

# Circular Economy Ontology Network (CEON) - Process ODP

## Metadata

### IRI

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

### Title

Circular Economy Ontology Network (CEON) - Process ODP

### Creator

Huanyu Li

### Contributor

Eva Blomqvist

Mikael Lindcrantz

Robin Keskisärkkä

### Date Created

2023-03-23

### License

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

### 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, C3-1, C4-2, C4-5, C4-7, C4-9, C13-2, E2-6

## Classes

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

**IRI** <http://w3id.org/CEON/ontology/actor/ProcessParticipation>

**Restriction** [`actorODP:participationIn`](#)<sup>op</sup> some [`actor:ProcessParticipation`](#)<sup>c</sup>

## Process<sup>c</sup>

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

**Description** An activity in the context of a circular value network, handling resources.

**In Domain Of**

[hasPart](#)<sup>op</sup>  
[has process execution](#)<sup>op</sup>  
[has process type](#)<sup>op</sup>  
[nextProcess](#)<sup>op</sup>

**In Range Of**

[hasPart](#)<sup>op</sup>  
[nextProcess](#)<sup>op</sup>

**Super Class Of**

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

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

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

**Description** An execution of a specific process.

**In Range Of**

[has process execution](#)<sup>op</sup>

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

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

**Description** The type of a process.

**In Range Of**

[has process type](#)<sup>op</sup>

## Situation<sup>c</sup>

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

**In Domain Of**

[isSettingFor](#)<sup>op</sup>

**In Range Of**

[initialSituation](#)<sup>op</sup>  
[resultingSituation](#)<sup>op</sup>

## Transformation<sup>c</sup>

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

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

**In Domain Of** [hasInput<sup>op</sup>](#)  
[hasOutput<sup>op</sup>](#)  
[initialSituation<sup>op</sup>](#)  
[occursInLocation<sup>op</sup>](#)  
[resultingSituation<sup>op</sup>](#)

## Object Properties

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

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

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

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

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

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

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

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

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

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

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

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

### has process execution<sup>op</sup>

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

**Description** A process can have specific executions.

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

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

## has process type<sup>op</sup>

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

**Description** The type of the process.

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

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

## intial situation<sup>op</sup>

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

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

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

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

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

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

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

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

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

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

## occurs in location<sup>op</sup>

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

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

## resulting situation<sup>op</sup>

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

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

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

## Annotation Properties

contributor <sup>ap</sup>
IRI <a href="http://purl.org/dc/terms/contributor">http://purl.org/dc/terms/contributor</a>
created <sup>ap</sup>
IRI <a href="http://purl.org/dc/terms/created">http://purl.org/dc/terms/created</a>
creator <sup>ap</sup>
IRI <a href="http://purl.org/dc/terms/creator">http://purl.org/dc/terms/creator</a>
description <sup>ap</sup>
IRI <a href="http://purl.org/dc/terms/description">http://purl.org/dc/terms/description</a>
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>
covers requirements <sup>ap</sup>
IRI <a href="http://www.ontologydesignpatterns.org/schemas/cpannotation-schema.owl#coversRequirements">http://www.ontologydesignpatterns.org/schemas/cpannotation-schema.owl#coversRequirements</a>

## Namespaces

:

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#>

**vann**

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

## Legend

 c	Classes
op	Object Properties
ap	Annotation Properties