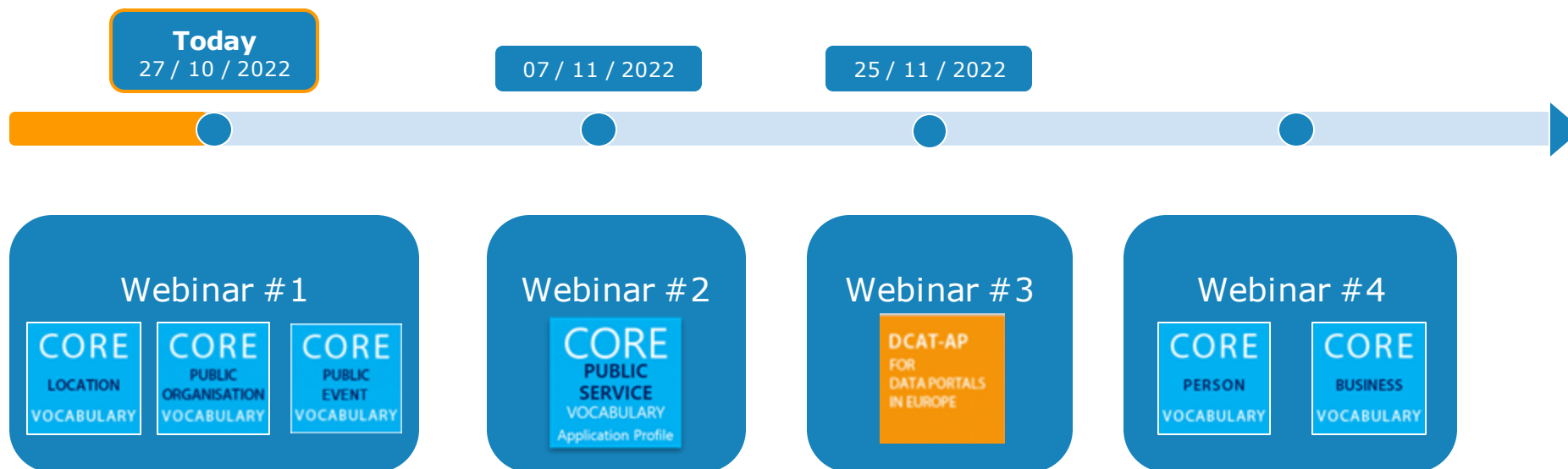
DCAT-AP
FOR
DATA PORTALS
IN EUROPE

GeoDCAT-AP
FOR
GEOSPATIAL
DATASETS

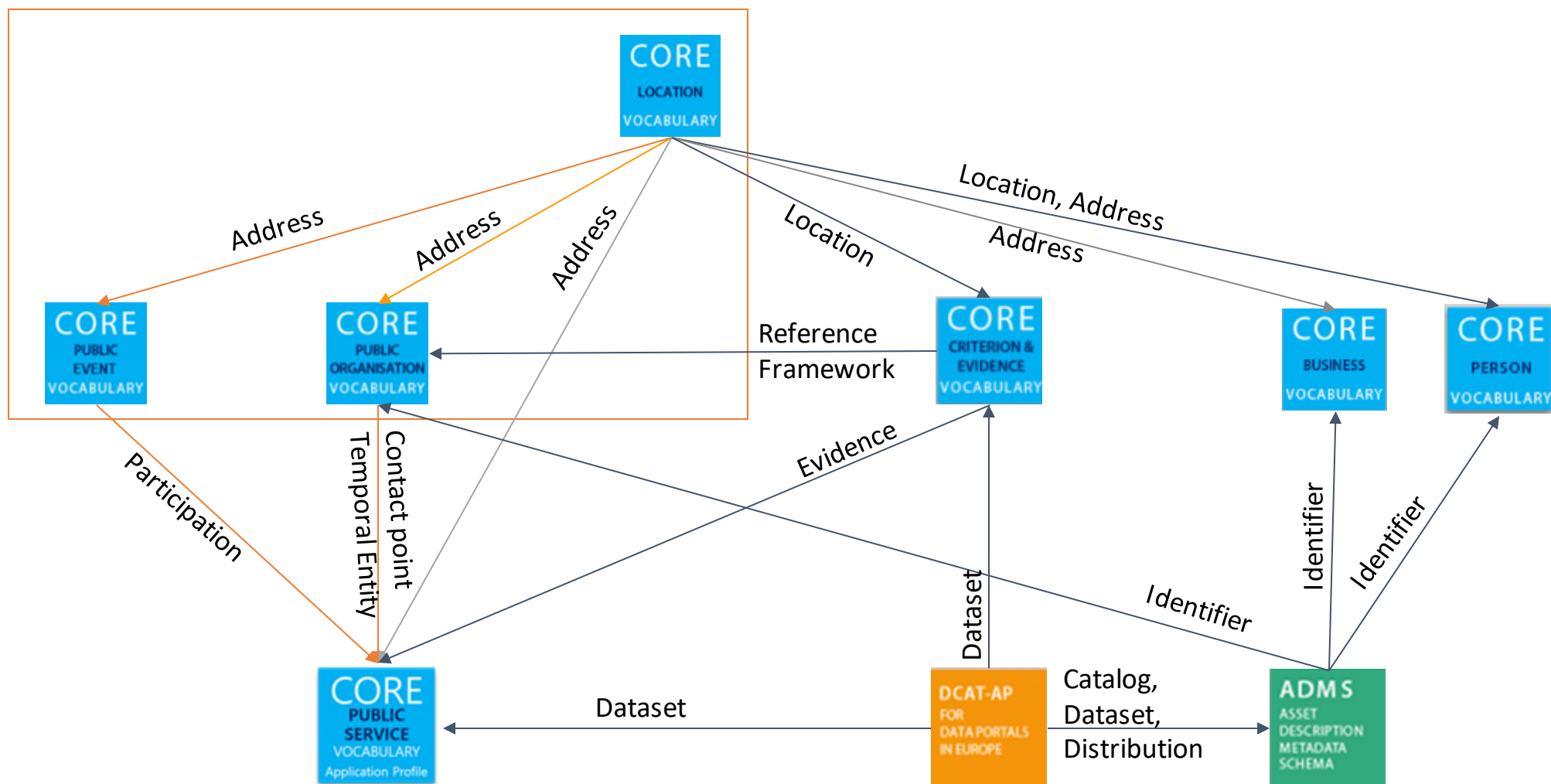
StatDCAT-AP
FOR
STATISTICAL
DATASETS

ADMS
ASSET
DESCRIPTION
METADATA
SCHEMA

Timeline webinars



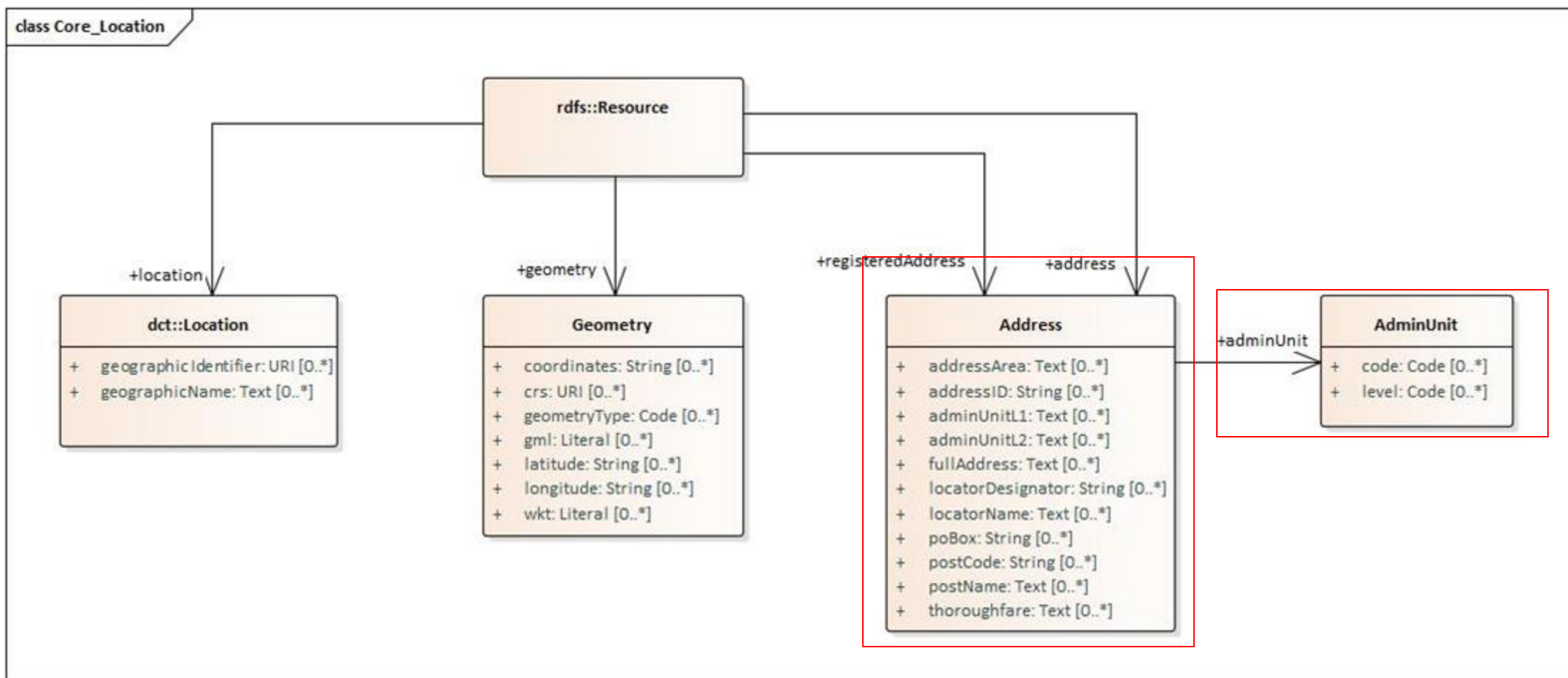
Core Vocabularies inter-dependencies





Updates on Core Location and Core Public Organisation

Core Location 2.0



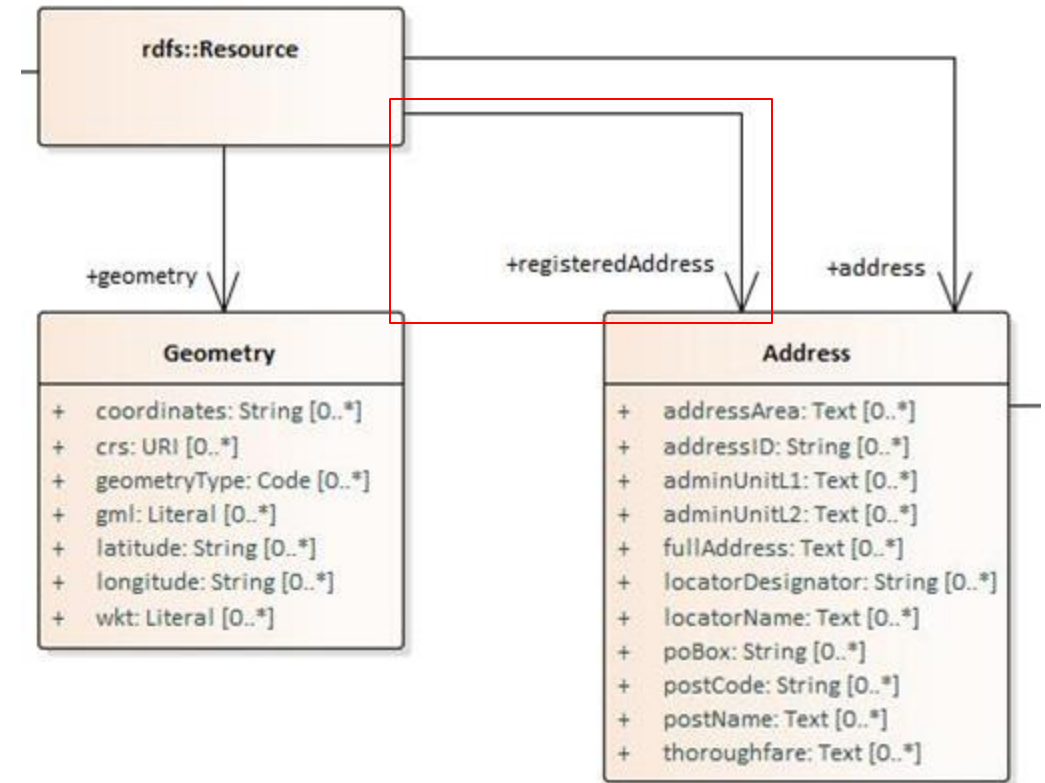
Change URI of RegisteredAddress (issue [#26](#))

FROM:

<https://www.w3.org/ns/legal#registeredAddress>

TO:

<http://data.europa.eu/m8g/registeredAddress>



Attribute for street name and number (issue [#22](#))

Request:

The definition for `locn:thoroughfare` does not propose a number, only the street name. The definition for `locn:fullAddress` propose a complete address (including zip code, city name, etc.) written as a string.

Willem van Millenberchstraat 21

Postbus 20302

Rue du Fort Niedergrünewald

173 avenue Jean Jaurès

100 rue Marietton

71 avenue Jean Jaurès, BP 80

1 avenue B, cité Berliet

[thoroughfare](#)

[Text](#)

The name of a passage or way through from one location to another.

A thoroughfare is usually a street, but it might be a waterway or some other feature. For example, "Avenue des Champs-Élysées".

[locator designator](#)

[String](#)

A number or sequence of characters that uniquely identifies the locator within the relevant scope.

In simpler terms, this is the building number, apartment number, etc. For an address such as "Flat 3, 17 Bridge Street", the locator is "flat 3, 17".

Recommendation: concatenate thoroughfare with locator designator, making the overall type a Text, for example: "Willem Van Milleberchstraat 21"@nl

Expected Range "String" in the class Address should be replaced by "Literal" (issue [#24](#))

Request:

"String" (xsd:string) is now in (and only in) the class Address (locn:Address) and used as a range for the properties which have "text without lang-tag".

According to old W3C [Core Location Vocabulary](#), except for locn:locatorId where no range is specified, the other properties should have rdfs:Literal as range.

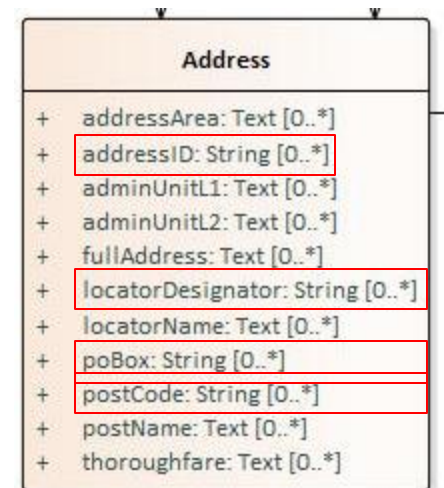
Proposition:

Switch to rdfs:Literal:

- xsd:String is compatible with rdfs:Literal;
- keep backward compatibility with the old W3C specification and
- simplify the use of datatypes.

Property address ID

Type of Term	Property
QName	locn:addressId
URI	http://www.w3.org/ns/locn#addressId
Term status	unstable
Domain	http://www.w3.org/ns/locn#Address
Range	http://www.w3.org/2000/01/rdf-schema#Literal
Definition	The concept of adding a globally unique identifier



AdminUnit (issue [#25](#))

Request:

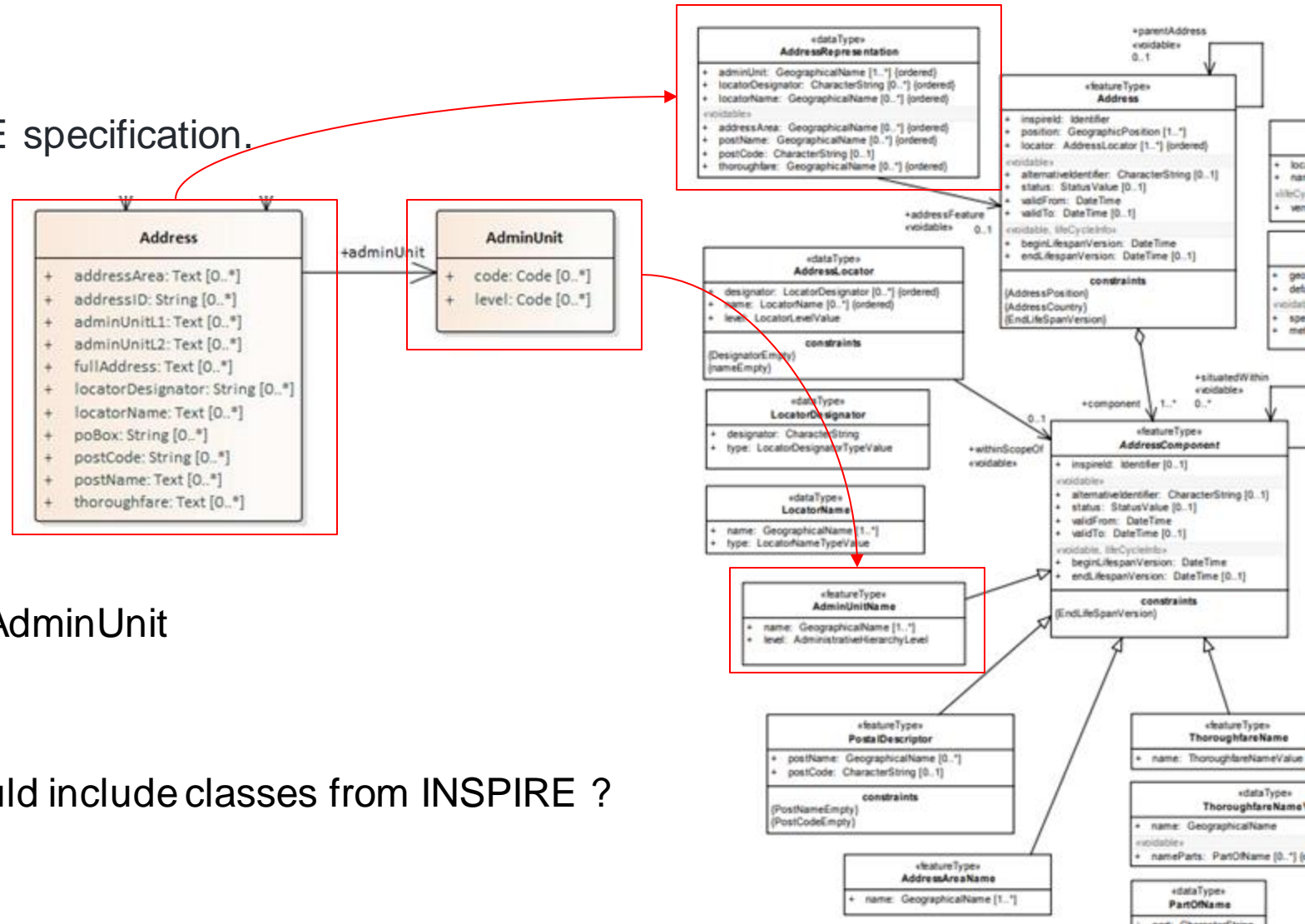
Be more in line with INSPIRE specification.

Proposition:

- Add name property in AdminUnit

Question:

How far Core Location should include classes from INSPIRE ?



Support use of JSON-LD Playground (issue [#23](#))

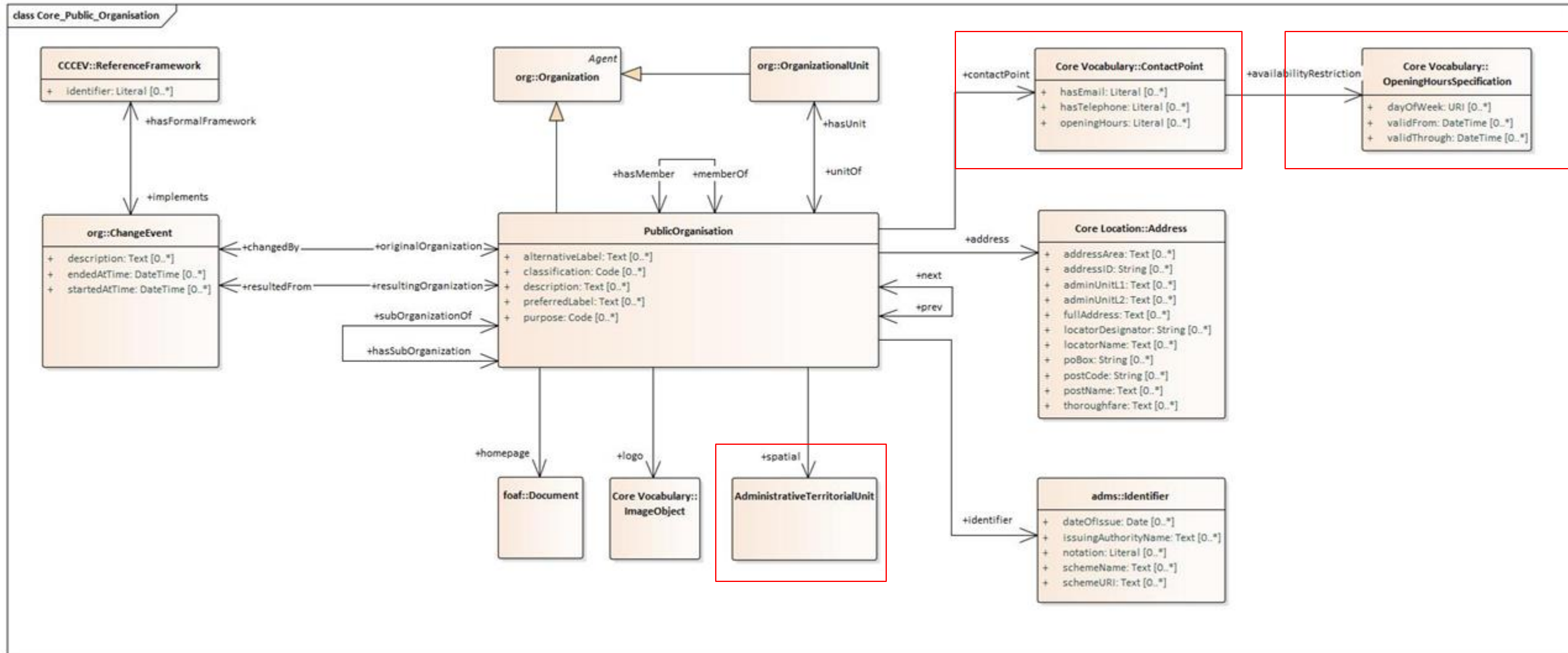
Remove round brackets () from labels in Address in order to be compatible with [JSON-LD playground](#). This approach will be applied to other Core Vocabularies.

administrative unit level 1 (country)	Text	The name of the uppermost level of the address, almost always a country.	Best practice is to use the ISO 3166-1 code but if this is inappropriate for the context, country names should be provided in a consistent manner to reduce ambiguity. For example, either write 'France' or 'FRA' consistently throughout the dataset and avoid mixing the two. The Country controlled vocabulary from the Publications Office can be reused for this.
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administrative unit level 2 (country/region/state)	Text	The name of a secondary level/region of the address, usually a county, state or other such area that typically encompasses several localities.	Values could be a region or province, more granular than level 1.
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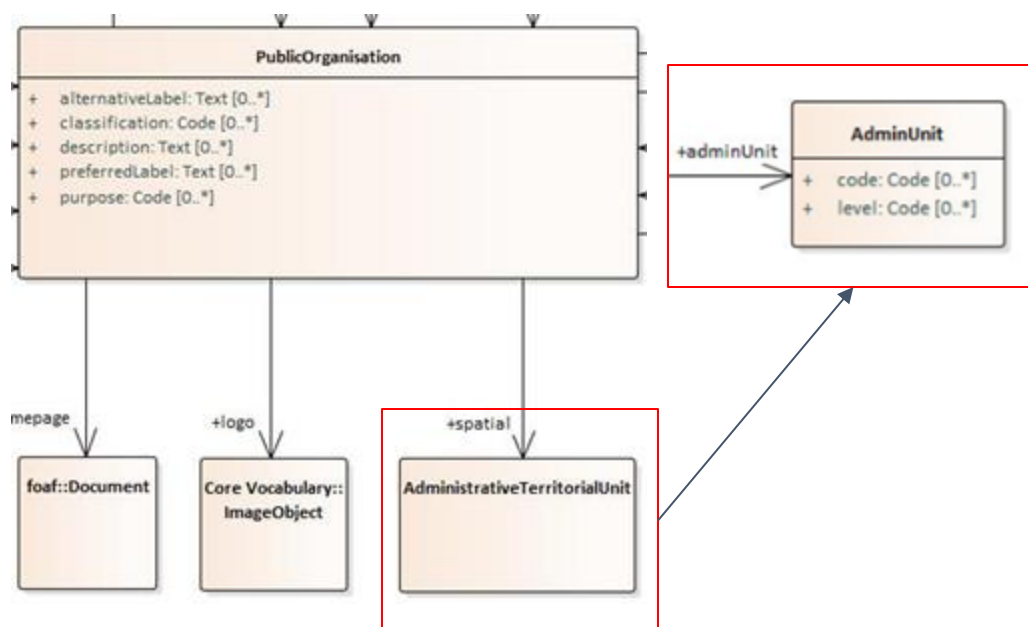
```
"Address.administrativeUnitLevel1 (country)": {
  "@container": "@set",
  "@id": "http://www.w3.org/ns/locn#adminUnitL1",
  "@type": "http://www.w3.org/1999/02/22-rdf-syntax-ns#langString"
},
"Address.administrativeUnitLevel2 (country/region/state)": {
  "@container": "@set",
  "@id": "http://www.w3.org/ns/locn#adminUnitL2",
  "@type": "http://www.w3.org/1999/02/22-rdf-syntax-ns#langString"
},
```

Core Public Organisation 2.0



CPSV-AP / CPOV consistency: AdministrativeTerritorialUnit class (issue [#22](#))

The range of dct:spatial should be a controlled vocabulary as the definition of AdministrativeTerritorialUnit refers to a 'code from list...' and the [URI of AdministrativeTerritorialUnit](#) (ATU) points to a web page of data.europa.eu, which refers to a [controlled vocabulary from the Publications Office](#).



[spatial](#)

[Administrative Territorial Unit](#)

This property links an Organization to the Administrative Region(s) that it covers.

The value of the property should be the URI of the region as defined in an authoritative list of regions. In Europe, this is likely to be the Administrative Territorial Units Named Authority List maintained by the Publications Office's Metadata Registry.

The ATU list does not include a geometry. That is, the territory is only identified by its name not its spatial coordinates. This is likely to be the case for similar lists. If geometries are available for the Public Organization's territory, they can be linked from the territorial unit using the Core Location Vocabulary's

[Administrative Territorial Unit](#)

Definition

A code from a list that represents the administrative territorial unit of the EU Member States, based on national official / legal information and the ISO 3166-2 standard.

Properties

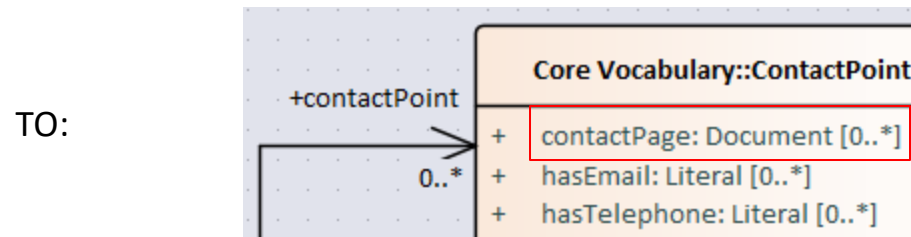
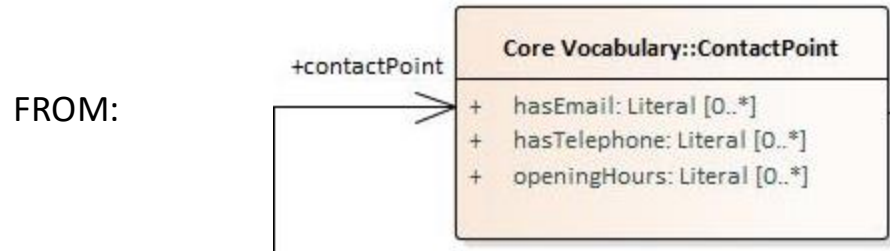
No properties have been defined for this entity.

Proposition:

Replace “AdministrativeTerritorialUnit” class with (Core Location) "AdminUnit", with recommendation to use ATU URI of Publications office, e.g. <http://publications.europa.eu/resource/authority/atu/BEL>

CPSV-AP / CPOV consistency: Contact page to be added in ContactPoint (issue [#24](#))

In alignment with CPSV-AP, the Contact Point will have a contactPage property.



contact page	Document	0..*	A contact page that could be used to reach out the contact point.
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Short break (5')



Presenting Core Public Event (CPEV)

Context

The notion of a ‘public event’ is widespread and includes conferences, shows, festivals and many more. Publishing such events online is currently done in a scattered way.

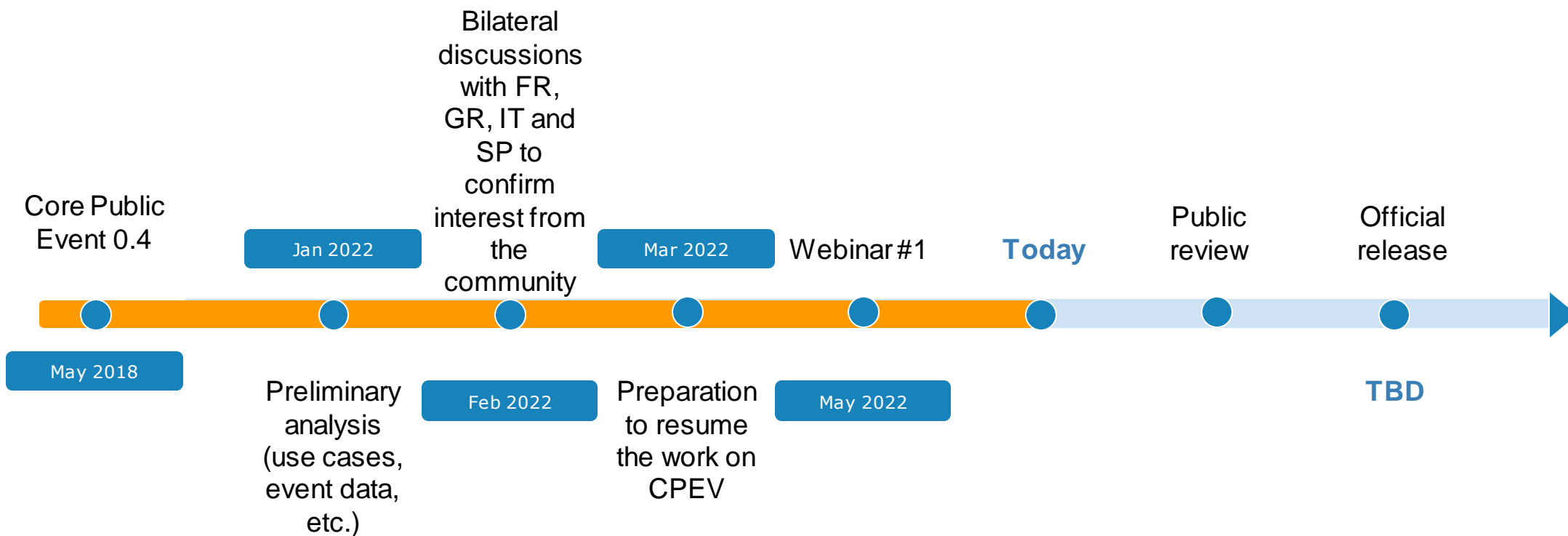
Public administrations and organisations do not have a common and stable way of describing the fundamental characteristics of a public event.

This in turn hinders the easy redistribution of these events, which is problematic. Consider the promotional efforts of (local) companies for instance. These can benefit from easy redistribution by making their events, be it a product launch or open house day, easier to find.

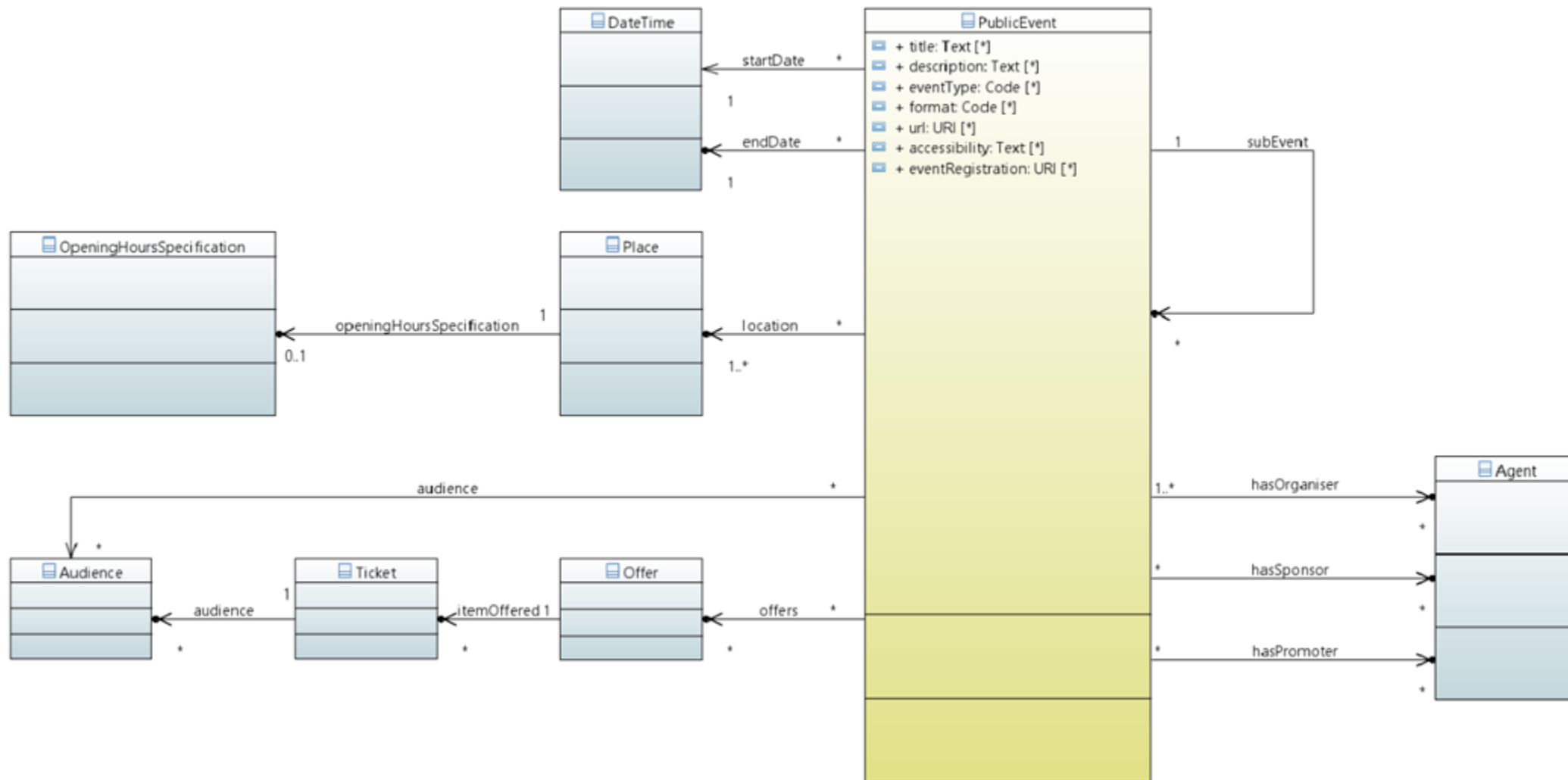
Similarly, citizens can benefit from more festivals and recreational events if public administrations manage to reach their target audience.

#	Initial Use cases
1	The CPEV will facilitate finding events online through search engines.
2	Widespread use of the CPEV will allow providers of goods and services to easily find opportunities arising from local events.
3	The use of CPEV will allow citizens and business to find related events .
4	CPEV will allow easy redistribution of events , which is interesting for both governments and companies.
5	CPEV should allow users to easily add events to their personal calendars .
6	CPEV will allow organizers of an event to easily find a suitable time and place for their events

Preparatory work for an official release



Core Public Event Vocabulary 0.4



Public Event definition (issues [#4](#) and [#6](#))

Definition from [Publications Office](#):

The public event type table defines public events that happen at a particular place and time, are organised by an agent for a particular purpose, and are of interest to a general audience.

This definition excludes natural events such as earthquakes or hurricanes.

Proposed definition:

*“Something that happens at a particular place and time, organised **by one or more agents** for a particular purpose, and is of interest to a general audience.*

This definition excludes natural events such as earthquakes and hurricanes.”

As a consequence, non-public events are excluded.

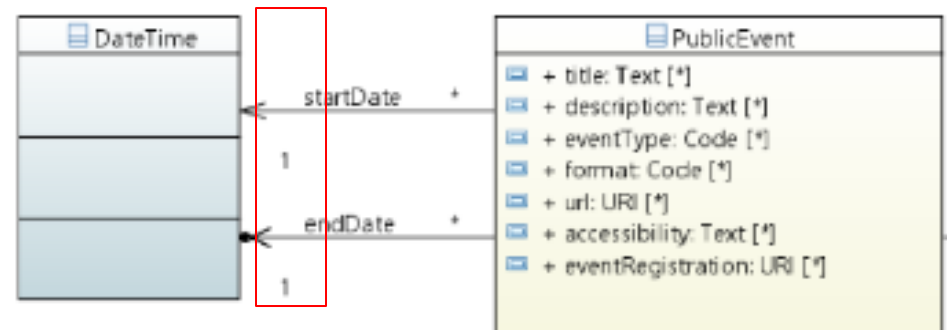
Core Vocabularies
do not impose
constraints

Unplanned Events (issue [#17](#))

Request:

It was discussed that events are not always scheduled or planned in advance.

An event can just happen on the moment and be qualified as an event afterwards, e.g., terrorist attack.



Proposition:

Like other Core Vocabularies, keep cardinalities open, so that restrictions on the timing of the events (start or end) do not exist.

Tickets (issue [#19](#))

Request:

Tickets relate to pricing, a maximum capacity, amongst others.

Tickets price might be considered too granular for the core model because of the many exceptions that exist (e.g., elders, children, families...).



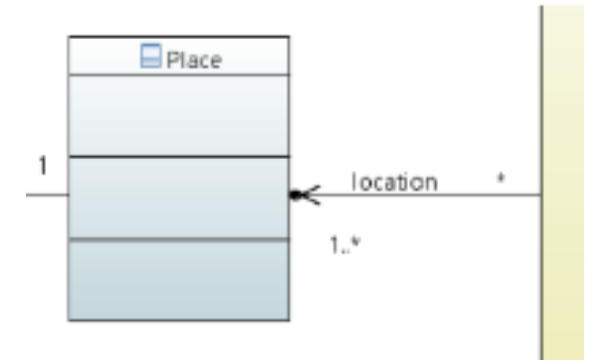
Proposition:

Remove Offer and Ticket classes, as requirements are not defined.

Place (issues [#1](#), [#10](#) and [#15](#))

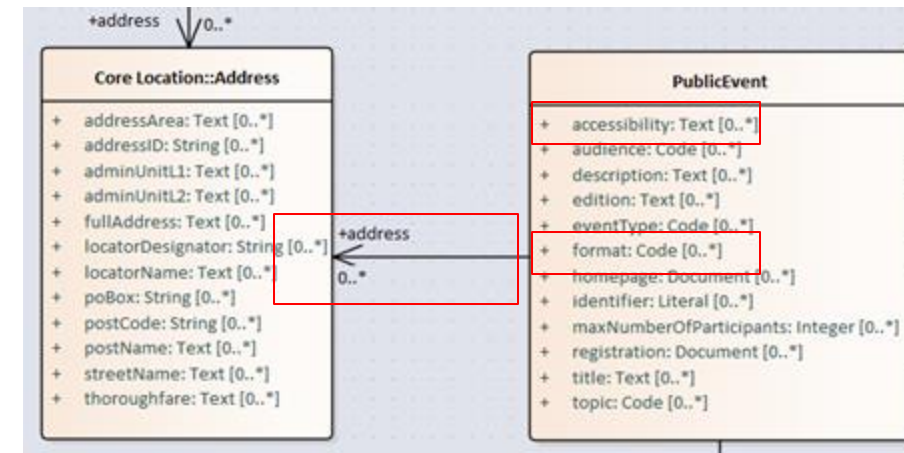
Request:

- Easier discovery of events within and between countries;
- Difference between physical and virtual location;
- Accessibility of an event;
- Multiple locations for a single event.



Proposition:

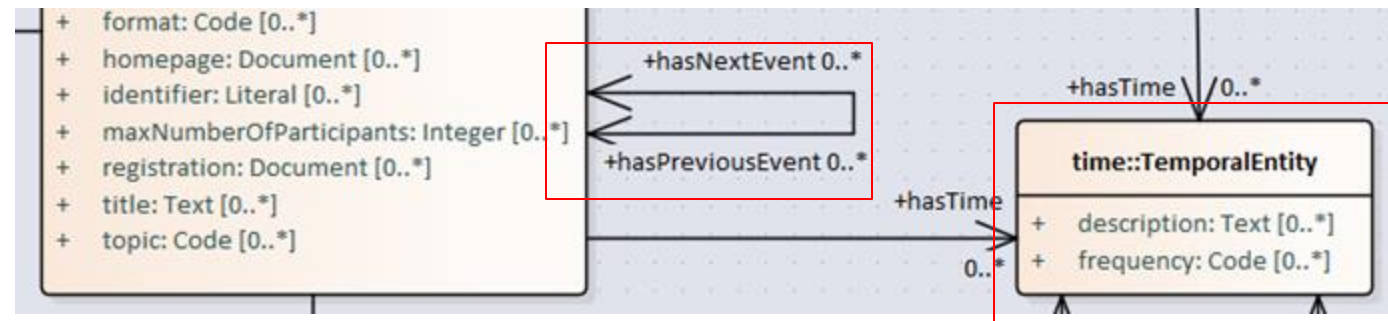
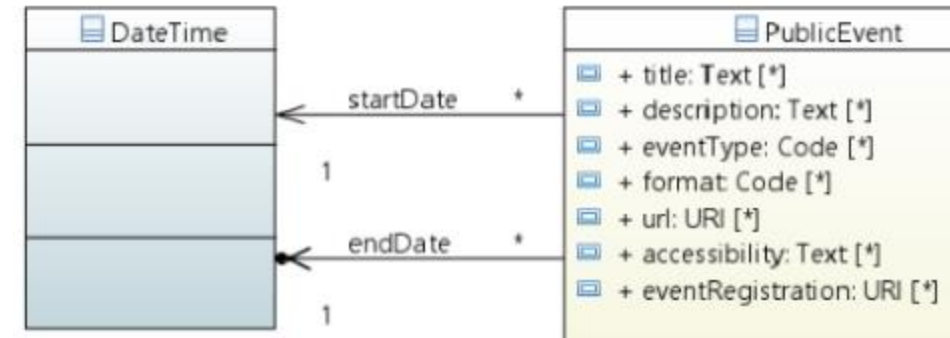
- Add the "address" relation to (Core Location) Address class for physical location;
- Keep the "format" (Code) property to specify the format of the event;
- Keep the "accessibility" (Text) property;
- Like for other Core Vocabularies, cardinalities are not enforced, so there can be multiple location for an event.



Time dimension of Event (issues [#12](#), [#18](#) and [#20](#))

Request:

- Dealing with different type of date formats (e.g just the day and not the hour);
- Modelling the frequency in case of recurrent event;
- Focus on the timing of event.



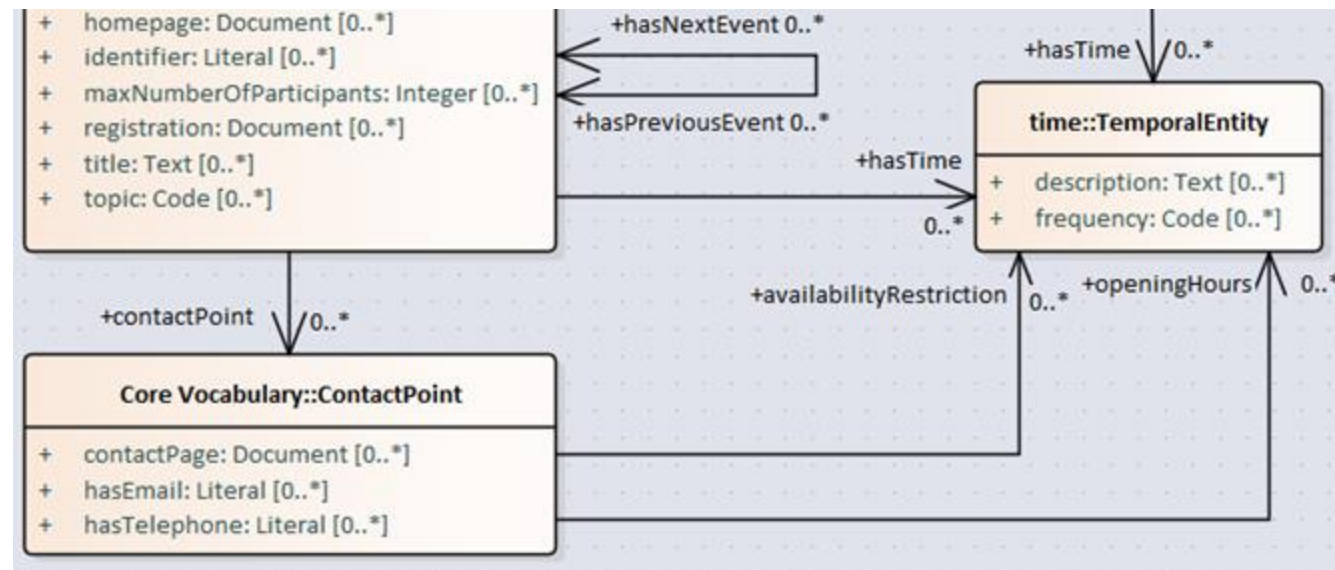
Proposition:

- Make use of [time:TemporalEntity](#) to define instants or periods with different time formats;
- Add a “description” property of the timing to ease its description;
- Add a “frequency” property to define the frequency of the event (daily, monthly, annual, etc.) with [code from Publications Office](#);
- Add “hasNextEvent” and “hasPreviousEvent” relations to link events in a sequence.

Contact Point (issue [#21](#))

Request:

Contact point, already defined in [CPOV](#), should be reused as part of CPEV.



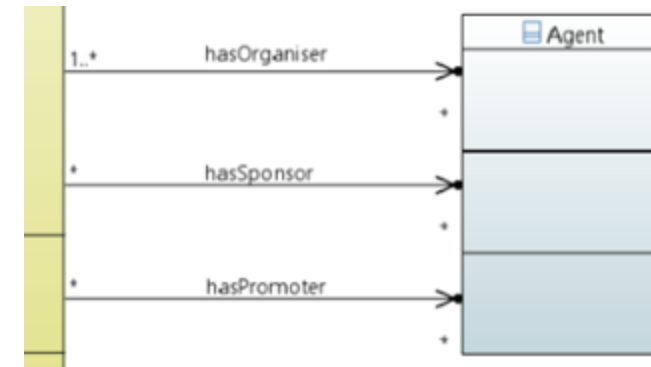
Proposition:

- Add “ContactPoint” class to refer to the Contact Point of the Public Event

Distinguishing active and passive participants (issue [#9](#))

Request:

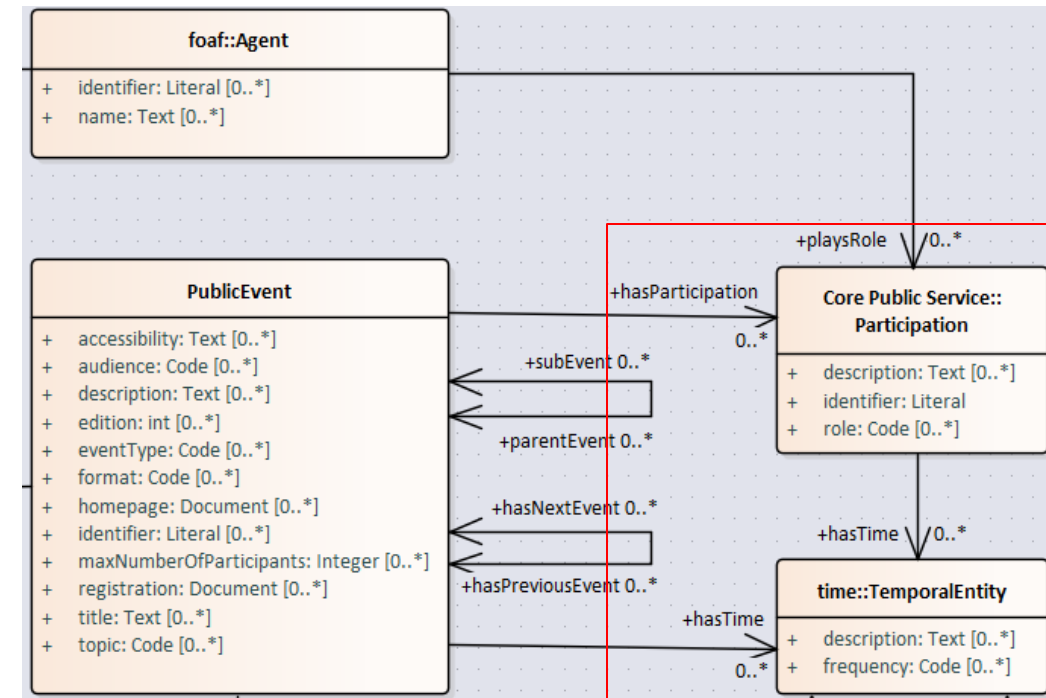
Distinguishing between the different participant roles as well as the need to distinguish between the event publisher, who is advertising the event and participants planning to attend the event.



Proposition:

Reuse the “Participation” class, which include the concept of Role, like in CPSV-AP.

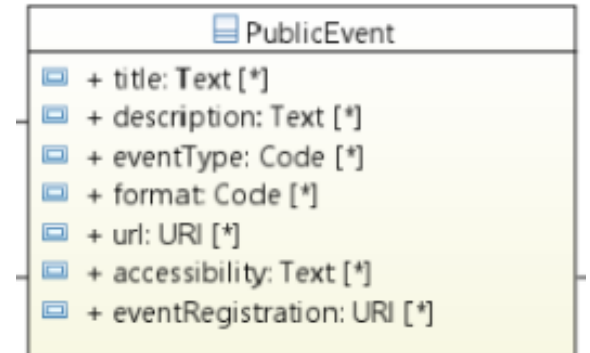
The “hasTime” relation, coming from time Ontology, could be used to add timing aspect to a Participation.



Public Event Type classification (issue [#14](#))

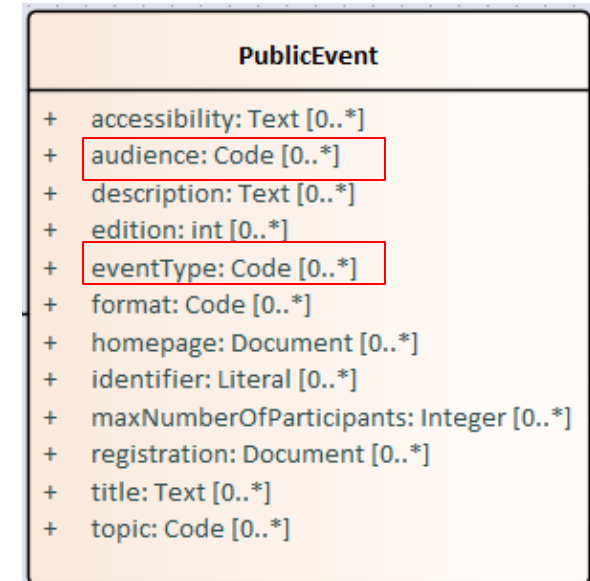
Request:

- Classify public events;
- Describe audience type.



Proposition:

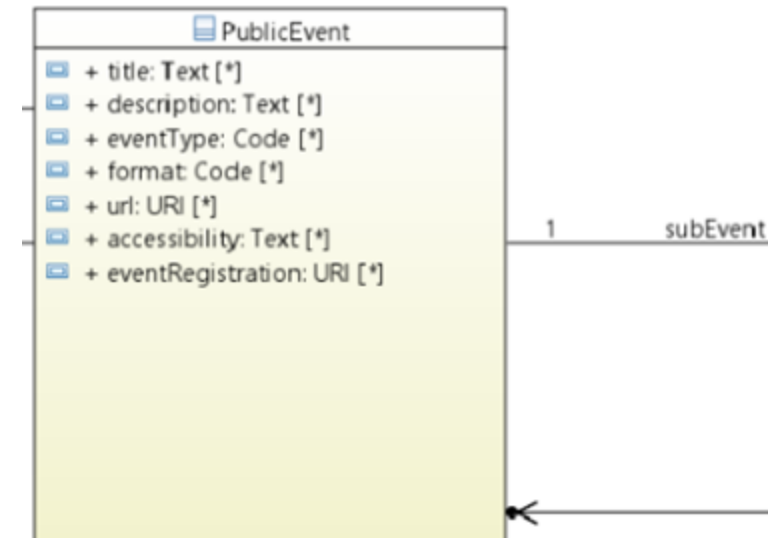
- Keep "eventType" (Code) property using the classification proposed by [Publications Office](#);
- Add the "audience" (Code) property to classify the audience, leaving to Member States how to implement such type of classification.



Hierarchy in events (issue [#16](#))

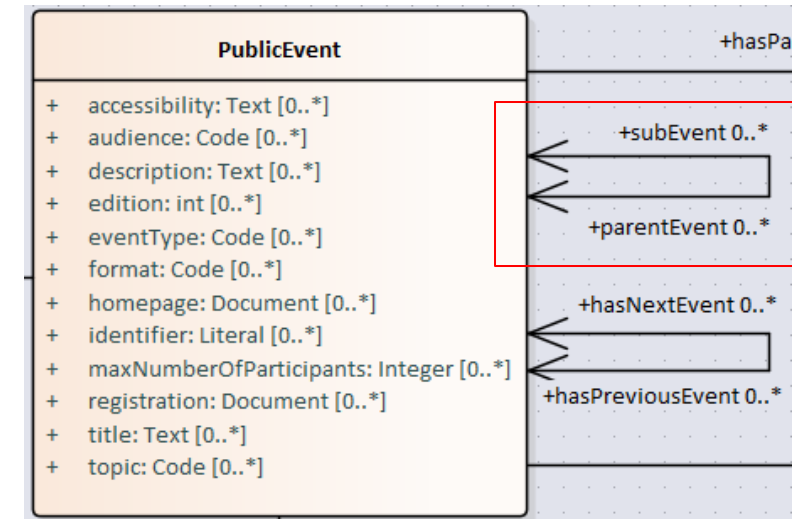
Request:

Events can sometimes have a parent and / or a child relationship.



Proposition:

- Keep the "subEvent" relation to another Event encompassing the first one;
- Add the "parentEvent" relation to another Event included in the first one.

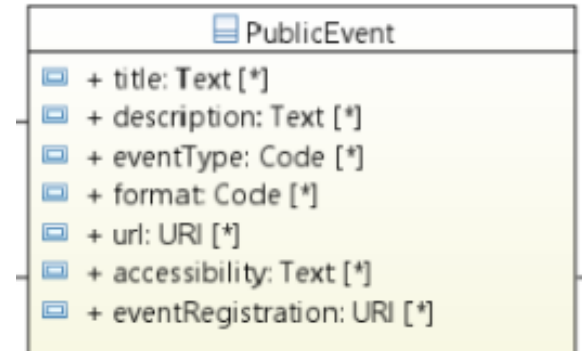


Identification of events (issue [#22](#))

Request:

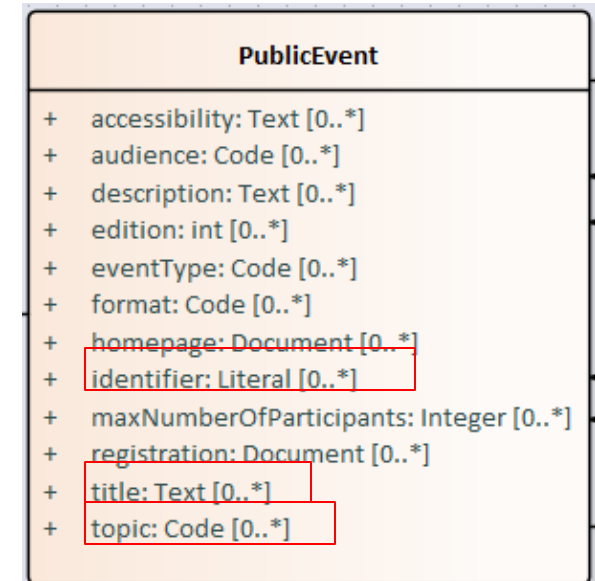
Several points regarding the identification of events have been raised and new attributes were suggested:

- Title of the event;
- Topics, allowing to specify the domain / area of the event and to link the event to other events.



Proposition:

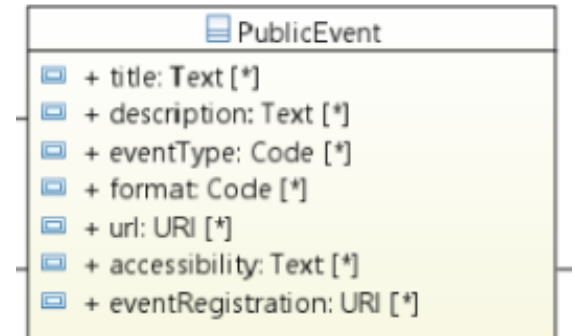
- Keep “title” (Text) property: to indicate the name given to the event;
- Add “identifier” (Literal) property: to distinguish uniquely an event from another;
- Add “topic” (Code) property: to indicate the main subject of the event.



Description, access, registration (issues [#5](#) and [#8](#))

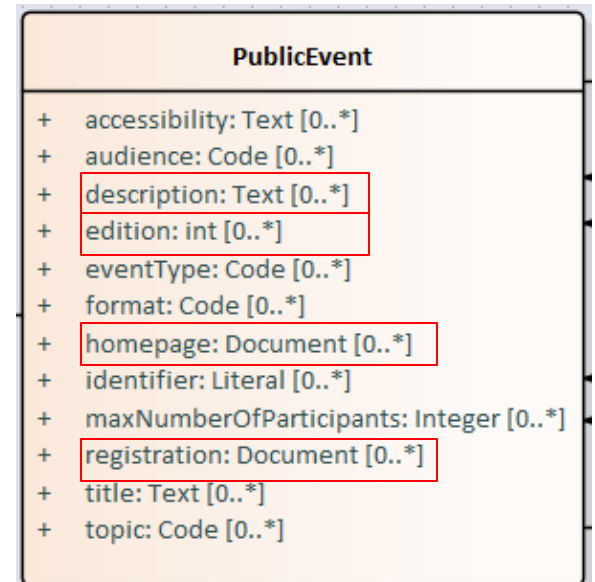
Request:

- To provide more detailed information about the Public Event;
- To provide information about registration;
- To provide information about the edition (sequence number e.g. 4th).



Proposition:

- Keep “description” (Text) property;
- Replace the "url" (Document) property with the "homepage" to explicit the main page where information may be found;
- Keep the "registration" (Document) property to indicate the page that provides means to attend the Public Event;
- Add the “edition” (Literal) property to indicate the sequence position of the Public Event.



Post-fact statistics and knowledge (issue [#7](#))

Request:

It could be interesting to have information on an event after the event has taken place. One could for instance determine how many attendees an event had, allow reviews, .

Proposition:

Proposal to add at least the "maxNumberOfParticipants" (Integer) property.

PublicEvent	
+	accessibility: Text [0..*]
+	audience: Code [0..*]
+	description: Text [0..*]
+	edition: int [0..*]
+	eventType: Code [0..*]
+	format: Code [0..*]
+	homepage: Document [0..*]
+	identifier: Literal [0..*]
+	maxNumberOfParticipants: Integer [0..*]
+	registration: Document [0..*]
+	title: Text [0..*]
+	topic: Code [0..*]



Wrap-up and next steps

Next steps



In the meantime, you are invited to share your feedback on the issues on [GitHub](#).

A network visualization on a dark blue background. A central node is highlighted in orange, with numerous lines radiating outwards. The lines are colored in a gradient from orange to green to blue. The lines connect to other nodes, some of which are also highlighted in green or blue. The overall effect is a starburst or radial network structure.

Thank you



interoperable europe

innovation ∞ govtech ∞ community

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DIGIT-INTEROPERABILITY@ec.europa.eu



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