

# Circular Economy Ontology Network (CEON) - Process ODP

## Metadata

### IRI

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

### Title

Circular Economy Ontology Network (CEON) - Process ODP

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### License

<https://github.com/LiUSemWeb/CEON/blob/master/LICENSE>

### Version Iri

<http://w3id.org/CEON/ontology/processODP/0.1/>

### Version Info

0.1

### Preferred Namespace Prefix

processODP

### Preferred Namespace Uri

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

### Description

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

### Covers Requirements

Covers the following requirements from Onto-DESIDE D3.1: CVN-Process-3,4,5, CVN-Input/Output-1,3,4, C3-1, C4-2, C4-5, C4-7, C4-9, C13-2, E2-6

## Classes

### Process Participation<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actor/ProcessParticipation">http://w3id.org/CEON/ontology/actor/ProcessParticipation</a>
<b><u>Restriction</u></b>	<a href="#">actorODP:participationIn</a> <sup>op</sup> some <a href="#">actor:ProcessParticipation</a> <sup>c</sup>

### Process<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/processODP/Process">http://w3id.org/CEON/ontology/processODP/Process</a>
<b><u>Description</u></b>	An activity in the context of a circular value network, handling resources.
<b><u>In Domain Of</u></b>	<a href="#">has part</a> <sup>op</sup> <a href="#">hasProcessExecution</a> <sup>op</sup> <a href="#">hasProcessType</a> <sup>op</sup> <a href="#">next process</a> <sup>op</sup>
<b><u>In Range Of</u></b>	<a href="#">has part</a> <sup>op</sup> <a href="#">next process</a> <sup>op</sup>
<b><u>Super Class Of</u></b>	<a href="#">Transformation</a> <sup>c</sup>

### ProcessExecution<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/processODP/ProcessExecution">http://w3id.org/CEON/ontology/processODP/ProcessExecution</a>
<b><u>Description</u></b>	An execution of a specific process.
<b><u>In Range Of</u></b>	<a href="#">hasProcessExecution</a> <sup>op</sup>

### ProcessType<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/processODP/ProcessType">http://w3id.org/CEON/ontology/processODP/ProcessType</a>
<b><u>Description</u></b>	The type of a process.
<b><u>In Range Of</u></b>	<a href="#">hasProcessType</a> <sup>op</sup>

## Situation<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/processODP/Situation">http://w3id.org/CEON/ontology/processODP/Situation</a>
<b>Description</b>	A situation that may involve some resources and actors, i.e. a state of affairs at a certain point in time.
<b>In Domain Of</b>	<a href="#">is the setting for</a> <sup>op</sup>
<b>In Range Of</b>	<a href="#">initial situation</a> <sup>op</sup> <a href="#">resulting situation</a> <sup>op</sup>

## Transformation<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/processODP/Transformation">http://w3id.org/CEON/ontology/processODP/Transformation</a>
<b>Description</b>	A process that transforms some situation into another situation, i.e. changes the state of affairs of some actor, resource etc.
<b>Sub Class Of</b>	<a href="#">Process</a> <sup>c</sup>
<b>In Domain Of</b>	<a href="#">has input</a> <sup>op</sup> <a href="#">has output</a> <sup>op</sup> <a href="#">initial situation</a> <sup>op</sup> <a href="#">occurs in location</a> <sup>op</sup> <a href="#">resulting situation</a> <sup>op</sup>

## Resource<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/resourceODP/Resource">http://w3id.org/CEON/ontology/resourceODP/Resource</a>
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## Object Properties

### 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>
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## has input<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/processODP/hasInput">http://w3id.org/CEON/ontology/processODP/hasInput</a>
<b>Description</b>	The situation before the transformation takes place, i.e. the state of affairs before the process takes places, such as the set of components before they are assembled into a product.
<b>Domain</b>	<a href="#">Transformation</a> <sup>c</sup>

## has output<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/processODP/hasOutput">http://w3id.org/CEON/ontology/processODP/hasOutput</a>
<b>Description</b>	The output situation of a transformation, i.e. the state of affairs after the transformation took place.
<b>Domain</b>	<a href="#">Transformation</a> <sup>c</sup>

## has part<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/processODP/hasPart">http://w3id.org/CEON/ontology/processODP/hasPart</a>
<b>Description</b>	A process can consists of several part, which are sub-processes.
<b>Domain</b>	<a href="#">Process</a> <sup>c</sup>
<b>Range</b>	<a href="#">Process</a> <sup>c</sup>

## hasProcessExecution<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/processODP/hasProcessExecution">http://w3id.org/CEON/ontology/processODP/hasProcessExecution</a>
<b>Description</b>	A process can have specific executions.
<b>Domain</b>	<a href="#">Process</a> <sup>c</sup>
<b>Range</b>	<a href="#">ProcessExecution</a> <sup>c</sup>

## hasProcessType<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/hasProcessType>

**Description** The type of the process.

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

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

## initial situation<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/initialSituation>

**Description** The situation before executing a process.

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

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

## is the setting for<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/isSettingFor>

**Description** The thing(s) that this situation is the setting for, e.g. a resource that is in a certain state.

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

## next process<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/nextProcess>

**Description** A relation between one process and the next one following it in some sequence of processes, e.g. a sequence of transformations in a material flow.

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

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

occurs in location<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/processODP/occursInLocation">http://w3id.org/CEON/ontology/processODP/occursInLocation</a>
<b>Description</b>	The location in which a transformation takes place, e.g. the factory location where something is manufactured.
<b>Domain</b>	<a href="#">Transformation</a> <sup>c</sup>

resulting situation<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/processODP/resultingSituation">http://w3id.org/CEON/ontology/processODP/resultingSituation</a>
<b>Description</b>	The situation after the execution of a process.
<b>Domain</b>	<a href="#">Transformation</a> <sup>c</sup>
<b>Range</b>	<a href="#">Situation</a> <sup>c</sup>

## Annotation Properties

contributor<sup>ap</sup>

<b>IRI</b>	<a href="http://purl.org/dc/terms/contributor">http://purl.org/dc/terms/contributor</a>
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created<sup>ap</sup>

<b>IRI</b>	<a href="http://purl.org/dc/terms/created">http://purl.org/dc/terms/created</a>
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creator<sup>ap</sup>

<b>IRI</b>	<a href="http://purl.org/dc/terms/creator">http://purl.org/dc/terms/creator</a>
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description<sup>ap</sup>

<b>IRI</b>	<a href="http://purl.org/dc/terms/description">http://purl.org/dc/terms/description</a>
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license <sup>ap</sup>	
IRI	<a href="http://purl.org/dc/terms/license">http://purl.org/dc/terms/license</a>
title <sup>ap</sup>	
IRI	<a href="http://purl.org/dc/terms/title">http://purl.org/dc/terms/title</a>
preferred namespace prefix <sup>ap</sup>	
IRI	<a href="http://purl.org/vocab/vann/preferredNamespacePrefix">http://purl.org/vocab/vann/preferredNamespacePrefix</a>
preferred namespace uri <sup>ap</sup>	
IRI	<a href="http://purl.org/vocab/vann/preferredNamespaceUri">http://purl.org/vocab/vann/preferredNamespaceUri</a>

## Namespaces

:

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

**actor**

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

**actorODP**

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

**dcterms**

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

**odp**

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

**owl**

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

**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/CEON/ontology/resourceODP/>

**vann**

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

## Legend

c

op

ap

Classes

Object Properties

Annotation Properties