D02.01.01.1 Core Criterion and Core Evidence Vocabulary
This study was prepared for the ISA Programme by:

PwC EU Services

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1. INTRODUCTION

1.1. Context and problem statement

Decision-making is one of the most common activities within the public sector that span across all different public processes, operations and services. In some cases, decisions are based on intuition, in other cases on evidence or on a combination of both others. For an official decision to be made in the public sector, a set of criteria, which usually derives from legislation, have to be assessed and fulfilled by specific pieces of evidence, which are usually documented in administrative documents and base registries. For example, an official decision has to be made in order to purchase new equipment for hospitals, to hire new staff, to contract a new study, or to give a grant to a newly found business.

Take for instance the case of public procurement, which included selecting eligible bidders in an electronic tendering process, assessing the bids and scoring them, or excluding a candidate for a specific position. All these processes involve a requestor setting criteria, and the parties willing to participate reply with specific evidence, which they believe that proves their capability to fulfil the criteria. The requestor assesses the responses either accepting or rejecting them, and scores each response to finally select the most suitable based on the criteria and the provided evidence.

Despite being broadly used across organisations, sectors and borders, data about criteria and evidence is not harmonised and is understood differently in different context. Returning back to the example of public procurement, the following challenges are hampering the automated processing and the reuse of data about criteria and evidence:

- Complex environment: Data about criteria and evidence is found in many different sectors and countries, which often define and represent them differently. As the number of cross-border (or cross-sector) exchanges of data increases, there is a need to harmonise the criteria and evidences in order to work towards a Digital Single Market
- Number of actors involved: There are many different actors involved. Not only the sender and the receiver but also third parties providing evidentiary documentation. These parties are often in different levels of technical maturity.
- Large number of types of criteria: There are many different types of criteria, and they can require different types of responses: Exclusion grounds, financial statements, technical experience, organization features, required attestations are examples of criteria that should be described using a common vocabulary.
1.2. Proposed solution

By using the Core Criterion and Core Evidence Vocabulary (CCCEV), public organisations have the potential to implement new capabilities in their information systems to:

- Allow users picking up criteria from common repositories, standardising the criteria used in different sectors and domains.
- Enable the automatic response to criteria, lowering the language barrier for cross-border processes and exchanges.
- Automatic assessment through the analysis of criteria and provided evidences.
- Promote the standardisation of criteria and evidences among attestation and certificate providers, and across different Member States.
- Increase the transparency of the assessment and therefore the selection processes, reducing complaints and subjective assessment.

Section 2 describes a set of use cases that can benefit from the CCCEV.

1.3. Scope

The CCCEV contains two basic and complementary core concepts:

- the criterion, something used as a reason for making a judgement or decision, e.g. a requirement set in a public tender or a condition that has to be fulfilled for a public service to be executed; and
- the evidence, something which shows that something else exists or is true, in particular an evidence is used to prove that a specific criterion is met.

Wherever possible, the CCCEV will reuse existing vocabularies and, as a result, may not define any new terms of its own. It will define how existing terms should be used and may suggest specific code lists to be used as values for specific properties.

1.4. Process and methodology

This common data model has been defined as a core vocabulary for criteria and evidences. A Core Vocabulary is a simplified, reusable, and extensible data model that captures the fundamental characteristics of an entity in a context-neutral fashion. Well-known examples of existing Core Vocabularies include the Dublin Core Metadata Set¹.

Such Core Vocabularies are the starting point for agreeing on new semantic interoperability assets and defining mappings between existing assets. Semantic interoperability assets that map to or extend such Core Vocabularies are the minimum required to guarantee a level of cross-domain and cross-border interoperability that can be attained by public administrations.

¹ http://dublincore.org/documents/dcmi-terms/
The work has been conducted according to the ISA process and methodology for developing Core Vocabularies [2]. The process and methodology provides guidance in two domains. First, the **process** describes how consensus can be reached among stakeholders and domain experts so that the vocabulary is recognised as meeting its design goals, leading to endorsement by Member States. Second, the **methodology** describes how the core vocabulary is specified following best practices for selecting, reusing, developing and presenting concepts. Table 1 provides an overview of the steps in the process and methodology.

The concrete application of the process and methodology as well as an action plan for the development of the Criterion and Evidence Core Vocabulary are attached in section xxxx.

### Table 1: Process and Methodology Overview

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### 1.5. Structure of this document

This document consists of the following sections.

- Section 2 defines the main use cases that drive the specification of the Core Vocabulary.
- Section 3 collects the information requirements for criteria and evidences.
- The classes and properties defined for the vocabulary are identified in section 4.
- Section 6 contains the Conformance Statement for this Core Vocabulary.
- Section 8 describes specific accessibility and multilingualism aspects.
2. **Use cases**

The Core Criterion and Core Evidence Vocabulary (CCCEV) is designed to meet specific needs of public administrations, businesses and citizens across the European Union. These needs are described in the use cases below.

2.1. **Facilitate development of interoperable information systems**

Systems dealing with criteria and evidences are often based on manual processes. A Core Vocabulary for describing criteria and evidences can drive the development of new information systems to support different public processes and services, including:

- **Public procurement information systems** where criteria for selection and exclusion of candidates and awarding criteria could be defined.
- **e-Tendering platforms** facilitating the link between the criteria defined by the public organizations and the responses and evidences from private bidders.
- **E-learning systems** that could use criterion and criterion responses to define exams for the students.
- **HR systems** where candidates and their qualifications could be stored and analysed using this common standard.

The use of common vocabularies to describe criteria and evidences facilitates the development of information systems and improves their interoperability.

2.2. **Create a repository of reusable criteria in machine-readable formats**

Standardising criterion and evidence allows for the creation of lists of criteria per domain, sector or country. Some of these criteria can then be reused by different organizations following a similar process. To maximise reuse, criteria should be encoded in machine-readable formats.

An example could be the European Single Procurement Document, where a collection of standardised criteria is created and exchanged with potential tenderers in order to assess whether they can be qualified.

The use of common vocabularies promotes the creation of a repository of criteria and evidence information.
2.3. Automate the assessment of criteria

Nowadays, most of the assessment processes are done manually, gathering responses and individually scoring or assessing them. This activity is time-consuming, error-prone and could be seen as non-transparent.

The formal language for criteria and evidences defined by the CCCEV would allow the creation of systems capable of treating the criteria responses and evidence data automatically, which would facilitate the objective and automatic assessment support for people assessing or qualifying.

The Core Vocabulary describing the criterion responses allows systems to easily compare the information collected from different parties and enables automatic assessment of the responses for a specific criterion.

2.4. Automate scoring of responses

When criteria are weighted, criteria responses could be ordered by the receiving systems. This use case is relevant for instance in electronic tendering when assessing criteria are defined with their own weight. The receivers of the criterion responses shall assess and order them according to their level of compliance to the defined criteria and their weight.

The Core Vocabulary can help systems ordering the received responses based on the automatic assessment of the received criterion responses after applying the assigned weight.

Weighting criteria, the assessment can be followed by an automate scoring of the responses provided by different parties.

2.5. Promote cross-border participation in public procurement

Cross border processes in Europe have the challenge of the different language domains. There are multiple languages in Europe, and for criterion-response processes to be deployed cross-border, criteria should be understood despite the language of the receiver.

The Core Vocabulary allows for the creation of coded lists of criteria. Coded lists of criteria can potentially remove the language barrier for cross-border business processes.
The use of the Core Vocabulary for electronic criterion and evidence allows for removing language barriers **improving the cross border exchange of information**, and thus the cross-border participation in pan-European selection processes.

### 2.6. Calculating statistics

Statistical offices can gather information and generate accurate statistics using the formally defined criterion and evidences through this Core Vocabulary. They can collect structured information from public repositories such as the Publications Office and analyse the most used criteria, the number of criteria defined for a particular type of process or even identify criteria preventing participation.

High quality statistics can help driving policies on electronic public procurement or other sectors where criteria and evidences have special relevance.

Standardising data for criteria, criterion responses and evidences allows **calculating statistical information** such as the most common used criteria for a given process or the most relevant evidences.

### 2.7. Create a registry of mappings of criteria

The Core Vocabulary enables the creation of a registry of mappings of criteria in different countries and jurisdictions.

For example, a specific criterion in one member state can be fulfilled by an organisation providing two different evidences. However, an organisation from another member state is not able to provide neither of these two evidences, as they are country-specific. Organisations from foreign member states can use another set of evidences to proof the fulfilment of the criterion.

Using the Core Vocabulary, it will be possible to create a registry of mappings to allow **crosschecking of the criteria with the evidences** of each particular member state.
3. REQUIREMENTS

Based on the use cases set out above the following requirements can be defined:

**R1** Criterion must be described and uniquely identified, and it may have a weight in order to allow for automatic scoring.

**R2** Criterion may be coded in order to provide for automatic translation.

**R3** A criterion may contain an indicator defining whether it is fulfilled or not.

**R4** Criterion may be broken down into sub-criteria. Each sub-criterion is a criterion by itself.

**R5** The relationship between a criterion and the formal framework from which it derives may be specified.

**R6** Formal frameworks must be described with elements such as a name, a description, a jurisdiction and a URI where further information can be found.

**R7** Criterion must be validated in terms of one or more groups of requirements. In order to be valid, a criterion must be valid at least according to one of these groups or requirements.

**R8** Each group of requirements must be uniquely identified.

**R9** A group of requirements must be composed or one or more atomic criterion requirements.

**R10** Basic elements of the criterion requirement must be an identifier, the description, a code type, the data type of the response and a measure.

**R11** The measure of the response may be a range of values or a threshold for which the criterion requirement shall be considered valid.

**R12** A criterion requirement may refer to a period where it is applicable.

**R13** A criterion requirement may point to suggested evidentiary documents that can proof its fulfilment. For instance, a candidate evidentiary document can be a declaration on oath.

**R14** A criterion requirement response must contain elements such as the reference to the criterion requirement, the value of the response or the evidence (a set of resources that can support the verification of fulfilment of the criterion).

**R15** An evidence must contain an identifier, a description and a type. It may refer to a document or a registry URI.

**R16** An evidence may identify the agency or organism that has issued it.
4. **Existing Solutions**

This specification is based on different initiatives and projects that have been working on the modelling of Criterion and Evidences.

4.1. **ESPD Data Model**

The ESPD Data Model defines the elements and properties of the European Single Procurement Document that will be used in public e-Procurement to provide qualification requirements and qualification evidences to become eligible for participating in a public procurement process.

4.2. **CEN BII Data Models**

The CEN Business Interoperable Interfaces Workshop Agreements have been defining Profiles that describe process choreography between two parties that exchange information using business transactions. These business transactions contain among others classes representing criteria and criteria responses.

4.3. **CPOV**

The Core Public Organisation Vocabulary defines terms and classes that can be reused in the CCCEV. The organisations issuing the evidences can be defined using the terms defined in the CPOV known as Formal Organisation. The legal terms that drive the definition of a criterion can be defined in the CPOV as the Formal Framework.

4.4. **Dublin Core DCMI Type Vocabulary**

The DCMI Type Vocabulary provides a general, cross-domain list of approved terms that may be used as values for the Resource Type element to identify the genre of a resource. Evidences are resources and can have associated metadata.
5. **CORE CRITERION AND CORE EVIDENCE VOCABULARY**

The Core Criterion and Core Evidence Vocabulary is depicted in Figure 1 CCCEV Data Model.

5.1. **Data Model for the CCCEV**

![CCCEV Data Model Diagram]

*Figure 1 CCCEV Data Model*
5.2. **Class: Criterion**

The Criterion class represents the rule or principle used to judge, evaluate or assess something. One criterion may be broken down into several sub-criterions that are described using the same properties and relationships.

The Criterion class has the properties described below.

5.2.1. **Property: criterion identifier [1..1]**

This property provides an identifier for the criterion allowing its unique identification in its context of use.

5.2.2. **Property: name [0..1]**

A criterion may have a name. The translation of the criterion to different languages shall be done using the criterion type.

5.2.3. **Property: description [0..1]**

Criterion may be textually described using this property. The description can be used to add details of the criterion.

5.2.4. **Property: type [1..1]**

Criterion must be defined in terms of a coded type in order to allow for automatic translation. The types of criterion shall be based on controlled vocabularies.

5.2.5. **Property: weight [0..1]**

Criterion may have a weight to provide for automatic scoring of the criterion responses.

5.2.6. **Property: sub Criterion [0..n]**

A criterion may be broken down in several sub-criteria. Each sub-criterion is described with the same properties and relationships used to describe a criterion.

5.2.7. **Property: has Formal Framework [0..1]**

A legal text or any other formal framework may define the legal basis of the criterion.

5.2.8. **Property: fulfilled by Requirement Group [1..n]**

Criterion must be fulfilled by means of one or several options. These options are defined as groups of requirements. There might be different ways to validate a single criterion. Each requirement group contains all the requirement criteria that can be used to fulfil the criterion.

5.3. **Class: Formal Framework**

A criterion may describe the formal framework from where it is derived.
This class and its properties are defined in the Core Public Service Vocabulary and may represent legislation or official policy that leads to a change event, including the establishment of the organisation.

5.4. **Class: Requirement Group**

A criterion can be satisfied using different options. The Requirement Group class is used to wrap the set of criteria requirements that validate a Criterion. When there is more than one option, at least one of them has to provide valid responses with evidences in order for the whole criterion to be valid.

A Criterion must have one or many Requirement Groups.

5.4.1. **Property: requirement group identifier [1..1]**

A requirement group must be identified.

5.4.2. **Property: has Criterion Requirement [1..n]**

A requirement group is a collection of criterion requirements. At least, a requirement group contains one criterion requirement.

5.5. **Class: Criterion Requirement**

A Criterion Requirement is an atomic requirement for a criterion. Some criteria shall be expressed with several atomic requirements. A criterion requirement can specify an expected value or a range of threshold values.

The Criterion Requirement may apply to a certain period of time. It also can provide a list of candidate evidences that the responder can use to prove the criterion requirement.

5.5.1. **Property: requirement identifier [1..1]**

A Criterion Requirement must have a requirement identifier.

5.5.2. **Property: name [0..1]**

A Criterion Requirement may have a name.

5.5.3. **Property: description [0..1]**

A Criterion Requirement may have a description.

5.5.4. **Property: expected data type [1..1]**

Each Criterion Requirement shall describe the expected data type that the response has to provide.

5.5.5. **Property: expected value [0..1]**

This property is used to define the expected value that the responder has to provide in the criterion response.
5.5.6. **Property: maximum expected value [0..1]**
When the value of the criterion response must fall into a range or it shall be lesser than a threshold, this property is used to define the maximum expected value.

5.5.7. **Property: minimum expected value [0..1]**
When the value of the criterion response must fall into a range or it shall be larger than a specific threshold, this property is used to define the minimum expected value.

5.5.8. **Property: applicable in period [0..1]**
If the Criterion Requirement applies to a specific period, this class is used to describe it.

5.5.9. **Property: candidate evidence [0..n]**
A Criterion Requirement may point to a list of candidate of evidence that can prove the criterion requirement is fulfilled.

5.6. **Class: Requirement Response**
Requirement Response is the class used to define the actual response to a criterion requirement. It provides the value for the specific requirement and the period to which it applies. It refers to the criterion requirement that validates.

5.6.1. **Property: response identifier [1..1]**
A Requirement Response must have a response identifier.

5.6.2. **Property: name [0..1]**
A Requirement Response may have a name.

5.6.3. **Property: description [0..1]**
A Requirement Response may have a description.

5.6.4. **Property: value [1..1]**
The Requirement Response shall contain the value that responds to the criterion requirement. In order to fulfill the criterion requirement, when there is an expected value or an expected threshold, the value should be equal to the expected value or within the range established by the thresholds range.

5.6.5. **Property: applies to period [0..1]**
If the Requirement Response applies to a specific period, this class is used to describe it.

5.6.6. **Property: validates criterion requirement [1..1]**
The Requirement Response must refer to the Criterion Requirement it is actually replying to.
5.6.7.  Property: proven by evidence [0..1]
The Requirement Response may provide the evidence that proves the response, and this the criterion requirement.

5.7.  Class: Period
Period is a generic class used to specify a period of time. The current definition of the period defines an initial date and time and a final date and time.

5.7.1.  Property: initial date [1..1]
Defines the initial date of the period.

5.7.2.  Property: initial time [0..1]
Defines the initial time of the period.

5.7.3.  Property: final date [1..1]
Defines the final date of the period.

5.7.4.  Property: final time [0..1]
Defines the final time of the period.

5.8.  Class: Evidence
The Evidence class contains information which shows that a criterion requirement exists or is true, in particular an evidence is used to prove that a specific criterion is met.

An evidence can have the following properties.

5.8.1.  Property: evidence identifier [1..1]
An Evidence must have an evidence identifier.

5.8.2.  Property: name [0..1]
An Evidence may have a name.

5.8.3.  Property: description [0..1]
An Evidence may have a description.

5.8.4.  Property: type [0..1]
As with the Criterion Requirements, the Evidences have the property type to allow for translation services.

5.8.5.  Property: language [0..1]

5.8.6.  Property: issued by Formal Organization [0..1]
5.8.7. Property: refer to Document Reference [0..1]

5.9. Class Document Reference

5.9.1. Property: document identifier [0..1]
5.9.2. Property: URI [0..1]

5.10. Class: Formal Organization

5.10.1. Property: administrative name [0..1]
5.10.2. Property: alternative name [0..n]

5.11. Controlled vocabulary

Criterion is a rule or principle that is used to judge, evaluate or test something.

Criterion requirement group is the set of requirements that must be fulfilled together to validate a criterion.

Criterion requirement is an atomic requirement for a criterion.

Criterion response is an assertion that responds to a criterion.

Evidence is any resource that can document or support a criterion response.

Coverage The extent or scope of the content of the resource. Coverage will typically include spatial location (a place name or geographic co-ordinates), temporal period (a period label, date, or date range) or jurisdiction (such as a named administrative entity). Recommended best practice is to select a value from a controlled vocabulary (for example, the Thesaurus of Geographic Names [Getty Thesaurus of Geographic Names, http://www.getty.edu/research/tools/vocabulary/tgn/]). Where appropriate, named places or time periods should be used in preference to numeric identifiers such as sets of co-ordinates or date ranges.

Guidelines for content creation:

Whether this element is used for spatial or temporal information, care should be taken to provide consistent information that can be interpreted by human users, particularly in order to provide interoperability in situations where sophisticated geographic or time-specific searching is not supported. For most simple applications, place names or coverage dates might be most useful. For more complex applications, consideration should be given to using an encoding scheme that supports appropriate specification of information, such as DCMI Period, DCMI Box or DCMI Point.
Examples:

Coverage="1995-1996"
Coverage="Boston, MA"
Coverage="17th century"
Coverage="Upstate New York"

[Add more as necessary]
6. EXAMPLES

This section provides some examples of criterion and evidences for illustration purposes.

6.1. Simple examples

This section contains a set of simple examples that illustrate the use of the CCCEV data model. The examples explain how to get admitted to a movie in a cinema.

The first scenario describes the usual way to enter into the cinema, having paid an entry fee. In this first example there is a single requirement and a single evidence. Using the CCCEV, the scenario could be depicted with the following elements:

The cinema owner establishes the criterion:

- Criterion: To get admitted to the movie you have to pay a fee.
- Criterion requirement: To have bought a ticket for the fee.

The person willing to see the movie has to prove he fulfils the requirement:

- Requirement response: I have paid the fee and I have got a ticket
- Evidence: The actual ticket

This is a simple case where there is no need for complex structures.

A second scenario describes an additional way to get admitted into the cinema: there is a free entrance for accredited members of the press. In this case, you have two options, either you have paid the ticket or you can demonstrate you are an accredited member of the press.

The criterion has now changed to support two different options. The options are packaged in different groups, and the person willing to enter into the cinema has to provide a response and evidences on one of them.

- Criterion: To get admitted to the movie you have to pay a fee or to be an accredited member of the press.
- Requirement group: First option
  - Criterion requirement: To have bought a ticket for the fee.
- Requirement group: Second option
  - Criterion requirement: To be accredited as a member of the press

The person willing to see the movie has to prove he fulfils one requirement group or the other:

- Requirement response: I am member of the press and I have an accreditation.
- Evidence: The press accreditation
In this case, the person will enter the cinema because he fulfils the second option, he is a member of the press and has an accreditation.

The third scenario adds yet another requirement. The movie is not allowed for people under eighteen. In this case, there is another requirement that has to be fulfilled.

- **Criterion:** To get admitted to the movie you have to pay a fee and be more than eighteen or to be an accredited member of the press.
- **Requirement group:** First option
  - **Criterion requirement:** To have bought a ticket for the fee.
    - **Candidate evidence:** The ticket
  - **Criterion requirement:** To be over eighteen
    - **Candidate evidence:** ID card
    - **Candidate evidence:** Passport
- **Requirement group:** Second option
  - **Criterion requirement:** To be accredited as a member of the press
    - **Candidate evidence:** Press accreditation

In this case, the first option has two different criteria that must be fulfilled at the same time: The person must have the ticket and has to be over eighteen. The example of the criterion includes a new concept, the candidate evidences, where the cinema owner describes which elements can be used to prove each criterion requirement.

- **Requirement response:** I have paid the fee and I have got a ticket
- **Evidence:** The actual ticket
- **Requirement response:** I am 23 years-old
- **Evidence:** The ID card

The latest example depicts the most complex example, where there are different options to fulfil the criterion, and one of the options has more than one requirement.

### 6.2. Exclusion criterion

This example describes an exclusion criterion that can be found in a procurement process. The example populates the properties for all the classes to illustrate their use. Each section below defines the contents of one of the classes of the CCCEV data model.

#### 6.2.1. **Criterion**

The criterion says that the organisations participating in a criminal organisation shall be excluded from the tendering process except if they can provide evidences that they have demonstrated self-cleaning.

The table below contains the Criterion properties for this class:
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>005eb9ed-1347-4ca3-bb29-9bc0db64e1ab</td>
</tr>
<tr>
<td>Name</td>
<td>Participation in a criminal organisation</td>
</tr>
<tr>
<td>Description</td>
<td>The economic operator itself or any person who is a member of its administrative, management or supervisory body or has powers of representation, decision or control therein has not been the subject of a conviction by final judgment for participation in a criminal organisation, by a conviction rendered at the most five years ago or in which an exclusion period set out directly in the conviction continues to be applicable. As defined in Article 2 of Council Framework Decision 2008/841/JHA of 24 October 2008 on the fight against organised crime (OJ L 300, 11.11.2008, p. 42).</td>
</tr>
<tr>
<td>Coded Type</td>
<td>Exclusion.Criminal_conviction</td>
</tr>
<tr>
<td>Formal framework</td>
<td>See 6.1.2</td>
</tr>
<tr>
<td>Requirement group</td>
<td>See 6.1.3</td>
</tr>
</tbody>
</table>

The coded type contains a value from a controlled vocabulary that can be used to ensure the criterion can be translated to different languages.

### 6.2.2. Formal framework

In electronic public procurement, the legislation drives the exclusion criteria. The legislation is described using the Formal framework class. This example describes the EU Directive 2014/24/EU.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>005eb9ed-1347-4ca3-bb29-9bc0db64e1ab-000211</td>
</tr>
<tr>
<td>Description</td>
<td>Directive 2014/24/EU</td>
</tr>
<tr>
<td>Language</td>
<td>English</td>
</tr>
<tr>
<td>Territorial application</td>
<td>Europe</td>
</tr>
<tr>
<td>Jurisdiction level</td>
<td>EU_DIRECTIVE</td>
</tr>
</tbody>
</table>
6.2.3. Requirement group

The requirement group class contains an identifier and a set of criterion requirements.

The requirement group represents an option. In our example, there are two different option and their properties will be an identifier and a set of Criterion requirements that describe each option:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>7c637c0c-7703-4389-ba52-02997a055bd7</td>
</tr>
<tr>
<td>Criterion requirement</td>
<td>See 6.1.4.</td>
</tr>
</tbody>
</table>

6.2.4. Criterion requirement

Each requirement group has a set of criterion requirements. In this example, the first requirement group contains only one single requirement.

This first Requirement Group is the option that has to be chosen by the parties that have never been convicted. In this case, replying "true" to this criterion is enough to fulfil the main criterion.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>4157c56b-754b-4f92-b4b1-0256b9a472d2</td>
</tr>
<tr>
<td>Description</td>
<td>The economic operator itself or any person who is a member of its administrative, management, or supervisory board or has powers of representation, decision or control therein has not been the subject of a conviction by final judgement for participation in a criminal organisation, by a conviction rendered at the most five years ago or in which an exclusion period set out directly in the conviction continues to be applicable as defined in Article 2 of Council Framework Decision 2008/841/JHA of 24 October 2008 on the fight against organised crime (OJ L 300, 11.11.2008, p. 42)</td>
</tr>
<tr>
<td>Expected data type</td>
<td>Boolean</td>
</tr>
</tbody>
</table>

The second requirement group contains a set of six different criterion requirements that may also be used to make the whole criterion valid. Those parties that having been convicted, have been clearing it up shall use this option.

Most of the requirements are provided textually, which means that it will not be possible to automatically assess the responses.
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>4157c56b-754b-4f92-b4b1-0256b9a472d1</td>
</tr>
</tbody>
</table>

**Description:**
The economic operator itself or any person who is a member of its administrative, management, or supervisory board or has powers of representation, decision or control therein **has been** the subject of a conviction by final judgement for participation in a criminal organisation, by a conviction rendered at the most five years ago or in which an exclusion period set out directly in the conviction continues to be applicable as defined in Article 2 of Council Framework Decision 2008/841/JHA of 24 October 2008 on the fight against organised crime (OJ L 300, 11.11.2008, p. 42)

**Expected data type:** Boolean

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>ecf40999-7b64-4e10-b960-7f8ff8674cf6</td>
</tr>
</tbody>
</table>

**Description:** Provide the date of conviction

**Expected data type:** text

Note that the criterion requirements define the expected data type as text data.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>7d35fb7c-da5b-4830-b598-4f347a04dceb</td>
</tr>
</tbody>
</table>

**Description:** Provide the reason of the conviction

**Expected data type:** text

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>c5012430-14da-454c-9d01-34cedc6a7ded</td>
</tr>
</tbody>
</table>

**Description:** Provide the name of the convicted persons.

**Expected data type:** text

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>9ca9096f-eddd-4f19-b6b1-b55c83a2d5c8</td>
</tr>
</tbody>
</table>
**6.2.5. Requirement response**

In this example, the persons replying to the criterion can use two different options:

1) Use the first requirement group and state that they have not been convicted, or

2) Fail the first requirement group as someone has been convicted but still provide enough additional information so the criterion can be considered as valid.

In case the responder fulfils the initial requirement group, the requirement response will be:

- **Response identifier**: 3242-3432-45565-b4f942
- **Criterion requirement identifier**: 4157c56b-754b-4f92-b4b1-0256b9a472d2
- **Description**: The economic operator itself or any person who is a member of its administrative, management, or supervisory board or has powers of representation, decision or control therein **has not been** the subject of a conviction by final judgement for participation in a criminal organisation, by a
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response identifier</strong></td>
<td>3242-3432-45565-b4i943</td>
</tr>
<tr>
<td><strong>Criterion requirement identifier</strong></td>
<td>ecf40999-7b64-4e10-b960-7f8ff8674cf6</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>The economic operator itself or any person who is a member of its administrative, management, or supervisory board or has powers of representation, decision or control therein <strong>has been</strong> the subject of a conviction by final judgement for participation in a criminal organisation, by a conviction rendered at the most five years ago or in which an exclusion period set out directly in the conviction continues to be applicable as defined in Article 2 of Council Framework Decision 2008/841/JHA of 24 October 2008 on the fight against organised crime (OJ L 300, 11.11.2008, p. 42)</td>
</tr>
<tr>
<td><strong>Value</strong></td>
<td>true</td>
</tr>
</tbody>
</table>

The recipient of the criterion response will be able to automatically assess the reply when the above requirement group is met.

If the responder does not fulfil the initial requirement group, he will reply with the following requirement responses associated with the requirement criterion of the second requirement group.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response identifier</strong></td>
<td>3242-3432-45565-b4i944</td>
</tr>
<tr>
<td><strong>Criterion requirement identifier</strong></td>
<td>7d35fb7c-da5b-4830-b598-4f347a04dceb</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Provide the date of conviction</td>
</tr>
<tr>
<td><strong>Value</strong></td>
<td>2013-01-01</td>
</tr>
<tr>
<td>Property</td>
<td>Value</td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>Response identifier</td>
<td>3242-3432-45565-b4i946</td>
</tr>
<tr>
<td>Criterion requirement identifier</td>
<td>c5012430-14da-454c-9d01-34cedc6a7ded</td>
</tr>
<tr>
<td>Description</td>
<td>Provide the reason of the conviction</td>
</tr>
<tr>
<td>Value</td>
<td>This economic operator was accused and convicted of Espionage in Buenos Aires by an Argentinian Court.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response identifier</td>
<td>3242-3432-45565-b4i948</td>
</tr>
<tr>
<td>Criterion requirement identifier</td>
<td>7d35fb7c-da5b-4830-b598-4f347a04dceb</td>
</tr>
<tr>
<td>Description</td>
<td>Provide the name of the convicted persons.</td>
</tr>
<tr>
<td>Value</td>
<td>The convicted party was the ACME's branch in Buenos Aires.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response identifier</td>
<td>3242-3432-45565-b4i950</td>
</tr>
<tr>
<td>Criterion requirement identifier</td>
<td>c5012430-14da-454c-9d01-34cedc6a7ded</td>
</tr>
<tr>
<td>Description</td>
<td>Length of the period of conviction</td>
</tr>
<tr>
<td>Value</td>
<td>Till the end of the year 2013</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response identifier</td>
<td>3242-3432-45565-b4i952</td>
</tr>
<tr>
<td>Criterion requirement identifier</td>
<td>7d35fb7c-da5b-4830-b598-4f347a04dceb</td>
</tr>
<tr>
<td>Description</td>
<td>Have measures been taken to demonstrate the self-cleaning?</td>
</tr>
<tr>
<td>Value</td>
<td>true</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response identifier</td>
<td>3242-3432-45565-b4i954</td>
</tr>
<tr>
<td>Criterion requirement identifier</td>
<td>c5012430-14da-454c-9d01-34cedc6a7ded</td>
</tr>
<tr>
<td>Description</td>
<td>Description of the measures taken to demonstrate &quot;self-</td>
</tr>
</tbody>
</table>
We repealed the decision in front of an International Court. This Court decided that ACME was innocent. See evidences attached.

In case the first requirement group is not met, then the recipient of the criterion response will have to manually assess the textual responses provided to each criterion requirement in the second requirement group.

The last response to the final criterion requirement points to an evidence, other requirement responses should contain also the proper evidences in order to prove the response.

### 6.2.6. Evidence

The example uses an evidence to prove the last response provided.

The evidence points to a court decision from the Argentinian Justice and refers to the place where this evidence can be actually found. The properties of the evidence are as follows:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence identifier</td>
<td>3242-3432-45565-b4i954</td>
</tr>
<tr>
<td>Name</td>
<td>Court decision</td>
</tr>
<tr>
<td>Language</td>
<td>Spanish</td>
</tr>
<tr>
<td>Document reference</td>
<td>See 6.1.7</td>
</tr>
</tbody>
</table>

### 6.2.7. Document Reference

The evidence points to a reference that in this case is a URL to a Court decision.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to</td>
<td><a href="http://www.dipublico.org/jurisprudencia/internacional/corte-terminante-de-justicia-internacional/">http://www.dipublico.org/jurisprudencia/internacional/corte-terminante-de-justicia-internacional/</a></td>
</tr>
</tbody>
</table>

### 6.3. Selection criterion

This second complex example describes a selection criterion that can be found in a procurement process. The criterion establishes that the turnover for the last three financial years has to be more than a certain minimum threshold and that it has a weight of 60% of the total score.
6.3.1. **Criterion**

The criterion refines the weight for this criterion. As in the previous case, the coded type can be used to identify the type of criterion and be able to translate it into different languages.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>499efc97-2ac1-4af2-9e84-323c2ca67747</td>
</tr>
<tr>
<td>Name</td>
<td>General yearly turnover</td>
</tr>
<tr>
<td>Description</td>
<td>The economic operator's general yearly turnover for the last three financial years.</td>
</tr>
<tr>
<td>Coded Type</td>
<td>Selection.Economic_Financial_Standing</td>
</tr>
<tr>
<td>Weight</td>
<td>60%</td>
</tr>
<tr>
<td>Requirement group</td>
<td>See 6.2.2</td>
</tr>
</tbody>
</table>

6.3.2. **Requirement group**

In this example, there is only one requirement group as there are no options, and every requirement in the group will contain a criterion requirement defining the minimum threshold value for the turnover and the period this maximum should be applied to.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>5cff730f-cc50-4177-b2d9-107eb40a686c</td>
</tr>
<tr>
<td>Criterion requirement</td>
<td>See 4.1.4.</td>
</tr>
</tbody>
</table>

6.3.3. **Criterion requirement**

There are three different criterion requirements in this requirement group. One per each financial year, and they have both a minimum threshold value and an applicable period.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>4157c56b-754b-4f92-b4b1-0256b9a472d2</td>
</tr>
<tr>
<td>Description</td>
<td>Minimum financial turnover in Euros for 2013.</td>
</tr>
<tr>
<td>Expected data type</td>
<td>Numeric</td>
</tr>
<tr>
<td>Minimum expected value</td>
<td>100000</td>
</tr>
<tr>
<td>Applicable in period</td>
<td>See 6.2.4</td>
</tr>
</tbody>
</table>
These three criterion requirements provide a minimum expected value per each financial year.

### 6.3.4. Period

Each criterion requirement has an applicable period. Similarly, the requirement response also refers to the applicable period. The Period class is used to define the financial year the requirement has to be applied to or belongs to respectively.

The table below describes as an example the Period class defining the financial year 2015.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial date</td>
<td>2015-01-01</td>
</tr>
<tr>
<td>Final date</td>
<td>2015-12-31</td>
</tr>
</tbody>
</table>

### 6.3.5. Requirement response

In this example, there are three response requirements, one per each criterion requirement. Every requirement response describes the turnover per each year.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>3242-3432-45565-b4i943</td>
</tr>
<tr>
<td>Criterion</td>
<td>4157c56b-754b-4f92-b4b1-0256b9a472d2</td>
</tr>
<tr>
<td>Requirement Identifier</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Minimum financial turnover in Euros for 2013</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>3242-3432-45565-b4i944</td>
</tr>
<tr>
<td>Criterion requirement Identifier</td>
<td>57cd25e9-a04f-45fa-a964-1dad9ee8335a</td>
</tr>
<tr>
<td>Description</td>
<td>Minimum financial turnover in Euros for 2014</td>
</tr>
<tr>
<td>Value</td>
<td>298000</td>
</tr>
<tr>
<td>Applies to period</td>
<td>See 6.2.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>3242-3432-45565-b4i946</td>
</tr>
<tr>
<td>Criterion requirement Identifier</td>
<td>0892e478-84f7-4dd7-b098-a75dfea30e85</td>
</tr>
<tr>
<td>Description</td>
<td>Minimum financial turnover in Euros for 2015</td>
</tr>
<tr>
<td>Value</td>
<td>344000</td>
</tr>
<tr>
<td>Applies to period</td>
<td>See 6.2.4</td>
</tr>
</tbody>
</table>

The recipient of the response will be able to automatically assess whether the values are higher than the minimum threshold established in the criterion and thus will be able to automatically score the response.
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8. Accessibility and Multilingual Aspects
ANNEXES