2017-04-26

Second meeting of the e-procurement ontology working group

E-procurement ontology

Meeting Minutes

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| --- | --- | --- | --- |
| Second meeting of the e-procurement ontology working group | | | |
| Venue | Adobe Connect | Meeting date | 2017-04-26 |
| Author | Florian Barthélemy | Meeting time | 13:00 – 16:00 |
| Reviewed by | Makx Dekkers | Issue date | 2017-05-05 |
| Status | For review | Version | 0.05 |

# Attendees

|  |  |  |
| --- | --- | --- |
| Name | Abbreviation | Organisation |
| Claire Noël | CN | Publications Office of the EU |
| Claude Schmit | CS | Publications Office of the EU |
| Cyril Picard | CP | Publications Office of the EU |
| Jáchym Hercher | JH | European Commission, DG GROW |
| Jostein Frømyr | JF | TC 440, Edisys Consulting |
| Minjoo Son | MS | OECD |
| Margareta Molnar | MM | Hungarian Prime Minister’s Office |
| Natalie Muric | NM | Publications Office of the EU |
| Patrizia Cannuli | PC | Consip, Italy |
| Polyxeni Mylona | PM | Publications Office of the EU |
| Makx Dekkers (**editor**) | MD | AMI Consult |
| Brecht Wyns | BW | PwC EU Services |
| Florian Barthélemy | FB | PwC EU Services |

# Agenda

|  |  |
| --- | --- |
| ID | Description |
|  | Round table |
|  | Introduction and objectives of this meeting |
|  | Current status |
|  | Three existing use cases |
|  | Conceptual model |
|  | Additional use cases |
|  | Actions and tasks |

# Round table

# Introduction and objectives

MD explained the agenda and objectives of the meeting see Figure 1: Introduction slide.

# Current status

MD described the different issues that were raised on GitHub until the 19 April 2017 and the types of input the working group members were asked to share. This is detailed in Figure 2: Current status.

The comments submitted after the 19 April 2017 were not included in this presentation, but were discussed during the meeting.

As a synthesis, the comments concerned two points:

1. the use cases proposed are at different levels of description (some high-level and others more detailed)
2. gaps and overlaps exist between the use cases (scope of the use cases or information requirements identified from the use cases).

The discussions about those two points touched the objective and the approach adopted to create the e-procurement ontology.

It was decided that the working group should be responsible for:

* Deciding the level of detail of the use cases;
* Reviewing existing use cases;
* Selecting relevant use cases among the ones proposed;
* Identifying gaps and overlaps between the use cases; and
* Proposing new use cases and descriptions for all the use cases.

The working group should exchange suggestions, GitHub is set up to support this exchange. It was suggested that any further question about the two points mentioned above can be raised on GitHub or through the mailing list. It was added that overlaps exist between the use cases but this is not a problem because one use case can have overlaps with others and still cover other gaps in the conceptual model. The objective is to obtain descriptions of the use cases before the second phase of the project.

# The three existing use cases

The full description of the three existing use cases is available in Annex III – Three existing use cases

## Data journalism (1) (see Figure 3 Data journalism)

Citizens want to have insights in the way that contracting authorities are procuring services, hence spending public money. For example, they want to know who the selected tenderer is, what was the volume and/or the value of the contract, what were the criteria, who is accountable etc.

One of the issue raised on GitHub and related to this use case concerned the distinction between different roles of a contracting authority such as Central Purchasing Body, Procuring Entity or Buyer. On the one hand, some clarity could be required to differentiate the roles, on the other hand, the use cases can be really specific to one or a few stakeholders, with a generalisation to other roles at the modelling stage.

The main decision supported the use of generalisation/addition of the information requirements missing at the stage of the data conceptualisation.

Another issue expressed during the meeting was about the consistency of the terms used throughout all the use cases (e.g. the term ‘maintenance’).

It was decided that PwC would adapt the use case to include a reference or code to exactly define ‘maintenance’. The working group members would raise an issue on GitHub for the different terms that would require specific definitions.

For example, the reuse of other standards also applied to the modelling of other concepts in the ontology, such as economic operator which can be modelled using the Core Business Vocabulary or Criterion from the Core Evidence and Criterion Vocabulary. In the landscaping document several such examples were listed.

## Automated matchmaking of procured services and products with businesses (2) (see Figure 4: Automated matchmaking)

No comments were raised.

## Verifying VAT payments on intracommunity service provision (3) (see Figure 5: Verifying VAT payments)

No comments were raised.

## Information requirements, classes and properties for the three use cases (see Figure 6: Information requirements, classes and properties)

FB explained shortly on what and how the working group members could share their inputs. The slide on information requirements and classes and properties is available in Annex III – Three existing use cases.

It was suggested that the working group use the wiki on GitHub in the logical order displayed: starting with use cases, then checking if the information requirements were exhaustive, looking at the cardinalities, ranges and domains of the classes and properties, etc. until the level of the conceptual model included.

Working group members were asked to share their inputs on GitHub before 10 May.

# Conceptual model (see Figure 7: Visualisation)

Working group members were invited to propose properties and to fill the conceptual model displayed on slide 16 in Annex IV – Conceptual model. The conceptual model describes what is necessary for the three use cases (e.g. economic operator has a name).

It was asked, whether working group members should review and create issues on the many basic things missing, the answer was that the members should start looking at the e-procurement ontology from the perspective of the three use cases. In the future, the scope would be broadened to include all use cases identified.

Particular issues on the conceptual model were discussed (see Figure 8: Modelling issues):

* **Contracting Authority class** <https://github.com/eprocurementontology/eprocurementontology/issues/3>

It was agreed that the term “Buyer” should be used.

* **Is bound to – relationship** <https://github.com/eprocurementontology/eprocurementontology/issues/4>

The definition of the relationship should be as general as possible without losing the semantic agreed for the concept.

* **Responds to – relationship** <https://github.com/eprocurementontology/eprocurementontology/issues/5>

The relationship should be from Tender to Call For Tender.

* **Contracting Authority – Extend roles** <https://github.com/eprocurementontology/eprocurementontology/issues/6>

MD mentioned the necessity in the full ontology to include important roles by identifying sub-classes or by linking roles to a type vocabulary.

* **Call For Tender - Distinction between Framework Agreement and Specific Contract** <https://github.com/eprocurementontology/eprocurementontology/issues/7>

This distinction would be considered.

# Additional use cases

The additional use cases are documented in Annex V – Additional use cases.Additional use cases

## e-tendering process (see Figure 9)

* Link to GitHub: <https://github.com/eprocurementontology/eprocurementontology/issues/8>
* Decision:

PC agreed to submit a description following the template on GitHub and to define clearly e-tendering and differentiate it from e-procurement.

## e-procurement procedures (see Figure 10)

* Link to GitHub: <https://github.com/eprocurementontology/eprocurementontology/issues/11>
* Decision:

Submitted description can be reviewed by the working group.

## Financial exclusion grounds (see Figure 11)

* Link to GitHub: <https://github.com/eprocurementontology/eprocurementontology/issues/13>
* Decision: MM agreed to submit more details for this use case following the model on GitHub

## Public understandability (see Figure 12: Public understandability (1.1))

* Discussion:

This use case was really high-level but could be useful for an audit purpose.

The valuable part in this use case concerned the use of the Directives behind it and all the valuable information for a broad audience but maybe not for an ontology. From the understanding of the working group members, the objective of the ontology was not about explaining the procurement procedure.

* Decision:

If considered relevant for the future phases of the project, PwCwould consider conducting one or more interviews with watchdogs in order to determine what should be described in this use case. From the collection of information, this use case would need to be rewritten.

## Monitor the money flow (see Figure 13: Monitor the money flow (1.3))

* Link to GitHub: <https://github.com/eprocurementontology/eprocurementontology/issues/9>
* Discussion:

The ability to follow the money flow was recognised as an important use case. For example: citizens could be interested in what their local authority is doing/buying.

* Decision:

JF agreed to create an issue on GitHub with an indication on how this use case could be used.

NM added that each use case did not necessarily need to be too detailed. What was not covered in one use case could be covered for example in another and need not be repeated.

## Detect fraud and compliance with procurement criteria (see Figure 14: Detect fraud and compliance with procurement criteria (1.4))

* Discussion:

A Digiwhist report could provide input for this use case these issues.

* Decision:
* JH to provide the Digiwhist report

PwC and OP to look at the report and see if it could be used as a source.

## Audit procurement process (See Figure 15: Audit procurement process (1.5))

* Discussion:

No comments were raised.

* Decision:

This use case will not be further described in this phase.

## Cross-validate data from different parts of the procurement process (see Figure 16: Cross-validate data (1.6))

* Discussion:

No comments were raised.

* Decision:

This use case will not be further described in this phase.

## Automated validation of procurement criteria (see Figure 17: Automated validation of procurement criteria (2.2))

* Discussion:

This use case was valuable for working group members, but they asked gain if it was the role of the ontology to describe this.

BW confirmed that the ontology should not develop a tool but should describe, at the data level, how procurement data should be interoperable in order to support such tools.

* Decision:

This use case will not be further described in this phase.

## Alerting services (see Figure 18: Alerting services (2.3))

* Link to GitHub: <https://github.com/eprocurementontology/eprocurementontology/issues/10>
* Decision:

PC would develop this use case on GitHub before the next phase (September 2017).

PC would try and propose some examples before the end of this phase and would prepare the full use case for August 2017.

## Data analytics on public procurement data (see Figure 19: Data nalytics (2.4))

* Discussion:

It was mentioned that a huge work might be required to develop this use case even if some information was overlapping with other use cases.

This use case could link with other sectors and improve the interoperability between procurement data and other existing data. For example, this use case covers market prices which is outside public procurement.

* Decision:

This use case will not be further described in this phase.

## Introduce automated classification systems in public procurement systems (see Figure 20: Introduce automated classification systems (3.2))

* Discussion:

It was discussed whether the concept of product categories and of evidences should be part of the ontology.

An issue could be created on GitHub asking the working group to integrate such concepts in the ontology without developing a use case.

* Decision:

It was decided that all the classes, properties and relationships would not need to be derived from use cases. It would be perfectly possible that things would be in the model and not in the use cases.

This use case will not be described further in this phase.

It was suggested to raise issues if there were points unclear.

# Actions and tasks until the next phase

The two following tables describe the different tasks and time plan which were agreed during the meeting. The second table is more specific to the additional use cases to be created or described.

Table 1: General tasks related to the three existing use cases

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **Task** | **Responsible** | **Timeline** |
| Existing three use cases, properties, and information requirements  <https://github.com/eprocurementontology/eprocurementontology/wiki/Use-case-1:-Data-journalism> | Review and comment. | Working group members | 10 May 2017 |
| New use cases  <https://github.com/eprocurementontology/eprocurementontology/wiki/Add-a-new-use-case> | Propose and describe following the template. | Working group members | 15 May 2017 |
| Methodology, Project Charter and initial ontology  <https://joinup.ec.europa.eu/asset/eprocurementontology/communications/all> | Create a new version | PwC | 17 May 2017 |
| Third Meeting of the working group | Organise/attend | Publications Office, PwC/Working group members | Last week of May 2017 |

Table 2: Tasks related to additional use cases

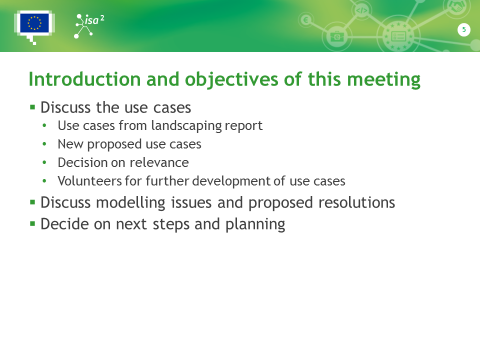
|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **Task** | **Responsible** | **Timeline** |
| e-tendering process  <https://github.com/eprocurementontology/eprocurementontology/issues/8> | Describe the use case following the template. | PC | Before the next phase (end of August 2017) |
| e-procurement procedures  <https://github.com/eprocurementontology/eprocurementontology/issues/11> | Review and comment. | Working group members | 15 May 2017 |
| Financial exclusion grounds  <https://github.com/eprocurementontology/eprocurementontology/issues/13> | Describe the use case following the template. | MM | End of May 2017 |
| Public understandability | Consider collecting information from watchdogs through one or more interviews. | The Publications Office and/or PwC | End of May 2017 |
| Monitor the money flow  <https://github.com/eprocurementontology/eprocurementontology/issues/9> | Describe it at least from a high-level perspective. | JF | 15 May 2017 |
| Detect fraud and compliance with procurement criteria  <https://github.com/eprocurementontology/eprocurementontology/wiki/Add-a-new-use-case> | Provide information which could help creating a use case. | JH | 15 May 2017 |
| Audit procurement process | None of the WG members have expressed their interest to elaborate this use case and include it in the set of use cases at this point of time. |  |  |
| Cross-validate data from different parts of the procurement process | None of the WG members have expressed their interest to elaborate this use case and include it in the set of use cases at this point of time. |  |  |
| Automated validation of procurement criteria | None of the WG members have expressed their interest to elaborate this use case and include it in the set of use cases at this point of time. |  |  |
| Alerting services  <https://github.com/eprocurementontology/eprocurementontology/issues/10> | Describe the use case following the template. | PC | Before the next phase (end of August 2017) |
| Data analytics on public procurement data | None of the WG members have expressed their interest to elaborate this use case and include it in the set of use cases at this point of time. |  |  |
| Introduce automated classification systems in public procurement | Issues to be created on GitHub asking the working group to integrate classifications in the ontology without developing a use case. |  |  |

# Conclusion

NM thanked everyone for the comments and she said that deadlines were short but if the working group members could provide information on the use cases on GitHub, it would be useful and would be used in the next phase of the project.

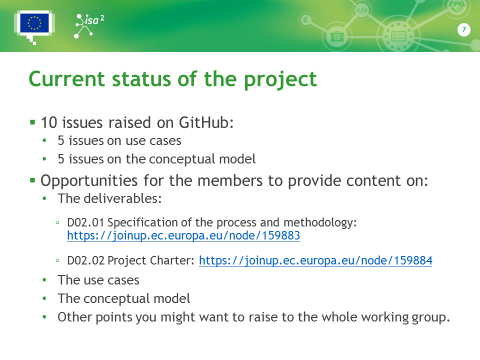
# Annex I - Introduction slides

Figure 1: Introduction slide



# Annex II – Current status of the project

Figure 2: Current status



# Annex III – Three existing use cases

Figure 3 Data journalism

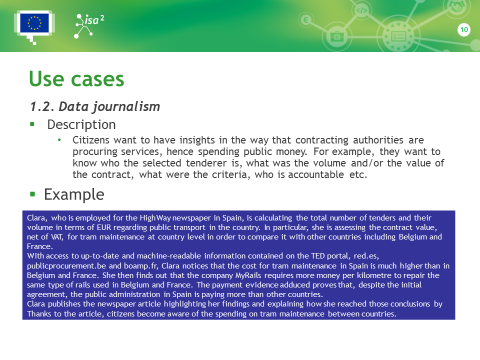


Figure 4: Automated matchmaking

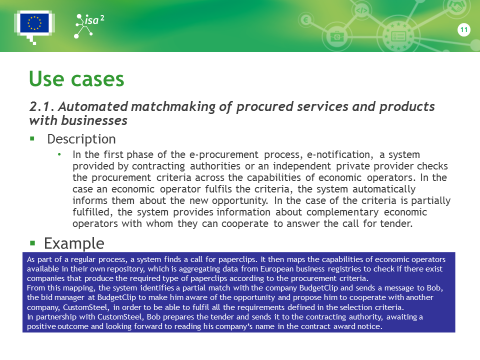
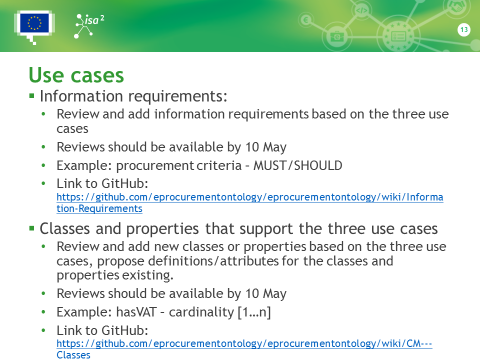


Figure 5: Verifying VAT payments



Figure 6: Information requirements, classes and properties



# Annex IV – Conceptual model

The data model is available here: <https://camo.githubusercontent.com/12f3f88a2aed596abe80fbfccd1327a7dbb17884/68747470733a2f2f6a6f696e75702e65632e6575726f70612e65752f73697465732f64656661756c742f66696c65732f636f6e6365707475616c5f6d6f64656c5f756d6c5f6469616772616d5f76302e30342e767364785f2e6a7067>

Figure 7: Visualisation

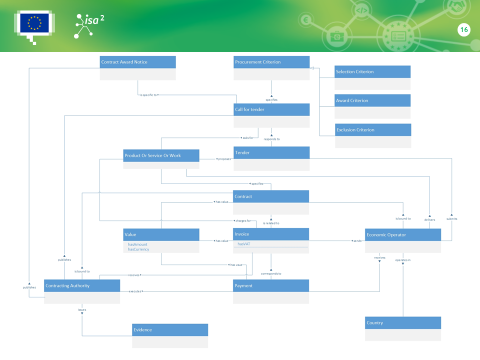


Figure 8: Modelling issues



# Annex V – Additional use cases

Figure 9: e-tendering process

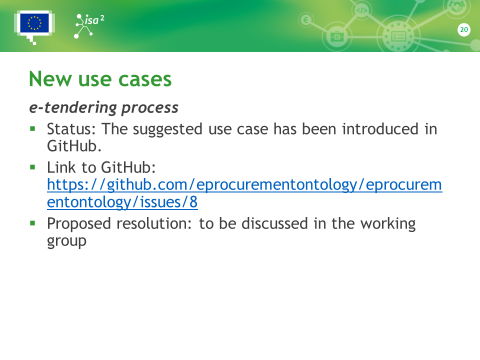


Figure 10: e-procurement procedure

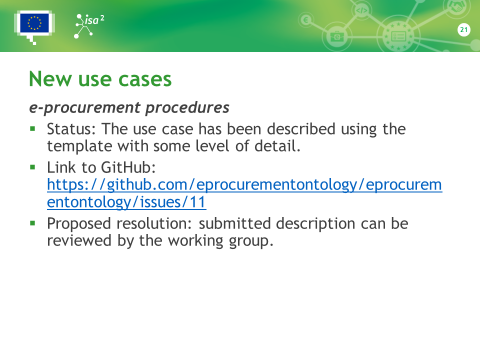


Figure 11: Financial exclusion grounds

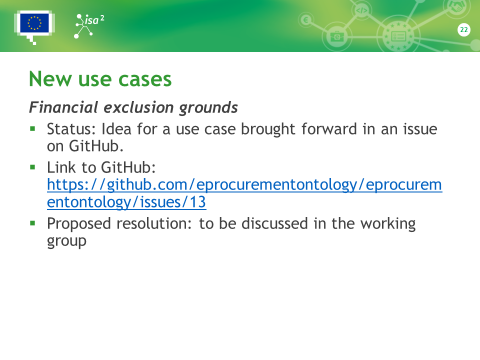


Figure 12: Public understandability (1.1)

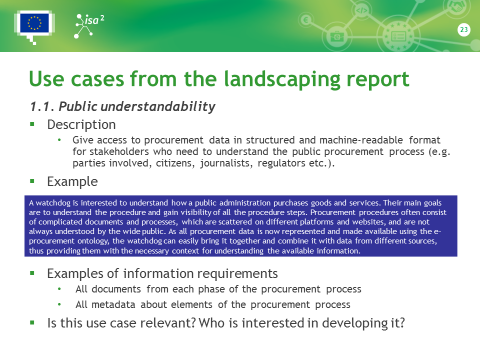


Figure 13: Monitor the money flow (1.3)

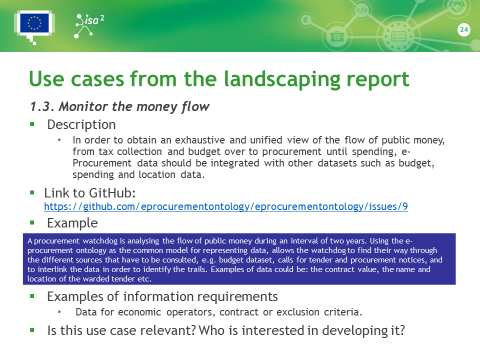


Figure 14: Detect fraud and compliance with procurement criteria (1.4)

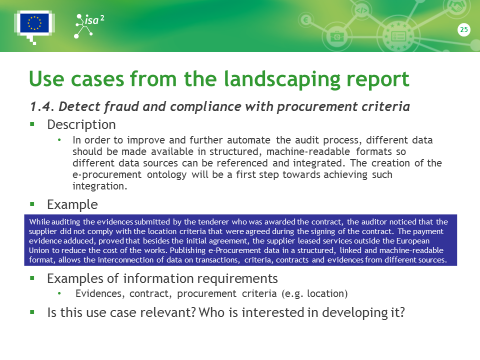


Figure 15: Audit procurement process (1.5)

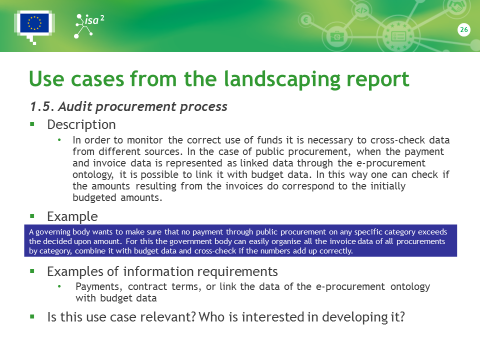


Figure 16: Cross-validate data (1.6)



Figure 17: Automated validation of procurement criteria (2.2)

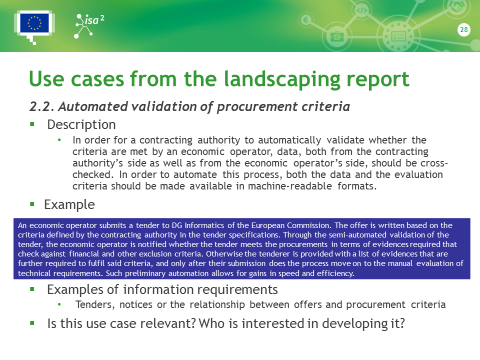


Figure 18: Alerting services (2.3)

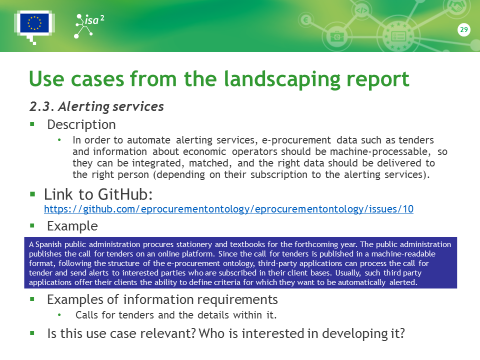


Figure 19: Data nalytics (2.4)

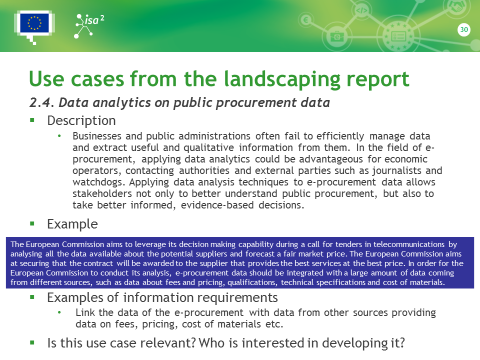


Figure 20: Introduce automated classification systems (3.2)

