

Legal Transition Programme

***Moldova: Policy advice, legislative drafting and on-going support to the MTender Pilot in 2020.***

***Multi-criteria Online Real Time Automated evaluation***

***Workplan Id P2-T1-A2***

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**ABBREVIATIONS**

| **Term** | **Description** |
| --- | --- |
| CA | Contracting Authority |
| CCCEV | Core Criterion and Core Evidence Vocabulary |
| CN | Contract Notice |
| EO | Economic Operator |
| ESPD | European Single Procurement Document |
| MEAT | Most Economically Advantageous Tender |

**GLOSSARY:**

|  |  |
| --- | --- |
| **Term** | **Description** |
| MTender | MTender is an end-to-end eProcurement system implemented in Moldova that aims to cover the complete public procurement cycle. It is based on a multi‑platform networking digital procurement model, comprising a government‑operated web portal and the Open Data central database unit, which is networking with several commercial electronic platforms certified to support electronic tendering procedures for the public sector and commercial clients. |

# Introduction

## Aim of the document

This document provides the necessary information regarding the prequalification, qualification and evaluation phases of the procurement process.

The approach for prequalification and its related criteria (exclusion grounds and selection criteria) is based on the European Single Procurement Document (ESPD) and its data-exchange model based on the Core Criterion and Core Evidence Vocabulary (CCCEV) concept. This design allows for the future use of the ESPD service as a separate remote tool since the data models and definitions are the same.

The key aspects covered by this profile are:

* A Contracting Authority (CA) can use this profile to request the ESPD from Economic Operators (EOs) within the context of a procurement procedure.
* the profile can be used by the system services to request and/or reflect additional inputs, statements, agreed metrics, etc.

Beyond the scope of this profile are qualifications provided through a Virtual Company Dossier or through other qualification profiles containing the necessary evidence documents, as well as tendering.

## Pre-conditions

* A procurement process is underway, which began from the line in the annual procurement plan based on a described need and the sources of financing declared for such a need;
* the CA is preparing all the necessary documentation prior to the tendering.

## Background

Before the introduction of the ESPD in the EU Public Procurement Directive 2014/24/EC[[1]](#footnote-1), EOs were required to submit a number of documents in order to provide up-front evidence or certificates (e.g. proof of payment of taxes, judicial records, etc.) when taking part in a procurement process.

Article 59 of the EU Public Procurement Directive 2014/24/EC introduces the ESPD, which is a self-declaration document intended to provide preliminary evidence in public procurement procedures. The ESPD replaces certificates issued by public authorities or third parties involved in a procedure, and its’ main objective is to reduce the administrative burden by removing the need to produce a substantial number of certificates and documentation related to exclusion and selection criteria, and simplify the participation in public procurement procedures for both CAs and EOs. Only the winner of the tender will be required to provide the actual documents and evidences in order to be able to begin the execution of the contract. The ESPD covers:

* The request document, which is used by the CA to set out the exclusion and selection criteria, as well as particular requirements, that the EO will need to fulfil in the context of a specific tender;
* The response document, which is used by the EO to answer the questions and provide references to evidences in response to the criteria and requirements expressed by the CA in the request document.

When the EO is not a sole contractor (e.g. when it is part of a group such as a consortium, or when relying on subcontractors), all EOs involved in the tender are required to provide an ESPD, although the information to be provided in the response document will depend on the role of each EO.

The ESPD benefits from the CCCEV, which harmonises criteria and evidence and helps to make decisions based on them.

### ESPD

The ESPD self-declaration form replaces the requirement for the candidates and the tenderers to provide up-front evidence or certificates by allowing EOs to self-declare that they:

* Do not fall within a ground for exclusion;
* Meet the contract-specific qualification requirements and fulfil the objective selection criteria set by the CA.

The ESPD form is divided into the following sections:

* Part I: Information concerning the procurement procedure and the contracting authority or contracting entity, which contains:
  + Information about publication
  + Identification of the procurer
  + Information about the procurement procedure
* Part II: Information concerning the EO, which contains:

1. Information about the EO
2. Information about representatives of the EO
3. Information about reliance on the capacities of other entities (including members of a group such as a consortium or joint venture, subcontractors or other third parties)
4. Information concerning subcontractors on whose capacity the EO does not rely (this is, when the EO intends to subcontract any share of the contract to third parties but does not rely on the capacities of these third parties in order to meet the selection criteria)

Part II applies only to the response document that the EO needs to fulfil.

* Part III: Exclusion grounds, which contains:

1. Grounds relating to criminal convictions
2. Grounds relating to the payment of taxes or social security contributions
3. Grounds relating to insolvency, conflicts of interests or professional misconduct
4. Blacklisting

Part III is part of the minimum pre-qualification requirements.

* Part IV: Selection criteria, which contains:

1. Suitability
2. Economic and financial standing
3. Technical and professional ability
4. Quality assurance schemes and environmental management standards
5. Global indication for all selection criteria (instead of options A-D)

Part IV allows CAs to set contract-specific pre-qualification requirements.

* Part V: Reduction of the number of qualified candidates.

Part V applies only for the response document that the EO needs to fulfil (except when the EO is an entity, the lead entity does not rely on in order to meet the selection criteria). Furthermore, the EO should only provide information when it is necessary in order to limit the number of candidates that will be invited to tender or to conduct a dialogue, as stated by the CA in the request document.

* Part VI: Concluding statements, which contain the legal statements of the document. In the response document provided by the EO, it shall also contain the date, place and signature.

### CCCEV

The CCCEV is designed to support the exchange of information between organisations, defining eligibility criteria for the provision of public services and entities providing the necessary evidences to meet the criteria (e.g. citizens, businesses and other public agencies). It concerns, for example, the legislative criteria for EOs participating in public procurement, or the evidence that EOs have to provide to prove compliance with the criteria.[[2]](#footnote-2)

By using the CCCEV, public organisations have the potential to implement new capabilities in their information systems to:[[3]](#footnote-3)

* Allow the use of 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;
* enable automatic assessment through the analysis of criteria and evidence provided;
* promote the standardisation of criteria and evidence 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.

The CCCEV contains two basic and complementary core concepts:

* *Criterion*: Used as the basis 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;
* *Evidence*: Proves that something else exists or is true. In particular, evidence is used to prove that a specific criterion is met by someone or something.

The ESPD uses a number of concepts and classes defined within the CCCEV model, such as:

* *Criterion*: Represents a rule or principle used to judge, evaluate or assess either an item or bidder. A criterion is satisfied when one or more of its requirement groups are satisfied;
* *Requirement Group*: A collection of one or more individual requirements. A requirement group is satisfied when all of its requirements are satisfied;
* *Requirement:* Atomic requirement which can be expressed as either an expected value or a range of accepted values.

For example, the ESPD uses the aforementioned concepts:

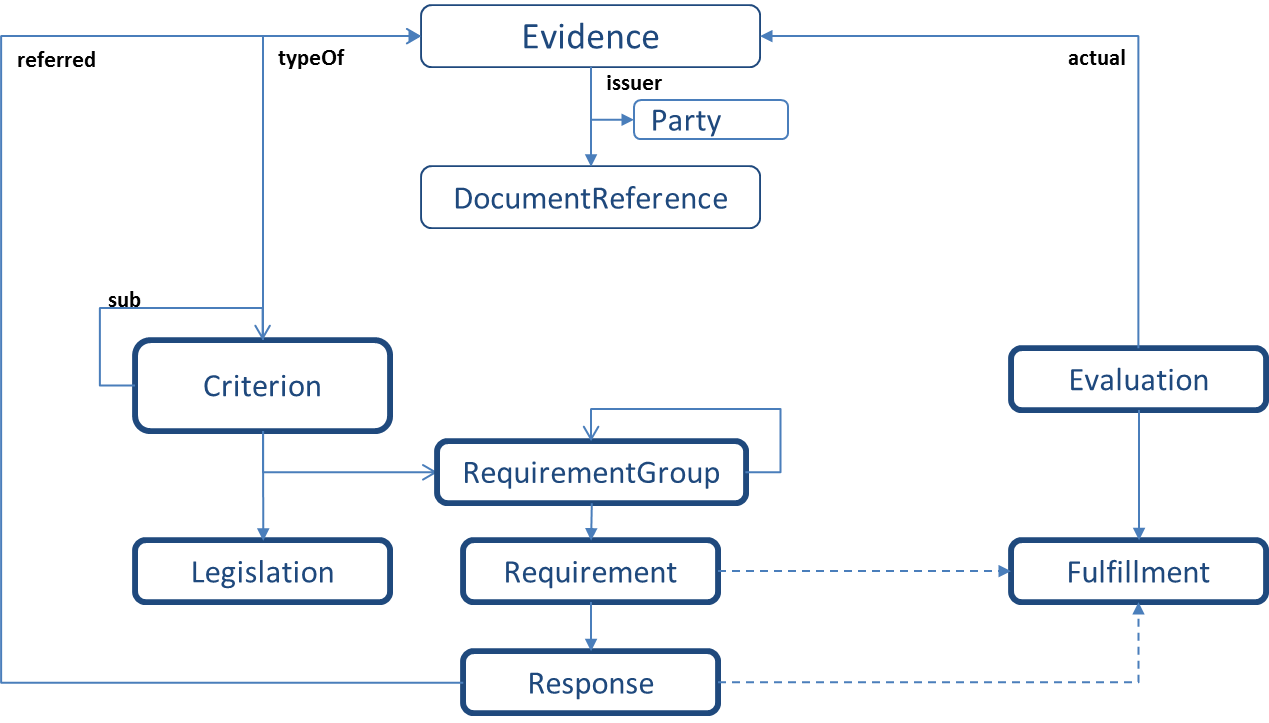


Figure 1 - ESPD data model[[4]](#footnote-4)

|  |
| --- |
| The CCCEV model can be used to express both AND conditions, where a group of requirements must be met to satisfy a criterion, and OR conditions, where there are alternative requirements that can satisfy a criterion. |

# Business requirements

According to [BIS 41 - European Single Procurement Document](http://wiki.ds.unipi.gr/display/ESPDInt/BIS+41+-+ESPD+V2.1.0#BIS41-ESPDV2.1-tbr070-010)[[5]](#footnote-5) (Trdm070 ESPD request transaction BRs), the following business requirements are to be fulfilled within this Profile:

## Contracting Authority

| **ID** | **Requirement** |
| --- | --- |
| tbr70-001 | The CA must be identified. Hence, information about the party is required, such as party name, country, identification, endpoint id. |
| tbr70-002 | The CA must be able to list criteria for exclusion grounds according to legislation. |
| tbr70-003 | The CA must be able to list criteria for qualitative selection according to legislation. |
| tbr70-004 | The CA must be able to indicate which criteria for exclusion and which qualitative selection specific types the EOs need to declare. |
| tbr70-005 | Where a call for tender is divided into lots, the CA must be able to indicate for each individual lot, what selection criteria are to be fulfilled. |
| tbr70-006 | The qualification document should contain contact information of the CA: Postal address, telephone number, fax number, e-mail address, contact person(s). |

Table 1 – Business requirements regarding the CA

## Call for tenders

|  |  |
| --- | --- |
| **ID** | **Requirement** |
| tbr70-007 | The ESPD must contain a reference to the call for tenders, i.e. the procurement project ID, which defines the requirements (i.e. criteria) for which this document is created and submitted by the EO. It must be possible to maintain this information in order to keep track of the connection between the request (call for tenders, ESPD template) and response (the ESPD). |

Table 2 - Business requirements regarding Call for tenders

## Procurement lots

|  |  |
| --- | --- |
| **ID** | **Requirement** |
| tbr70-08 | The ESPD request may contain information about the procurement lots defined in a call for tender and indicate for each individual lot, what selection criteria are to be fulfilled. The CA shall also set the minimum yearly turnover that EOs are required to have if they tender for more than one lot. In this case, the CA shall provide a reference to the group of lots of the call for tender, to which the minimum turnover applies |

Table 3 - Business requirements regarding procurement lots

## List of criteria

|  |  |
| --- | --- |
| **ID** | **Requirement** |
| tbr70-009 | The ESPD template must contain information about the criteria that set the exclusion grounds. |
| tbr70-010 | The ESPD template must contain information about the criteria that set the selection grounds. |

Table 4 - Business requirements regarding criteria

# Technical design

In order to implement this profile in the MTender system, the technical aspects described in this section are to be taken into consideration.

At the system level, it is necessary to implement a mechanism to include several types of criteria in tender documentation. These sets of criteria may include different types of requirements, which can be used in different ways and for different reasons. Moreover, some criteria may be prescribed on a legal basis “by default” (e.g. exclusion grounds of ESPD, particular parts of selection grounds from ESPD such as general yearly turnover).

For each specific tendering process, the CA shall be able to set the criteria that will be used for the qualification of bidders, covering different types of qualification criteria:

* Exclusion grounds. A group of these criteria include eligibility criteria put forward by the CA to the candidates. All of them are published in the Contract Notice (CN) and relate to the whole procedure.

|  |  |
| --- | --- |
| Full list of applicable exclusion ground described by [ESPD Part III](https://espd.github.io/ESPD-EDM/v2.1.1/xml_guide.html#v-exclusion-criteria) |  |

* Selection criteria. These criteria include eligibility criteria, and the CA must indicate which selection criteria will apply to each specific tendering process.

|  |  |
| --- | --- |
| Full list of applicable selection criteria described by [ESPD part IV](https://espd.github.io/ESPD-EDM/v2.1.1/xml_guide.html#vi-selection-criteria) |  |

* Allowances. These criteria are the award criteria and should be taken into account by the CA in cases determined by relevant law, which also defines a set of such criteria and their values. Examples include the following criteria:
* The proposal of the candidate-resident of the country of jurisdiction receives a reduction factor;
* the proposal of a candidate-resident of the country of jurisdiction, if such candidate is an SMEs, receives a reduction factor of price.

## Qualification criteria

### Preparation of an ESPD and inclusion into a Notice

When preparing a CN within a procurement process, a separate criteria array is to be added into the tender building block in order to describe:

* Exclusion grounds;
* selection criteria and its minimum requirements;
* general and specific essential conditions of the future contract.

|  |
| --- |
| {  "tender": {  "criteria": [ ]  } } |

The Profile defines a flexible structure to express data about criteria. Based on this [ocds\_requirements\_extension](https://github.com/open-contracting-extensions/ocds_requirements_extension)[[6]](#footnote-6), it defines the component criterion, which is relevant in the [ESPD-EDM V2.1.0](https://espd.github.io/ESPD-EDM/v2.1.1/xml_guide.html#strong-xml-implementation-guide-v2-1-1-strong)[[7]](#footnote-7) in order to implement the necessary objects for exclusion and selection criteria.

[eOCDS-espd-add-ons\_extension](https://github.com/eOCDS-Extensions/eOCDS_espd_add-ons/blob/master/release-schema.json)[[8]](#footnote-8) adds a number of additional attributes which are important and even required on a transactional level, but not covered by neither the aforementioned OCDS extension nor [CCCEV](https://github.com/SEMICeu/CCCEV)[[9]](#footnote-9) on which ESPD data-model is based.

The [eOCDS\_evidences\_extension](https://github.com/eOCDS-Extensions/eOCDS-evidences/blob/master/release-schema.json)[[10]](#footnote-10) adds a concept of evidence for both ESPD requests and responses.

#### 3.1.1.1 Building blocks

##### Criteria

criterion represents the rule or principle used to judge, evaluate or assess something.

It is highly recommended that criteria are classified according to a [Criteria Types Codelist](https://espd.github.io/ESPD-EDM/v1.0.2/code_lists/pdf/CriteriaTypeCode.pdf)[[11]](#footnote-11) in order to maintain an interoperable environment. The local taxonomy could also be applied as an additional classification.

Each criterion is supposed to be related to an object (tenderer, lot, item) and have a source from which a response is expected against all the requirements prescribed by this criterion. There are specific *relatesTo* and *responseSource* code-lists designed to cover this prescription.

Additionally, CAs are able to introduce requirements that are particular to the national legislation or the specific procurement procedure. The profile supports a relevant legislation attribute used to point at the legislation related to the criterion.

|  |
| --- |
| {  "criteria": [  {  "id": "001",  "title": "Corruption",  "description": "Has the economic operator itself or any person who is a member of its administrative, decision or control therein been the subject of a conviction by final judgment for corruption? ",  "source": "tenderer",  "classification": {  "scheme": "EU-ESPD-2.1.1",  "description": "CRITERION.EXCLUSION.CONVICTIONS.CORRUPTION",  "id": "0.2.1.2"  },  "additionalClassifications": [  { }  ],  "relatesTo": "tenderer",  "legislation": [  {}  ]  }   ] } |

##### Requirement groups

requirementGroup is a set of requirements that must be fulfilled together in order to validate a criterion.

The requirement group is used to wrap the set of requirements that validate a criterion. All requirements belonging to a requirement group shall be validated for the requirement group to be considered valid.

When there is more than one Requirement group for a Criterion, at least one of them has to be positively validated for the Criterion to be considered fulfilled.

|  |
| --- |
| {  "tender":{  "criteria":[  {  "requirementGroups": [  {  "id": "001-1",  "requirements": [ ]  }  ]  },  {  "id": "001-2",  "requirements": [ ]  }  ]  }  ]  }   ]  }  } |

##### Requirements

A criterion can be expressed as a set of requirements where every requirement must be valid. A requirement is an atomic requirement when not it does not contain conjunctions and each part of it is expressed as a separate requirement. Some criteria can be expressed through several atomic requirements.

A requirement can specify the expected value that the response has to contain, or a range of threshold values within which the response has to fit in. The requirement may apply also to a certain period of time.

A list of candidate eligibleEvidences can be provided, which the responder can use in order to prove the fulfilment of the requirement.

Since a requirement can be changed or excluded in certain moments of the process according to a decision of the Review Body or the CA itself, the data-model of a requirement is extended with a number of additional attributes, responsible for the status of such a requirement and its crucial dates:

|  |
| --- |
| {  "tender": {  "criteria": [  {  "requirementGroups": [  {  "requirements": [  {  "id": "001-1-1",  "status": "active",  "datePublished": "",  "dateModified": "",  "title": "",  "description": "",  "dataType": "boolean",  "expectedValue": true,  "eligibleEvidences": [  { }  ]  }  ]  }  ]  }  ]  } } |

#### 3.1.1.2 Command add-on

In order to describe and include a set of qualification criteria into a CN, the following structure has to be used as an add-on of a common createCNonPN command model:

| **Code** | **Attribute** | **Description** |  |
| --- | --- | --- | --- |
| CMACN-032 | **tender.criteria[\*]** | *ESPD Request* |  |
| CMACN-033 | tender.criteria[\*].id | *A language-independent token* | **\*** |
| CMACN-034 | tender.criteria[\*].title | *A short and descriptive name for a criterion* | **\*** |
| CMACN-035 | tender.criteria[\*].description | *An extended description of the criterion* |  |
| CMACN-036 | tender.criteria[\*].source | *Source of response to the requirements specified in the criterion*  *Codelist: responseSource* |  |
| CMACN-037 | tender.criteria[\*].classification.scheme | *Name of taxonomy* |  |
| CMACN-038 | tender.criteria[\*].classification.id | *Identifier of this criterion according to taxonomy* |  |
| CMACN-039 | tender.criteria[\*].additionalClassifications[\*].scheme |  |  |
| CMACN-040 | tender.criteria[\*].additionalClassifications[\*].id |  |  |
| CMACN-040 | tender.criteria[\*].relatesTo | *The schema element that the criterion judges, evaluates or assesses*  *Codelist: relatesTo* |  |
| CMACN-041 | tender.criteria[\*].relatedItem | *Id of the item which the criterion relates to* |  |
| CMACN-043 | tender.criteria[\*].requirementGroups[\*].id | *The unique identifier for this requirement group* | **\*** |
| CMACN-044 | tender.criteria[\*].requirementGroups[\*].description | *A description of this requirement group* |  |
| CMACN-046 | tender.criteria[\*].requirementGroups[\*].requirements[\*].id | *The unique identifier for this requirement* | **\*** |
| CMACN-047 | tender.criteria[\*].requirementGroups[\*].requirements[\*].title | *A short and descriptive name for a requirement* | **\*** |
| CMACN-048 | tender.criteria[\*].requirementGroups[\*].requirements[\*].description | *An extended description of the requirement* |  |
| CMACN-049 | tender.criteria[\*].requirementGroups[\*].requirements[\*].dataType | *The data type in which the requirement response must be provided*  *Codelist: dataType* | **\*** |
| CMACN-050 | tender.criteria[\*].requirementGroups[\*].requirements[\*].expectedValue | *Used to state the requirement when the response must be particular value* |  |
| CMACN-051 | tender.criteria[\*].requirementGroups[\*].requirements[\*].minValue | *Used to state the lower bound of the requirement when the response must be within a certain range* |  |
| CMACN-052 | tender.criteria[\*].requirementGroups[\*].requirements[\*].maxValue | *Used to state the upper bound of the requirement when the response must be within a certain range* |  |
| CMACN-053 | **tender.criteria[\*].requirementGroups[\*].requirements[\*].period** | *Used to specify a particular period the requirement applies to* |  |
| CMACN-054 | tender.criteria[\*].requirementGroups[\*].requirements[\*].period.startDate |  | **\*** |
| CMACN-055 | tender.criteria[\*].requirementGroups[\*].requirements[\*].period.endDate |  | **\*** |
| CMACN-056 | tender.criteria[\*].requirementGroups[\*].requirements[\*].period.durationInMonth |  |  |
| CMACN-057 | tender.criteria[\*].requirementGroups[\*].requirements[\*].period.duration |  |  |
| CMACN-061 | tender.criteria[\*].requirementGroups[\*].requirements[\*].classification.scheme | *Name of taxonomy* | **\*** |
| CMACN-062 | tender.criteria[\*].requirementGroups[\*].requirements[\*].classification.id | *Identifier of this requirement according to taxonomy* | **\*** |
| CMACN-063 | tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*] | *A list of the evidences acceptable for this requirement* |  |
| CMACN-064 | tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].id | *Unique identifier of an eligible evidence template* | **\*** |
| CMACN-065 | tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].title | *A title of an evidence template* |  |
| CMACN-066 | tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].description | *A short description of an evidence template* |  |
| CMACN-067 | tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].type | *Type of this evidence template*  *Codelist: evidenceType* | **\*** |
| CMACN-068 | **tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].relatedDocument** | *Where evidence supposed to be based on a template* |  |
| CMACN-069 | tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].relatedDocument.id | *Unique identifier of a template from tender.documents* | **\*** |
| CMACN-070 | tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].relatedDocument.name | *Name of the template* |  |

Table 5 - Structure for an add-on of a common createCNonPN command model

##### Validation rules

|  |  |
| --- | --- |
| **Code** | **Rule** |
| CMACN-033 | At least 1 entry MUST be included |
| CMACN-036 | MUST be from related codelist |
| CMACN-037 | MUST be found in MDM |
| CMACN-038 | MUST be in declared scheme |
| CMACN-040 | MUST be from related codelist |
| CMACN-041 | MUST be found in scheme of this command model |
| CMACN-043 | At least 1 entry MUST be included |
| CMACN-046 | At least 1 entry MUST be included |
| CMACN-049 | MUST be from related codelist |
| CMACN-050 | MUST be in align with a dataType |
| CMACN-051 | MUST be in align with a dataType |
| CMACN-052 | MUST be in align with a dataType; |
| CMACN-052 | MUST be higher than minValue (if applied) |
| CMACN-055 | MUST be later than startDate (if applied) |
| CMACN-061 | MUST to be found in MDM |
| CMACN-062 | MUST to be in declared scheme |
| CMACN-067 | MUST be from related codelist |
| CMACN-069 | MUST be in tender.documents[\*] |

Table 6 - Validation rules

#### 3.1.1.3 Example

See below an example of the requirements specified for both an item and a tenderer:

|  |
| --- |
| {  "tender": {  "items": [  {  "id": "001",  "quantity": 10  },  {  "id": "002",  "quantity": 10  }  ],  "criteria": [  {  "id": "002",  "title": "Service warranty",  "description": "A minimum product warranty of 1 year is required",  "source": "tenderer",  "relatesTo": "item",  "relatedItem": "001",  "requirementGroups": [  {  "id": "002-1",  "requirements": [  {  "id": "002-1-1",  "title": "A minimum warranty of 1 year is guaranteed",  "dataType": "boolean",  "expectedValue": true  },  {  "id": "002-1-2",  "title": "The number of years for proposed warranty",  "dataType": "integer",  "minValue": 1,  "maxValue": 3  }  ]  }  ]  },  {  "id": "003",  "title": "Capacity",  "description": "Minimum qualification requirements",  "source": "tenderer",  "relatesTo": "tenderer",  "requirementGroups": [  {  "id": "003-1",  "requirements": [  {  "id": "003-1-1",  "title": "At least one Google-certified specialist on-board",  "dataType": "boolean",  "expectedValue": true  },  {  "id": "003-1-2",  "title": "Number of Google-certified staff",  "description": "",  "dataType": "integer",  "minValue": 1,  "maxValue": 5  }  ]  }  ]  }  ]  } } |

#### 3.1.1.4 Query add-on

In order to reflect a set of qualification criteria in a CN, the following structure has to be used as an add-on of a common query model:

| **Attribute** | **Description** |
| --- | --- |
| **tender.criteria** | Criteria applied in this procurement process |
| tender.criteria[\*].id | A language-independent token |
| tender.criteria[\*].title | A short and descriptive name for a criterion |
| tender.criteria[\*].description | An extended description of the criterion |
| tender.criteria[\*].source | Source of response to the requirements specified in the criterion |
| tender.criteria[\*].classification.scheme | Name of taxonomy |
| tender.criteria[\*].classification.id | Identifier of this criterion according to taxonomy |
| tender.criteria[\*].classification.description | Human-readable description according to a taxonomy applied |
| tender.criteria[\*].additionalClassifications[\*].scheme | Name of additional taxonomy |
| tender.criteria[\*].additionalClassifications[\*].id | Identifier of this criterion according to additional taxonomy |
| tender.criteria[\*].additionalClassifications[\*].description | Human-readable description according to additional taxonomy applied |
| tender.criteria[\*].relatesTo | The schema element that the criterion judges, evaluates or assesses |
| tender.criteria[\*].relatedItem | ID of the item which the criterion relates to |
| tender.criteria[\*].requirementGroups[\*].id | The unique identifier for this group |
| tender.criteria[\*].requirementGroups[\*].description | A description of this requirement group |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].id | The unique identifier for this requirement |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].title | A short and descriptive name for a requirement |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].description | An extended description of the requirement |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].dataType | The data type in which the requirement response must be provided |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].expectedValue | Used to state the requirement when the response must be particular value |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].minValue | Used to state the lower bound of the requirement when the response must be within a certain range |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].maxValue | Used to state the upper bound of the requirement when the response must be within a certain range |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].period.startDate | Details of a period the requirement applies to |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].period.endDate | Details of a period the requirement applies to |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].period.durationInMonth | Details of a period the requirement applies to |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].period.duration | Details of a period the requirement applies to |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].status | Current state of a requirement |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].datePublished | Date when this requirement was initially published |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].dateModified | Date when this requirement was modified |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].classification.scheme | Name of taxonomy |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].classification.id | Identifier of this requirement according to taxonomy |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*] | A list of the evidences acceptable for this requirement |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].id | Identifier of an eligible evidence template |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].title | A title of an evidence template |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].description | A short description of an evidence template |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].type | Type of this evidence template |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].relatedDocument | Where evidence supposed to be based on a template |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].relatedDocument.id | Unique identifier of a template from tender.documents |
| tender.criteria[\*].requirementGroups[\*].requirements[\*].eligibleEvidences[\*].relatedDocument.name | Name of the template |

Table 7 - Structure for an add-on of a common query model

## Scoring function

To achieve the Most Economically Advantageous Tender (MEAT), the buyer can use a scoring function by defining a set of evaluation criteria, as well as the options available and its possible values in order to determine the total weight of all components of the bid and the necessary background for the evaluation.

The scoring function enables the buyer to articulate its preferences regarding the various attributes which are made public to all tenderers within the published CN. Tenderers use this scoring function in order to calculate the value for specific configurations and, thus, they can understand how changing the different attributes of their tenders will affect the overall desirability of the bid.

The scoring function combines the evaluation criteria together with the weight assigned by the CA to each criterion, taking into account the predefined formulas in place that will be used (automatically or manually) in order to calculate the score of the bids. Therefore, the CA needs to provide:

* set of non-price criteria;
* set of values available for each defined non-price criterion;
* set of coefficients for available values applicable, once a specific value is selected;
* mathematical formula to be used in the electronic auction to determine automatic re-rankings on the basis of the new prices and/or new values submitted.

### Expression of the non-price criteria

Non-price criteria are part of the award criteria and can be used by the CA in order to identify the MEAT within a procurement procedure. The MEAT will be recognized as the winning bid according to the following criteria:

* In the case of procurement of goods: the price, delivery time, payment terms, profitability, quality, aesthetic, functional and technical characteristics, capabilities and cost of technical assistance and maintenance;
* in the case of procurement of works: the proposed quality, the cost per unit of product by the end of the work, the total price, the experience of the bidder, etc. The share of the price in the total evaluation of the offers should not be less than 80 per cent;
* in the case of procurement of services: the proposed quality, the cost per unit, the total price, the experience of the bidder, etc. The price share in the total evaluation of the offers should not be less than 40 per cent.

Therefore, depending on the category of the procurement procedure, the CA can determine a set of non-price criteria (quantitative and qualitative) which will be taken into account along with the price as part of the offer and will be used in the evaluation of the bids.

### Adding the criterion values

Each of the described requirements may or may not be associated with a set of available values. For example, Exclusion Grounds will only have the options ‘true/false’ available, while Selection or Non-price criteria usually allow for not only default or minimum requirements but also other values, available for the tenderers to choose.

Where this is the case, the CA shall specify in advance:

* Values and the coefficients within an electronic auction, provided that such values are quantifiable and can be expressed in figures or percentages;
* limits on the values which may be submitted, as they result from the specifications relating to the subject of the contract;
* mathematical formula to be used to determine automatic rankings of bids received.

#### 3.2.2.1 Command add-on

In order to describe and include a set of non-price criteria and requirements with the values into a CN, the same structure as the one described in section 3.1.1.2 has to be used as an add-on of a common createCNonPN command model.

### Conversions

For those requirements associated with a set of available values, each value from a predefined set (or available according to a described pattern) has to be associated with a related weighting coefficient. This coefficient is a numeric value which will be applied under the mathematical formula of the scoring function of evaluation used under this procurement process in order to calculate the score of each offer received, with the final goal of awarding the contract to the MEAT.

*Conversions* is a tool that allows:

* To describe used conversions and its applicable coefficients either as a list of precise values or as a mathematical formula for the calculation of the value of a particular coefficient in this particular procurement procedure (depending on the value received within requirementResponse related to a specific requirement);
* to relate each conversion used (together with coefficients) with used criteria or targets (where applicable);
* to include applicable options to criteria or observations for targets.

#### 3.2.3.1 Command add-on

In order to describe and include a set of non-price criteria into a CN, the following structure has to be used as an add-on of a common createCNonPN command model:

|  |  |  |
| --- | --- | --- |
| **Code** | **Attribute** | **Description** |
| CMACN-071 | tender.conversions[\*] | List of the conversions applicable within this procedure |
| CMACN-072 | tender.conversions[\*].id | An identifier of specific conversion |
| CMACN-073 | tender.conversions[\*].relatesTo | An element of schema of this process on which this conversion is related |
| CMACN-074 | tender.conversions[\*].relatedItem | Identifier of element on which this conversion is related |
| CMACN-075 | tender.conversions[\*].description | Short description of this conversion |
| CMACN-076 | tender.conversions[\*].rationale | Rationale of this conversion |
| CMACN-077 | tender.conversions[\*].coefficients[\*].id | Identifier of specific coefficient applicable by this conversion |
| CMACN-078 | tender.conversions[\*].coefficients[\*].value | Value of a requirementResopnse for which this coefficient is applicable |
| CMACN-079 | tender.conversions[\*].coefficients[\*].coefficient | Numerical value of this coefficient |
| CMACN-080 | tender.conversions[\*].coefficients[\*].minValue | Min value of a requirementResopnse for which this coefficient is applicable |
| CMACN-081 | tender.conversions[\*].coefficients[\*].maxValue | Max value of a requirementResopnse for which this coefficient is applicable |
| CMACN-082 | tender.conversions[\*].coefficients[\*].period.startDate | Start of a period during which this coefficient is applicable |
| CMACN-083 | tender.conversions[\*].coefficients[\*].period.endDate | End of a period during which this coefficient is applicable |
| CMACN-085 | tender.conversions[\*].coefficients[\*].period.duration | Duration of a period during which this coefficient is applicable |

Table 8 - Structure for an add-on of a common createCNonPN command model

#### 3.2.3.2 Example

Simple criteria that require only true/false answer can be used by the CA. For example, if the EO submitting a tender is a domestic bidder, the EO can get a ratio that increases the advantage of its price by 20%:

|  |
| --- |
| {  "criteria": [  {  "id": "001",  "title": "Benefits",  "description": "Benefits domestic bidders",  "source": "tenderer",  "relatesTo": "tenderer",  "requirementGroups": [  {  "id": "001-1",  "requirements": [  {  "id": "001-1-1",  "title": "Is Economic operator is domestic bidder?",  "description": "",  "dataType": "boolean"  }  ]  }  ]  }  ] } |

Using ocds\_requirements\_extension, we can describe this criterion as such. But using conversions we can also describe applicable coefficients:

|  |
| --- |
| {  "conversions": [  {  "relatesTo": "requirement",  "relatedItem": "001-1-1",  "rationale": "Domestic bidders receive a 20% price preference",  "coefficients": [  {  "value": true,  "coefficient": 0.8  },  {  "value": false,  "coefficient": 1  }  ]  }  ] } |

In this case, when the EO responds that there is a domestic bidder, using a cross-reference through the requirement\_id we can extract an applicable coefficient of - 0.8.

## Formulation of the offer according to a defined scoring function: structured bid

Having a set of requirements defined by the CA and a number of values available, when tenderers prepare their offers they include the values for each requirement, reflecting the contents of the offer and fulfilling the general corporate profiles’ data requested. Tenderers also complete the non-price parameters corresponding to values for specific verifiable tenderer attributes of the offer.

Afterwards, when the evaluation of bids is conducted, all these specified values will become the subject of competition, provided that such features are quantifiable and can be expressed in figures or percentages.

Each submitted offer includes:

* Organization profile according to the extended ‘organization’ model;
* absolute value of the amount of price offer;
* decomposed set of unit prices (if requested by the CA);
* set of documents of the offer, specified with relevant types of documents for their future splitting into the different "envelopes";
* set of requirement responses according to criteria specified for this procurement procedure by the CA:
  + Commitment on exclusion grounds;
  + commitment on selection criteria (including absolute values if applicable);
  + commitment on minimum technical requirements (including absolute values if applicable);
  + set of values for non-price criteria (if applicable);
  + set of values for subject specification (if applicable).

### Command add-on

In order to describe and include into a bid a set of valuable responses against non-price criteria, the following structure has to be used as an add-on of a common createBid command model:

|  |  |
| --- | --- |
| **Attribute** | **Description** |
| bid.requirementResponses[\*] | A list of responses by a tenderer |
| bid.requirementResponses[\*].id | Identifier of specific response |
| bid.requirementResponses[\*].value | An identifier of specific conversion |
| bid.requirementResponses[\*].requirement | An element of schema of this process on which this conversion is related |
| bid.requirementResponses[\*].relatedTenderer | Identifier of element on which this conversion is related |
| bid.requirementResponses[\*].relatedItem | Short description of this conversion |

Table 9 - Structure for an add-on of a common createBid command model

### Example

See below an example of requirements specified against both an item and a tenderer:

|  |
| --- |
| {  "bids": {  "details": [  {  "id": "",  "value": {  "amount": 10000.00,  "currency": "USD"  },  "items": [  {  "id": "001",  "unit": {  "value": {  "amount": 450.00,  "currency": "USD"  }  }  }  ],  "tenderers": [],  "requirementResponses": [  {  "id": "002-1-1",  "value": true,  "requirement": "001-1-1"  },  {  "id": "002-1-2",  "value": 2,  "requirement": "002-1-2"  },  {  "id": "003-1-1",  "value": true,  "requirement": "003-1-1"  }  ]  }  ]  } } |

## Ranking for evaluation

As shown in the table below, automated ranking can be undertaken using:

* A set of criteria and the relevant conversions applied by the CA for each available value of each specific requirement for a given procurement procedure;
* the requirement responses submitted by each EO against published criteria.

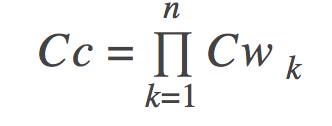
These two data-sets allow to calculate the score (normalized value) for each bid based on a uniform approach.

|  | **price only** | **cost only** | **quality only** | **rated criteria** |
| --- | --- | --- | --- | --- |
| scoring function applied | ranking based  on absolute value of the amount of price offer | ranking based  on absolute value of the amount of price offer considering set of values for quantifiable criteria by the CA (non-price criteria) | ranking based on  values for quantifiable and qualifiable criteria by the CA (technical requirements, non-price criteria, criteria on a subject specification) | ranking based on absolute value of the amount of price considering set of values for quantifiable and qualifiable criteria by the CA (technical requirements, non-price criteria, criteria on a subject specification) |
| scoring function not applied | - | - | - | - |

### Calculation of normalized price

#### 3.4.1.1 Correction coefficient

Correction coefficient is the total summary coefficient according to which the normalized price is calculated. The correction coefficient is calculated as the product of all weight coefficients and the values provided by tenderers for the non-price criteria set by the CA. The formula used for the calculation is the following:

****

Where:

* Cc: correction coefficient;
* Cw: weight of coefficient;
* n: total quantity of Cw;
* k: pointer to current Cw.

#### 3.4.1.2 Normalized price

Normalized price is the equivalent calculated weights. It is used to average the values for specific verifiable tenderer attributes of proposals made by different tenderers. After disclosure of the submitted bids, this indicator will be calculated automatically based on the following formula for each disclosed bid:

*Pn = P \* C1 \* C2 \* ... Cn*

Where:

* Pn: value of normalized price;
* P: basic price taken from a bid received for a specific lot, or equal to '1' in case of ‘cost only’ and ‘quality only’ award criteria;
* C1 ... Cn: values of the coefficients to be applied (related with the values of requirements, available for the EO and indicated in the requirement responses inside each particular bid).

### Ranking approach

Depending on the award criteria and availability of a scoring function, initial automated ranking can or cannot be provided:

* Price only: where awardCriteria: priceOnly, only the bid.value shall be compared in order to identify the most suitable offer (cheapest goes first);
* Cost only: where awardCriteria: costOnly, assumption is that all the tenderers have the same bid.value equal to lot.value. It means that the normalized price needs to be calculated for each bid received based on lot.value (cheapest goes first);
* Quality only: where awardCriteria: qualityOnly, assumption is that the price doesn't matter and the only valuable part of the bid is quality, meaning a set of values of criteria stated by the EO in the bid. It means that the normalized price needs to be calculated for each bid received based on '1';
* Rated criteria: where awardCriteria: ratedCriteria, assumption is that both price and valuable part of the bid matter for the evaluation. The normalized price needs to be calculated for each bid received based on 'bid.value'.

# Criteria-based evaluation in MTender

## Preparation for the evaluation by the CA

For all the disclosed bids, the system will automatically generate a set of qualification envelopes (awards) and launch the awarding period (tender.awardPeriod) for this procurement process.

##### Automated eligibility check

Where it is applicable, the system will automatically verify eligibility based on actual official data available via external bus (Mconnect) for each tenderer whose bid was disclosed according to rules of dispatch under the current procurement method. Those bids that passed the eligibility check, will go to the technical qualification by the CA. All the others that failed will go to automatic exclusion.

##### Automated ranking based on award criteria

Depending on the award criteria and the method of the initial evaluation applied by the CA (awardCriteriaDetails), the system will rank eligible bids in order of admissibility: from most to least acceptable by applicable criteria.

Automated ranking can be undertaken using a set of criteria and the relevant conversions applied, both by the CA for each available value of each applied requirement, and the requirement responses submitted by each EO against published criteria. These two data-sets allow for the calculation of normalized value for each bid based on the same approach. The award of the most acceptable offer will be marked with statusDetails:awaiting.

##### Publication of qualification envelopes (awards)

“Awards” section will be added to the initial query-model of the stage and will include all awards that were generated for all disclosed ‘bids’. Initial status of awards will be ‘pending’.

|  |
| --- |
| {  "awards": [  {  "id": "ocds-000-00001-award-2", // most acceptable eligible bid  "status": "pending",  "statusDetails": "awaiting"  },  {  "id": "ocds-000-00001-award-3", // acceptable bid in the line for review  "status": "pending"  }  ]  } |

1. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0024&from=EN> [↑](#footnote-ref-1)
2. <https://ec.europa.eu/isa2/consultations/public-review-core-criterion-and-core-evidence-vocabulary-cccev_en> [↑](#footnote-ref-2)
3. <https://joinup.ec.europa.eu/solution/core-criterion-and-core-evidence-vocabulary/distribution/core-criterion-and-core-evidence-vocabulary-v100-docx> [↑](#footnote-ref-3)
4. <https://joinup.ec.europa.eu/solution/core-criterion-and-core-evidence-vocabulary/distribution/core-criterion-and-core-evidence-vocabulary-v100-docx> [↑](#footnote-ref-4)
5. [BIS 41 - European Single Procurement Document](http://wiki.ds.unipi.gr/display/ESPDInt/BIS+41+-+ESPD+V2.1.0#BIS41-ESPDV2.1-tbr070-010) - http://wiki.ds.unipi.gr/display/ESPDInt/BIS+41+-+ESPD+V2.1.0#BIS41-ESPDV2.1-tbr070-010 [↑](#footnote-ref-5)
6. [ocds\_requirements\_extension](https://github.com/open-contracting-extensions/ocds_requirements_extension): <https://github.com/open-contracting-extensions/ocds_requirements_extension> [↑](#footnote-ref-6)
7. [ESPD-EDM V2.1.0](https://espd.github.io/ESPD-EDM/v2.1.1/xml_guide.html#strong-xml-implementation-guide-v2-1-1-strong): [https://espd.github.io/ESPD-EDM/v2.1.1/xml\_guide.html#strong-xml-implementation-guide-v2-1-1-strong](https://espd.github.io/ESPD-EDM/v2.1.1/xml_guide.html%23strong-xml-implementation-guide-v2-1-1-strong) [↑](#footnote-ref-7)
8. [eOCDS-espd-add-ons\_extension](https://github.com/eOCDS-Extensions/eOCDS_espd_add-ons/blob/master/release-schema.json):

   <https://github.com/eOCDS-Extensions/eOCDS_espd_add-ons/blob/master/release-schema.json> [↑](#footnote-ref-8)
9. CCEV: <https://github.com/SEMICeu/CCCEV> [↑](#footnote-ref-9)
10. [eOCDS\_evidences\_extension](https://github.com/eOCDS-Extensions/eOCDS-evidences/blob/master/release-schema.json): <https://github.com/eOCDS-Extensions/eOCDS-evidences/blob/master/release-schema.json> [↑](#footnote-ref-10)
11. [Criteria Types Codelist](https://espd.github.io/ESPD-EDM/v1.0.2/code_lists/pdf/CriteriaTypeCode.pdf): <https://espd.github.io/ESPD-EDM/v1.0.2/code_lists/pdf/CriteriaTypeCode.pdf> [↑](#footnote-ref-11)