

 Publications Office of the European Union

The eProcurement Ontology - News and updates

TED Together Natalie Muric Luxembourg 2024

Model of the complete procurement lifecycle



The ePO enables:

- Correctness of input data
- Provision of quality data
- Efficient reuse
- Enhanced transparency
- Viability of analysis
- Data usage from across the procurement life cycle



Machine readable and human readable concepts

Machine Readable concepts

- :hasItemCountryOfOrigin rdfs:domain :Tender ;
 rdfs:range skos:Concept .
- :includesTender rdfs:domain :Contract ;
 rdfs:range :Tender .
- :concernsTender a owl:FunctionalProperty ;
 rdfs:domain :TenderAwardOutcome ;
 rdfs:range :Tender .
- :hasElectronicSubmission rdfs:domain :Tender ;
 rdfs:range xsd:boolean .
- :isVariant rdfs:domain :Tender ; rdfs:range xsd:boolean .
- :Tender a owl:Class ;

rdfs:isDefinedBy :core ;

rdfs:subClassOf :Document ;

skos:definition "Information submitted by the Economic Operator to specify its Offer regarding a specific Lot, in response to the call for Tender. (WG approval 03/05/2022)"@en ; skos:prefLabel "Tender"@en .

epo:AcquiringParty +epo:signedByBuyer epo:Document epo:Buyer epo:Contract 0...* epo:isContractingEntity: xsd:boolean [0..1] +epo:bindsBuyer epo:hasContractConclusionDate: xsd:date [0..1] + epo:hasActivityDescription: rdf:PlainLiteral [0..*] epo:hasEntryIntoForceDate: xsd:date [0..1] 0..* epo:hasBuyerProfile: xsd:anyURI [0..1] +epo:includesTender (/ 0..* epo:Document «enumeration» +epo:hasItemCountryOfOrigin epo:Tender at-voc:country epo:hasElectronicSubmission: xsd:boolean [0..1] 0..* + epo:isVariant: xsd:boolean [0..1] + /|\ 1 +epo:concernsTender epo:ContextualProjection epo:TenderAwardOutcome epo:hasAwardRank: xsd:integer [0..1] +

Human readable concepts

eProcurement Ontology

2024 Releases



Editorial and history notes

Class : epo:AdHocChannel		×	Point
 Properties General Responsibilities Requirements Constraints Scenarios Files Related Links 	Name: epo:AdHocChanne B I U C = = = x ² × 0 C Web page where tools and devices for electronic communication that are not generally available can be downloaded free of charge.	Main Details Advanced Tags	epo:AgentInRole + dct:description: rdf:PlainLiteral [0*] + dct:title: rdf:PlainLiteral [0*] +epo:exposesChannel 0* cv:Channel + dct:description: rdf:PlainLiteral [01] + epo:hasAddressURL: xsd:anyUR [01] COMPARENT COMPARENT COMPA

External concept links

	Class : cccev:Cntenon					
cccev:Criterion + cccev:bias: xsd:decimal [01] + cccev:weight: xsd:decimal [01] + cccev:weightingConsiderationDescription: rdf:PlainLiteral [01] epo:hasWeightValueType 1 formation epo:hasAdditionalInformation: rdf:PlainLiteral [01] + epo:hasAdditionalInformation: rdf:PlainLiteral [01] + epo:hasFormula: rdf:PlainLiteral [01]	 Properties General Responsibilities Requirements Constraints Scenarios Files Related Links 	Name: cccev:Criterion B I U ▲ I = != ײ ×₂ ● □ External concept defined by http://data.europa.eu/m8g/Criterion	Stereotype: Status: Alias: Keywords: Author: Complexity: Language: Version: Phase: Package: Created: Modified: Main Details	Proposed Ips • Easy • Java • 1.0 1.0 classes 26-04-2022 17:20:03 11-11-2024 09:55:45 Advanced Tags		
			OK C:	ancel Apply	Help	

Model2Owl – Updates

Human readable format UML

Model2Owl

Machine readable format OWL and SHACL

Ongoing work

- Filtering of data in the human readable format
- SmarterCamelCase
- Incorporating the semic fork
- Remove duplicate imports
- Handling property inheritance in SHACL shapes
- UML : unified modeling language
- OWL: web ontology language
- SHACL: shapes constraints language



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ePO in 2025



Recap of the advantages of the ePO



How do we ensure the correctness and quality of the ePO

- Weekly meetings with procurement stakeholders (please contact us to join) to:
 - Create the human readable view
 - > Define the data concepts and their relations
- Automation and Feedback mechanisms
 - >Automatic transformation from human readable to machine readable
 - Publish release candidates to allow review and feedback
 - >Availability on <u>github</u> to encourage the raising of issues and discussions
- Reuse of other vocabularies
 - Core vocabularies
 - Authority tables

https://github.com/OP-TED/ePO

Issues · OP-TED/ePO (github.com)

https://docs.ted.europa.eu/epo-home/index.html

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