

# Circular Economy Ontology Network (CEON) - Actor ODP

## Metadata

### IRI

<http://w3id.org/CEON/ontology/actorODP/>

### Title

Circular Economy Ontology Network  
(CEON) - Actor ODP

### Creator

Eva Blomqvist

### Contributor

Huanyu Li

Mikael Lindecrantz

Robin Keskisärkkä

### Date Created

2023-03-17

### License

<https://creativecommons.org/licenses/by/4.0/>

### Version Iri

<http://w3id.org/CEON/ontology/actorODP/0.3/>

### Version Info

0.3

### Preferred Namespace Prefix

actorODP

### Preferred Namespace Uri

<http://w3id.org/CEON/ontology/actorODP/>

### Description

A core ODP of the CEON ontology network,  
defining aspects of the actor concept.

### Covers Requirements

Covers the following requirements from  
Onto-DESIDE D3.1: CVN-Process-3, CVN-  
Actor-1,4,6,7, CVN-Competency-3, CVN-  
Information-4, C11-1, C11-3, E1-6,6,6,9, E4-  
10

Covers the following requirements from  
Onto-DESIDE D2.3: CE1-1, CE2-1, CE2-2,  
CE4-2, CE6-3, CE12-1, CE10-1, CE10-4,  
CE10-9, CVN-Actor-1,4,6,7, CVN-  
Competency-3, C11-1, C11-3, E1-6,6,6,9,  
E4-10

## Classes

### Actor<sup>c</sup>

---

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actorODP/Actor">http://w3id.org/CEON/ontology/actorODP/Actor</a>
------------	---

<b><u>In Domain Of</u></b>	<a href="#"><u>actorType</u></a> <sup>op</sup>
----------------------------	--

<b><u>In Range Of</u></b>	<a href="#"><u>participatingActor</u></a> <sup>op</sup>
---------------------------	---

### Actor Type<sup>c</sup>

---

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actorODP/ActorType">http://w3id.org/CEON/ontology/actorODP/ActorType</a>
------------	---

<b><u>In Range Of</u></b>	<a href="#"><u>actorType</u></a> <sup>op</sup>
---------------------------	--

## Capability<sup>c</sup>

---

**IRI** <http://w3id.org/CEON/ontology/actor0DP/Capability>

**In Domain Of** [capabilityOf](#)<sup>op</sup>  
[capabilityProperty](#)<sup>op</sup>

**In Range Of** [basedOnCapability](#)<sup>op</sup>

## Collaboration Participation<sup>c</sup>

---

**IRI** <http://w3id.org/CEON/ontology/actor0DP/CollaborationParticipation>

**Sub Class Of** [Participation](#)<sup>c</sup>

**In Domain Of** [basedOnCapability](#)<sup>op</sup>  
[participationIn](#)<sup>op</sup>

## Infrastructure<sup>c</sup>

---

**IRI** <http://w3id.org/CEON/ontology/actor0DP/Infrastructure>

**In Range Of** [participating\\_infrastructure](#)<sup>op</sup>

## Participation<sup>c</sup>

IRI	<a href="http://w3id.org/CEON/ontology/actorODP/Participation">http://w3id.org/CEON/ontology/actorODP/Participation</a>
<u>Sub Class Of</u>	<a href="#">participationStartTime</a> <sup>dp</sup> <i>exactly 1 <a href="#">1</a><sup>c</sup> or</i> <a href="#">participationTimePoint</a> <sup>dp</sup> <i>exactly 1 <a href="#">1</a><sup>c</sup></i>
<u>In Domain Of</u>	<a href="#">participantRole</a> <sup>op</sup> <a href="#">participatingActor</a> <sup>op</sup> <a href="#">participating_infrastructur</a> <a href="#">e</a> <sup>op</sup> <a href="#">participationEndTime</a> <sup>dp</sup> <a href="#">participationStartTime</a> <sup>dp</sup> <a href="#">participationTimePoint</a> <sup>dp</sup>
<u>Super Class Of</u>	<a href="#">CollaborationParticipation</a> <sup>c</sup> <a href="#">ResourceParticipation</a> <sup>c</sup> <a href="#">ResourceRelation</a> <sup>c</sup>

## Resource Participation<sup>c</sup>

IRI	<a href="http://w3id.org/CEON/ontology/actorODP/ResourceParticipation">http://w3id.org/CEON/ontology/actorODP/ResourceParticipation</a>
<u>Sub Class Of</u>	<a href="#">Participation</a> <sup>c</sup>
<u>In Domain Of</u>	<a href="#">participatingObject</a> <sup>op</sup> <a href="#">participatingSubject</a> <sup>op</sup>

## Resource Relation<sup>C</sup>

---

**IRI** <http://w3id.org/CEON/ontology/actor0DP/ResourceRelation>

**Sub Class Of** [Participation<sup>C</sup>](#)

**In Domain Of** [participatingResource<sup>op</sup>](#)

## Role<sup>C</sup>

---

**IRI** <http://w3id.org/CEON/ontology/actor0DP/Role>

**In Range Of** [participantRole<sup>op</sup>](#)

## Collaboration<sup>C</sup>

---

**IRI** <http://w3id.org/CEON/ontology/cvn/Collaboration>

## Process<sup>C</sup>

---

**IRI** <http://w3id.org/CEON/ontology/process0DP/Process>

## Resource<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/resourceODP/Resource>

### In Range Of

[participatingObject](#)<sup>op</sup>  
[participatingResource](#)<sup>op</sup>  
[participatingSubject](#)<sup>op</sup>

## Object Properties

### actor type<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/actorODP/actorType>

**Domain** [Actor](#)<sup>c</sup>

**Range** [ActorType](#)<sup>c</sup>

### based on capability<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/actorODP/basedOnCapability>

**Domain** [CollaborationParticipation](#)<sup>c</sup>

**Range** [Capability](#)<sup>c</sup>

## capability of<sup>op</sup>

---

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actorODP/capabilityOf">http://w3id.org/CEON/ontology/actorODP/capabilityOf</a>
<b><u>Domain</u></b>	<a href="#"><u>Capability</u></a> <sup>c</sup>
<b><u>Range</u></b>	<a href="#"><u>Infrastructure</u></a> <sup>c</sup> <i>or</i> <a href="#"><u>Actor</u></a> <sup>c</sup>

## capability property<sup>op</sup>

---

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actorODP/capabilityProperty">http://w3id.org/CEON/ontology/actorODP/capabilityProperty</a>
<b><u>Domain</u></b>	<a href="#"><u>Capability</u></a> <sup>c</sup>

## participant role<sup>op</sup>

---

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actorODP/participantRole">http://w3id.org/CEON/ontology/actorODP/participantRole</a>
<b><u>Domain</u></b>	<a href="#"><u>Participation</u></a> <sup>c</sup>
<b><u>Range</u></b>	<a href="#"><u>Role</u></a> <sup>c</sup>

## participating actor<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actorODP/participatingActor">http://w3id.org/CEON/ontology/actorODP/participatingActor</a>
<b><u>Domain</u></b>	<a href="#">Participation<sup>c</sup></a>
<b><u>Range</u></b>	<a href="#">Actor<sup>c</sup></a>

## participating object<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actorODP/participatingObject">http://w3id.org/CEON/ontology/actorODP/participatingObject</a>
<b><u>Domain</u></b>	<a href="#">ResourceParticipation<sup>c</sup></a>
<b><u>Range</u></b>	<a href="#">resourceODP:Resource<sup>c</sup></a>

## participating resource<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actorODP/participatingResource">http://w3id.org/CEON/ontology/actorODP/participatingResource</a>
<b><u>Domain</u></b>	<a href="#">ResourceRelation<sup>c</sup></a>
<b><u>Range</u></b>	<a href="#">resourceODP:Resource<sup>c</sup></a>



## participating subject<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actorODP/participatingSubject">http://w3id.org/CEON/ontology/actorODP/participatingSubject</a>
<b><u>Domain</u></b>	<a href="#">ResourceParticipation</a> <sup>c</sup>
<b><u>Range</u></b>	<a href="#">resourceODP:Resource</a> <sup>c</sup>

## participating\_infrastructure<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actorODP/participating_infrastructure">http://w3id.org/CEON/ontology/actorODP/participating_infrastructure</a>
<b><u>Domain</u></b>	<a href="#">Participation</a> <sup>c</sup>
<b><u>Range</u></b>	<a href="#">Infrastructure</a> <sup>c</sup>

## participation in<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actorODP/participationIn">http://w3id.org/CEON/ontology/actorODP/participationIn</a>
<b><u>Domain</u></b>	<a href="#">CollaborationParticipation</a> <sup>c</sup>
<b><u>Range</u></b>	<a href="#">cvn:Collaboration</a> <sup>c</sup> <i>or</i> <a href="#">processODP:Process</a> <sup>c</sup>

## Datatype Properties

participation end time<sup>dp</sup>

---

**IRI** <http://w3id.org/CEON/ontology/actor0DP/participationEndTime>

**Domain** [Participation](#)<sup>c</sup>

**Range** [xsd:gYear](#)<sup>c</sup> *or* [xsd:gMonthYear](#)<sup>c</sup> *or* [xsd:dateTime](#)<sup>c</sup> *or* [xsd:date](#)<sup>c</sup>

participation start time<sup>dp</sup>

---

**IRI** <http://w3id.org/CEON/ontology/actor0DP/participationStartTime>

**Domain** [Participation](#)<sup>c</sup>

**Range** [xsd:gMonthYear](#)<sup>c</sup> *or* [xsd:date](#)<sup>c</sup> *or* [xsd:dateTime](#)<sup>c</sup> *or* [xsd:gYear](#)<sup>c</sup>

## participation time point<sup>dp</sup>

---

**IRI** <http://w3id.org/CEON/ontology/actor0DP/participationTimePoint>

**Domain** [Participation](#)<sup>c</sup>

**Range** [xsd:dateTime](#)<sup>c</sup> *or* [xsd:gMonthYear](#)<sup>c</sup> *or* [xsd:gYear](#)<sup>c</sup> *or* [xsd:date](#)<sup>c</sup>

## Annotation Properties

### contributor<sup>ap</sup>

---

**IRI** <http://purl.org/dc/terms/contributor>

### created<sup>ap</sup>

---

**IRI** <http://purl.org/dc/terms/created>

### creator<sup>ap</sup>

---

**IRI** <http://purl.org/dc/terms/creator>

description<sup>ap</sup>

---

**IRI** <http://purl.org/dc/terms/description>

license<sup>ap</sup>

---

**IRI** <http://purl.org/dc/terms/license>

title<sup>ap</sup>

---

**IRI** <http://purl.org/dc/terms/title>

preferred namespace prefix<sup>ap</sup>

---

**IRI** <http://purl.org/vocab/vann/preferredNamespacePrefix>

preferred namespace uri<sup>ap</sup>

---

**IRI** <http://purl.org/vocab/vann/preferredNamespaceUri>

**covers requirements**<sup>ap</sup>

---

**IRI** <http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#coversRequirements>

**definition**<sup>ap</sup>

---

**IRI** <http://www.w3.org/2004/02/skos/core#definition>

**pref label**<sup>ap</sup>

---

**IRI** <http://www.w3.org/2004/02/skos/core#prefLabel>

## Namespaces

:

<http://w3id.org/CEON/ontology/actorODP/>

**cvn**

<http://w3id.org/CEON/ontology/cvn/>

**dcterms**

<http://purl.org/dc/terms/>

**geo**

<http://www.opengis.net/ont/geosparql#>

**odp**

<http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#>

**owl**

<http://www.w3.org/2002/07/owl#>

**processODP**

<http://w3id.org/CE0N/ontology/processODP/>

**prov**

<http://www.w3.org/ns/prov#>

**rdf**

<http://www.w3.org/1999/02/22-rdf-syntax-ns#>

**rdfs**

<http://www.w3.org/2000/01/rdf-schema#>

**resourceODP**

<http://w3id.org/CE0N/ontology/resourceODP/>

**skos**

<http://www.w3.org/2004/02/skos/core#>

**vann**

<http://purl.org/vocab/vann/>

**xsd**

<http://www.w3.org/2001/XMLSchema#>

## Legend

c	Classes
op	Object Properties
dp	Data type Properties
ap	Annotation Properties