Circular Economy Ontology Network (CEON) - Actor ODP

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Actor ODP

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Version Iri

http://w3id.org/CEON/ontology/actorODP/0.2/

Version Info

0.2

Preferred Namespace Prefix

actorODP

Preferred Namespace Uri

https://w3id.org/CEON/ontoloy/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

Classes

Actor ^C	
IRI	http://w3id.org/CEON/ontology/actorODP/Actor
Description	An agent able to act in the context of a circular value network, e.g. an organisation, person.
In Domain Of	has actor type op
In Range Of	Relates to the actor holding the capability. op has participating actor op

Actor Type C

IRI http://w3id.org/CEON/ontology/actorODP/ActorType

Description

The type of an actor, e.g. the type of company, or a specific subtype based on the

organisations capabilities.

In Range Of has actor type op

Capability ^C

IRI http://w3id.org/CEON/ontology/actorODP/Capability

Description

Something that the actor is capable of doing, e.g. perfomring a certain role in a

process, based on some properties, such as access to infrastructure, resources

and know-how.

In Domain Of
Relates to the actor holding the capability. op

capability property^{op}

In Range Of based on capability op

Collaboration participation ^c

IRI http://w3id.org/CEON/ontology/actorODP/CollaborationParticipation

DescriptionThe relation involving the role of a certain actor with respect to a value network or

a process in such a network, e.g. an organisation (actor) acting as the recycler (role) in a glass recycling value netowrk (network) at a specific point or period in time. Or an organisation (actor) acting as the dismantler (role) in a dismantling step of a building deconstruction process (process step) at a specific point or

period in time.

Sub Class Of Participation^C

In Domain Of based on capability op

is a participation in op

Participation ^C

IRI http://w3id.org/CEON/ontology/actorODP/Participation

Sub Class Of time point dp exactly 1 1c or start time dp exactly 1 1c

In Domain Of

has participant role op has participating actor op

start time dp time point dp

Super Class Of

Collaboration participation C ResourceParticipation C Resource Relation C

Resource Participation^C

IRI http://w3id.org/CEON/ontology/actorODP/ResourceParticipation

Sub Class Of Participation^C

In Domain Of

<u>participatingObject</u>^{op} <u>participatingSubject</u>^{op}

Resource Relation^c

IRI http://w3id.org/CEON/ontology/actorODP/ResourceRelation

DescriptionThe relation involving the role of a certain actor with respect to a certain resource,

e.g. an organisation or individual (actor) owning (role) a specific product (resource)

at a specific point or period in time.

Sub Class Of Participation^c

In Domain Of has participating resource op

Role ^C

IRI http://w3id.org/CEON/ontology/actorODP/Role

Description

A role that an actor can take in a specific context. Applies both to roles in the

context of resources, such as owner, manufacturer, reseller etc. of that resource, as well as roles in relation to a circular value network, such as recycler, dismantler,

transporter etc., in relation to a material flow.

In Range Of has participant role op

Collaboration ^C

IRI http://w3id.org/CEON/ontology/cvn/Collaboration

Description A collaboration between a set of actors.

Process ^C

IRI http://w3id.org/CEON/ontology/process/Process

Resource ^C

IRI http://w3id.org/CEON/ontology/resourceODP/Resource

In Range Of has participating resource op

Object Properties

has actor type op

IRI http://w3id.org/CEON/ontology/actorODP/actorType

Description The type of the actor.

Domain Actor^c

Range Actor Type C

based on capability op

IRI http://w3id.org/CEON/ontology/actorODP/basedOnCapability

DescriptionAn actor participates in a collaboration based on that it has some capability that is

useful for the collaboration.

Domain Collaboration participation^C

Range Capability^C

Relates to the actor holding the capability.capability of op

IRI http://w3id.org/CEON/ontology/actorODP/capabilityOf

Domain Capability^c

Range Actor^c

capability property op

IRI http://w3id.org/CEON/ontology/actorODP/capabilityProperty

Description

Relates some properties to the capability, such as the parameters of it, or the

needed resources.

Domain Capability^c

has location op

IRI http://w3id.org/CEON/ontology/actorODP/hasLocation

Domain Actor^c or resourceODP:Resource^c

has participant role op

IRI http://w3id.org/CEON/ontology/actorODP/participantRole

Description

Holds the value of the role of the participant in this participation relation.

Domain Participation^c

Range Role^c

has participating actor op

IRI http://w3id.org/CEON/ontology/actorODP/participatingActor

Description

Holds the value of the actor involved in this participation relation.

Domain Participation^C

Range Actor^C

participating object op

IRI http://w3id.org/CEON/ontology/actorODP/participatingObject

Description Participating object in a resource participation

Domain ResourceParticipation^C

has participating resource op

IRI http://w3id.org/CEON/ontology/actorODP/participatingResource

Description

The resource that this participation relates to, i.e. for which the actor holds

the specified role.

Domain Resource Relation^C

Range resourceODP:Resource^C

participating subject op

IRI http://w3id.org/CEON/ontology/actorODP/participatingSubject

DescriptionParticipating subject in a resource participation

Domain ResourceParticipation^c

is a participation in op

IRI http://w3id.org/CEON/ontology/actorODP/participationIn

DescriptionThe collaboration or process that this participation relates to.

Domain Collaboration participation^C

Range Collaboration or process: Process

Datatype Properties

end time dp

IRI http://w3id.org/CEON/ontology/actorODP/participationEndTime

DescriptionThe end of a time interval.

Range <u>xsd:gMonthYear^c or xsd:dateTime^c or xsd:date^c or xsd:gYear^c</u>

start time dp

IRI http://w3id.org/CEON/ontology/actorODP/participationStartTime

DescriptionThe start of a time interval.

Domain Participation^c

Range xsd:gYear^c or xsd:dateTime^c or xsd:date^c or xsd:gMonthYear^c

time point dp

IRI http://w3id.org/CEON/ontology/actorODP/participationTimePoint

DescriptionThe point in time when something took place or was valid.

Domain Participation^C

Range xsd:gYear^c or xsd:date^c or xsd:dateTime^c or xsd:gMonthYear^c

Annotation Properties

contributor ^{ap}		
IRI	http://purl.org/dc/terms/contributor	
creator ^{ap}		
IRI	http://purl.org/dc/terms/creator	
description ap		
IRI	http://purl.org/dc/terms/description	
title ^{ap}		
IRI	http://purl.org/dc/terms/title	
preferred namespace prefix ^{ap}		
IRI	http://purl.org/vocab/vann/preferredNamespacePrefix	
preferred namespace uri ap		
IRI	http://purl.org/vocab/vann/preferredNamespaceUri	
covers requirements ap		
IRI	http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#covers Requirements	

Namespaces

```
:
    http://w3id.org/CEON/ontology/actorODP/

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

dcterms
    http://purl.org/dc/terms/

odp
```

```
http://www.ontology design patterns.org/schemas/cpannotationschema.owl \#
owl
     http://www.w3.org/2002/07/owl#
     http://w3id.org/CEON/ontology/process/
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/
xsd
     http://www.w3.org/2001/XMLSchema#
```

Legend

С	Classes
op	Object Properties
dp	Datatype Properties
ар	Annotation Properties