# Circular Economy Ontology Network (CEON) - Construction Module

#### Metadata

IRI

http://w3id.org/CEON/demo/construction/

Title

Circular Economy Ontology Network (CEON) - Construction Module

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**Version Iri** 

http://w3id.org/CEON/demo/construction/0.2/

**Version Info** 

0.2

**Preferred Namespace Prefix** 

construction

**Preferred Namespace Uri** 

http://w3id.org/CEON/demo/construction/

**Description** 

The construction use case ontology in Onto-DESIDE, as a module of CEON.

# Classes

# Quantity <sup>C</sup>

IRI http://qudt.org/schema/qudt/Quantity

**Super Class Of** 

ConductivityProperty<sup>C</sup> FloorPanelHeightProperty<sup>C</sup> FloorPanelLengthFloorProperty<sup>c</sup> FloorPanelWidthProperty<sup>C</sup>

<u>LifeCycleAssessmentImpact</u><sup>c</sup> MaximalDismantlingCostPerSqm<sup>C</sup> MinimalDismantlingCostPerSqm<sup>C</sup>

PedestalHeightProperty<sup>C</sup>

RecycledContent<sup>C</sup>

RecyclingSeparabilityProperty<sup>C</sup> ResistanceToEarthProperty<sup>C</sup> ReuseDeconstructabilityProperty<sup>C</sup> <u>SystemMaximalWeightProperty</u><sup>C</sup> <u>SystemMinimalWeightProperty</u><sup>C</sup>

<u>SystemWeightProperty</u><sup>c</sup>

ThicknessProperty<sup>C</sup>

# Quantity Value <sup>C</sup>

**Super Class Of** 

Conductivity<sup>C</sup>
DismantlingCost<sup>C</sup>
FloorPanelHeight<sup>C</sup>
FloorPanelLength<sup>C</sup>
FloorPanelWidth<sup>C</sup>
GlobalWarmingPotential<sup>C</sup>

GlobalWarmingPotential LocalRecyclingPlantDistance MarketValueForProduct MaximalDismantlingCost MaximalDismantlingCostPerSqm MinimalDismantlingCost MinimalDisma

MinimalDismantlingCostPerSqm<sup>C</sup>

PedestalHeight<sup>c</sup>
PedestalLength<sup>c</sup>
PedestalWidth<sup>c</sup>

RecycledContentValue<sup>C</sup>
RecyclingDeconstructability<sup>C</sup>
RecyclingPotentialValue<sup>C</sup>
RecyclingSeparability<sup>C</sup>
RefurbishmentCost<sup>C</sup>
ResistanceToEarth<sup>C</sup>
SystemMaximalWeight<sup>C</sup>
SystemMinimalWeight<sup>C</sup>

SystemWeight<sup>c</sup>
TestingCost<sup>c</sup>
Thickness<sup>c</sup>
TransportCost<sup>c</sup>
UseSpanTime<sup>c</sup>

#### Unit <sup>C</sup>

http://qudt.org/schema/qudt/Unit

Super Class Of CO2Eq<sup>C</sup>

### A1Raw M Aterial Extraction Impact <sup>c</sup>

tionImpact

Sub Class Of ProductStageImpact<sup>C</sup>

#### A2Transportation Of Raw Materials Impact<sup>c</sup>

IRI http://w3id.org/CEON/demo/construction/A2TransportationOfR

awMaterialsImpact

Sub Class Of ProductStageImpact<sup>C</sup>

A3Manufacturing Impact <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/A3ManufacturingImpa

ct

Sub Class Of ProductStageImpact<sup>C</sup>

A4Transportation Of Manufactured Products Impact C

anufacturedProductsImpact

Sub Class Of ProductStageImpact<sup>C</sup>

A5The Construction Phase Impact c

IRI http://w3id.org/CEON/demo/construction/A5TheConstructionPh

aseImpact

Sub Class Of ProductStageImpact<sup>C</sup>

Acoustic Layer<sup>c</sup>

Sub Class Of product:Product

B1Installed Product Impact <sup>c</sup>

http://w3id.org/CEON/demo/construction/B1InstalledProductI

mpact

Sub Class Of UseStageImpact<sup>C</sup>

B2Maintenance Impact <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/B2MaintenanceImpact

Sub Class Of UseStageImpact<sup>C</sup>

B3Repair Impact<sup>c</sup>

Sub Class Of UseStageImpact<sup>C</sup>

B4Replacement Impact<sup>C</sup>

Sub Class Of UseStageImpact<sup>C</sup>

B5Refurbishment Impact <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/B5RefurbishmentImpa

ct

Sub Class Of UseStageImpact<sup>C</sup>

B6Operational Energy Consumption <sup>c</sup>

IRI http://w3id.org/CEON/demo/construction/B6OperationalEnergy

Consumption

Sub Class Of UseStageImpact<sup>C</sup>

B7Operational Water Use <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/B7OperationalWaterU

se

Sub Class Of UseStageImpact<sup>C</sup>

Beyond End Of Life <sup>C</sup>

Sub Class Of LifeCycleAssessmentImpact<sup>C</sup>

C1Demolition <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/C1Demolition

Sub Class Of EndOfLifeStage<sup>C</sup>

C2Cmh Silver Compliance C

ce

Sub Class Of product:Compliance

Equivalentclass product:complianceWith\_value C2C\_MH\_Silver<sup>c</sup>

C2Transportation Of Demolition Waste <sup>c</sup>

IRI http://w3id.org/CEON/demo/construction/C2TransportationOfD

 ${\it emolitionWaste}$ 

Sub Class Of EndOfLifeStage<sup>C</sup>

C3Recycling Or Disposal C

IRI http://w3id.org/CEON/demo/construction/C3RecyclingOrDispos

**Sub Class Of** EndOfLifeStage<sup>C</sup>

C4Final Disposal<sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/C4FinalDisposal

**Sub Class Of** EndOfLifeStage C

Co2Eq<sup>c</sup>

IRI http://w3id.org/CEON/demo/construction/CO2Eq

**Sub Class Of** http://qudt.org/schema/qudt/Unit<sup>c</sup>

Conductivity <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/Conductivity

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnitop some http://qudt.org/schema/qudt/Unitop and http://qudt.org/schema/qudt/hasUnit op only http://qudt.org/schema/qudt/Unit

In Range Of hasConductivityValue op

Restriction http://qudt.org/schema/qudt/numericValuedp only Conductivityc

Conductivity Property C

IRI http://w3id.org/CEON/demo/construction/ConductivityPropert

У

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity\_c http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasConductivityValue op

In Range Of hasConductivityProperty<sup>op</sup>

Restriction hasConductivityValue op only ConductivityPropertyC Construction Product Quality<sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/ConstructionProduct

Quality

Sub Class Of <a href="http://w3id.org/CEON/ontology/resourceODP/ResourceQuality">http://w3id.org/CEON/ontology/resourceODP/ResourceQuality</a>

In Range Of hasProductQuality op

**Named Individuals** 

product\_quality\_high<sup>ni</sup> product\_quality\_low<sup>ni</sup> product\_quality\_medium<sup>ni</sup>

Contaminant <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/Contaminant

Sub Class Of <a href="http://w3id.org/CEON/ontology/resourceODP/Matter">http://w3id.org/CEON/ontology/resourceODP/Matter</a>

In Range Of hasContaminant op

Dimensional Deviation <sup>c</sup>

IRI http://w3id.org/CEON/demo/construction/DimensionalDeviatio

n

In Range Of <u>hasDimensionalDeviation</u> op

Dismantling Cost <sup>C</sup>

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit<sup>c</sup>

and http://qudt.org/schema/qudt/hasUnitop some

http://qudt.org/schema/qudt/Unit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="DismantlingCost">DismantlingCost</a> only <a href="DismantlingCost">DismantlingCost</a>

End Of Life Stage C

Sub Class Of LifeCycleAssessmentImpact<sup>C</sup>

**Super Class Of** 

C1Demolition<sup>C</sup>

C2TransportationOfDemolitionWaste<sup>C</sup>

C3RecyclingOrDisposal<sup>C</sup> C4FinalDisposal<sup>C</sup> Environmental Impact <sup>c</sup>

IRI http://w3id.org/CEON/demo/construction/EnvironmentalImpact

Sub Class Of <a href="http://w3id.org/CEON/ontology/resourceODP/ResourceProperty">http://w3id.org/CEON/ontology/resourceODP/ResourceProperty</a>

Super Class Of <u>LifeCycleAssessmentImpact</u><sup>C</sup>

Fire Resistance Rating <sup>c</sup>

g

Sub Class Of <a href="http://w3id.org/CEON/ontology/resourceODP/ResourceProperty">http://w3id.org/CEON/ontology/resourceODP/ResourceProperty</a>

In Range Of hasFireResistanceRating op

Named Individuals

F30<sup>ni</sup> F60<sup>ni</sup>

Fire Resistance Relation <sup>C</sup>

http://w3id.org/CEON/demo/construction/FireResistanceRelat

ion

Sub Class Of actorODP:ResourceParticipation

Floor Panel Height<sup>c</sup>

IRI http://w3id.org/CEON/demo/construction/FloorPanelHeight

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit<sup>c</sup>

and <a href="http://qudt.org/schema/qudt/hasUnit">http://qudt.org/schema/qudt/hasUnit</a> one

http://qudt.org/schema/qudt/Unit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only FloorPanelHeight<sup>c</sup>

Floor Panel Height Property C

IRI http://w3id.org/CEON/demo/construction/FloorPanelHeightPro

perty

Sub Class Of http://gudt.org/schema/gudt/Quantity

http://qudt.org/schema/qudt/Quantity<sup>c</sup> http://w3id.org/CEON/ontology/resourceODP/ResourceProperty Floor Panel Length <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/FloorPanelLength

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only FloorPanelLength<sup>c</sup>

Floor Panel Length Floor Property c

orProperty

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantityc

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

Floor Panel Width <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/FloorPanelWidth

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

Restriction http://qudt.org/schema/qudt/numericValue<sup>dp</sup> only FloorPanelWidth<sup>c</sup>

Floor Panel Width Property C

erty

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

Floor System<sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/FloorSystem

Sub Class Of product:Product

Floor Tile C

Sub Class Of product:Product

Floor Tile Condition <sup>C</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/resourceODP/ResourceCondition">http://w3id.org/CEON/ontology/resourceODP/ResourceCondition</a>

Named Individuals

bad\_condition<sup>ni</sup>
good\_condition<sup>ni</sup>
medium\_condition<sup>ni</sup>

Floor Tile Condition Relation <sup>C</sup>

http://w3id.org/CEON/demo/construction/FloorTileConditionR

elation

Sub Class Of actorODP:ResourceParticipation

Galvanized Steel Material C

http://w3id.org/CEON/demo/construction/GalvanizedSteelMate

rial

Sub Class Of material:Material

Global Warming Potential <sup>c</sup>

ial

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only CO2Eq<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some CO2Eq<sup>c</sup>

In Range Of hasGlobalWarmingPotential op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="mailto:GlobalWarmingPotential">GlobalWarmingPotential</a> <a href="mailto:GlobalWarmingPotential">http://qudt.org/schema/qudt/numericValue</a> <a href="mailto:GlobalWarmingPotential">http://qudt.org/schema/globalWarmingPotential</a> <a href="mailto:GlobalWarmingPotential">http:/

Installation Location <sup>C</sup>

http://w3id.org/CEON/demo/construction/InstallationLocatio

n

Sub Class Of <a href="http://w3id.org/CEON/ontology/location/Location">http://w3id.org/CEON/ontology/location/Location</a>

Life Cycle Assessment Impact <sup>c</sup>

IRI http://w3id.org/CEON/demo/construction/LifeCycleAssessment

Impact

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity<sup>c</sup>

<u>EnvironmentalImpact</u><sup>c</sup>

In Domain Of hasGlobalWarmingPotential op

Restriction hasGlobalWarmingPotential<sup>op</sup> only LifeCycleAssessmentImpact<sup>C</sup>

Super Class Of

BeyondEndOfLife<sup>C</sup>
EndOfLifeStage<sup>C</sup>
ProductStageImpact<sup>C</sup>
UseStageImpact<sup>C</sup>

Local Recycling Plant Distance <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/LocalRecyclingPlant

Distance

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnitop only http://qudt.org/schema/qudt/Unitop

and http://qudt.org/schema/qudt/hasUnitop some

http://qudt.org/schema/qudt/Unit<sup>c</sup>

In Range Of

 $\underline{has Distance To Recycling Plant}^{op}$ 

hasRecyclingPlant<sup>op</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="http://qudt.org/schema/qudt/numericValue">LocalRecyclingPlantDistance</a> on

Market Value For Product<sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/MarketValueForProdu

ct

Sub Class Of

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

C

In Range Of hasMarketValueForNewProduct<sup>op</sup>

hasMarketValueForReusedProduct<sup>op</sup>

Restriction http://gudt.org/schema/gudt/numericValue<sup>dp</sup> only MarketValueForProduct<sup>C</sup>

Maximal Dismantling Cost <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/MaximalDismantlingC

ost

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="mailto:MaximalDismantlingCost">MaximalDismantlingCost</a> only

Maximal Dismantling Cost Per Sqm<sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/MaximalDismantlingC

ostPerSqm

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity<sup>c</sup> http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit op only http://qudt.org/schema/qudt/Unit c

and http://qudt.org/schema/qudt/hasUnitop some

http://qudt.org/schema/qudt/Unit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> dp only

<u>MaximalDismantlingCostPerSqm</u><sup>c</sup>

Minimal Dismantling Cost C

ost

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> dp only <a href="mailto:MinimalDismantlingCost">MinimalDismantlingCost</a> C

Minimal Dismantling Cost Per Sqm<sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/MinimalDismantlingC

 $\verb"ostPerSqm"$ 

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

C

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only

<u>MinimalDismantlingCostPerSqm<sup>c</sup></u>

Pedestal <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/Pedestal

Sub Class Of product:Product

Pedestal Glue <sup>C</sup>

Sub Class Of product:Product

Pedestal Height<sup>C</sup>

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>C</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit<sup>c</sup>

and http://qudt.org/schema/qudt/hasUnitop some

http://qudt.org/schema/qudt/Unit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="PedestalHeight">PedestalHeight</a>

Pedestal Height Property <sup>c</sup>

rty

Sub Class Of http://gudt.org/schema/gudt/Ouantity<sup>C</sup>

http://qudt.org/schema/qudt/Quantity\_c http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

Pedestal Length <sup>C</sup>

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>C</sup>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

Restriction <a href="http://gudt.org/schema/gudt/numericValue">http://gudt.org/schema/gudt/numericValue</a> only <a href="PedestalLength">PedestalLength</a> only <a href="http://gudt.org/schema/gudt/numericValue">PedestalLength</a> only <a href="

Pedestal Width C

IRI http://w3id.org/CEON/demo/construction/PedestalWidth

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup> http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

http://qudt.org/schema/qudt/hasUnitop only http://qudt.org/schema/qudt/Unitop

and http://qudt.org/schema/qudt/hasUnit op some

http://qudt.org/schema/qudt/Unit<sup>c</sup>

Restriction http://qudt.org/schema/qudt/numericValue<sup>dp</sup> only PedestalWidth<sup>c</sup>

Product Stage Impact<sup>c</sup>

IRI http://w3id.org/CEON/demo/construction/ProductStageImpact

**Sub Class Of** <u>LifeCycleAssessmentImpact</u><sup>C</sup>

**Super Class Of** 

A1RawMAterialExtractionImpact<sup>C</sup>

<u>A2TransportationOfRawMaterialsImpact</u><sup>C</sup>

<u>A3ManufacturingImpact</u><sup>c</sup>

A4TransportationOfManufacturedProductsImpact<sup>C</sup>

A5TheConstructionPhaseImpact<sup>C</sup>

Recycled Content<sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/RecycledContent

**Sub Class Of** http://qudt.org/schema/qudt/Quantity<sup>C</sup>

Recycled Content Value <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/RecycledContentValu

**Sub Class Of** http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

In Range Of hasRecycledContentValue op

Restriction http://qudt.org/schema/qudt/hasUnitop only RecycledContentValue

http://qudt.org/schema/qudt/numericValue<sup>dp</sup> only RecycledContentValue<sup>c</sup>

Recycling Deconstructability<sup>c</sup>

IRI http://w3id.org/CEON/demo/construction/RecyclingDeconstruc

tability

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnitop only http://qudt.org/schema/qudt/Unitop

and http://qudt.org/schema/qudt/hasUnit op some

http://qudt.org/schema/qudt/Unit<sup>c</sup>

In Range Of hasReuseDeconstructability op

Restriction <a href="http://gudt.org/schema/qudt/numericValue">http://gudt.org/schema/qudt/numericValue</a> only RecyclingDeconstructability<sup>c</sup>

Recycling Potential Value <sup>C</sup>

alue

Sub Class Of http://gudt.org/oabs

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

In Range Of hasRecyclingPotential op

Restriction <a href="http://gudt.org/schema/qudt/numericValue">http://gudt.org/schema/qudt/numericValue</a> only RecyclingPotentialValue<sup>C</sup>

Recycling Separability <sup>C</sup>

ty

Sub Class Of http://qudt.org/schema/qudt/QuantityValue<sup>C</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

In Range Of <u>hasRecyclingSeparability</u> op

Restriction <a href="http://gudt.org/schema/gudt/numericValue">http://gudt.org/schema/gudt/numericValue</a> only RecyclingSeparability<sup>c</sup>

Recycling Separability Property <sup>C</sup>

tyProperty

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasRecyclingSeparability op

Restriction hasRecyclingSeparability<sup>op</sup> only RecyclingSeparabilityProperty<sup>c</sup>

Refurbishment Cost <sup>C</sup>

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only RefurbishmentCost<sup>C</sup>

Resistance To Earth <sup>c</sup>

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

In Range Of hasResistanceToEarth<sup>op</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only ResistanceToEarth<sup>c</sup>

Resistance To Earth Property C

IRI http://w3id.org/CEON/demo/construction/ResistanceToEarthPr

operty

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity<sup>C</sup>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasResistanceToEarth op

Restriction hasResistanceToEarth<sup>op</sup> only ResistanceToEarthProperty<sup>c</sup>

Reuse Deconstructability Property <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/ReuseDeconstructabi

lityProperty

Sub Class Of

http://qudt.org/schema/qudt/Quantity<sup>c</sup>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasReuseDeconstructability op

Restriction hasReuseDeconstructability<sup>op</sup> only ReuseDeconstructabilityProperty<sup>c</sup>

Reuse Potential<sup>c</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/resourceODP/ResourceProperty">http://w3id.org/CEON/ontology/resourceODP/ResourceProperty</a>

In Domain Of hasRecyclingPotential op

In Range Of hasReusePotential op

**Named Individuals** 

high\_reuse\_potential<sup>ni</sup> moderate\_reuse\_potential<sup>ni</sup>

no\_reuseni

Screw<sup>c</sup>

Sub Class Of product:Item

System Maximal Weight <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/SystemMaximalWeight

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit<sup>c</sup>

and http://qudt.org/schema/qudt/hasUnitop some

http://qudt.org/schema/qudt/Unit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> dp only <a href="SystemMaximalWeight">SystemMaximalWeight</a> c

System Maximal Weight Property C

IRI http://w3id.org/CEON/demo/construction/SystemMaximalWeight

Property

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity<sup>c</sup>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

Restriction hasSystemWeight<sup>op</sup> only SystemMaximalWeightProperty<sup>c</sup>

System Minimal Weight C

IRI http://w3id.org/CEON/demo/construction/SystemMinimalWeight

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit<sup>c</sup>

 $\textit{and} \ \underline{\text{http://qudt.org/schema/qudt/hasUnit}}^{op} \ \text{some}$ 

http://qudt.org/schema/qudt/Unit<sup>C</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="mailto:SystemMinimalWeight">SystemMinimalWeight</a> on <a href="mailto:SystemMinimalWeight">SystemMinimalWeigh

System Minimal Weight Property C

Property

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity<sup>c</sup>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

Restriction <u>hasSystemWeight</u><sup>op</sup> only <u>SystemMinimalWeightProperty</u><sup>c</sup>

System Weight<sup>C</sup>

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/Unit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

In Range Of hasSystemWeight<sup>op</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> dp only SystemWeight<sup>C</sup>

System Weight Property C

IRI http://w3id.org/CEON/demo/construction/SystemWeightPropert

У

Sub Class Of http://gudt.org/sc

http://qudt.org/schema/qudt/Quantityc

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

Restriction <u>hasSystemWeight</u>op only <u>SystemWeightProperty</u><sup>C</sup>

Take Back Program From Original Manufacturer <sup>C</sup>

IRI http://w3id.org/CEON/demo/construction/TakeBackProgramFrom

OriginalManufacturer

Sub Class Of actorODP:Infrastructure

Testing Cost<sup>C</sup>

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit<sup>c</sup>

and http://qudt.org/schema/qudt/hasUnitop some

http://qudt.org/schema/qudt/Unit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="mailto:TestingCost">TestingCost</a> only <a href="mailto:TestingCost">Test

Thickness <sup>c</sup>

IRI http://w3id.org/CEON/demo/construction/Thickness

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnitop some http://qudt.org/schema/qudt/Unitop and http://qudt.org/schema/qudt/hasUnit op only http://qudt.org/schema/qudt/Unit

Restriction http://qudt.org/schema/qudt/numericValue<sup>dp</sup> only Thickness<sup>c</sup>

Thickness Property C

IRI http://w3id.org/CEON/demo/construction/ThicknessProperty

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity<sup>C</sup> http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

Transport Cost C

IRI http://w3id.org/CEON/demo/construction/TransportCost

**Sub Class Of** 

http://qudt.org/schema/qudt/QuantityValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnitop some http://qudt.org/schema/qudt/Unitop and http://qudt.org/schema/qudt/hasUnit op only http://qudt.org/schema/qudt/Unit

Restriction http://qudt.org/schema/qudt/numericValuedp only TransportCostc

Treatment Policy C

IRI http://w3id.org/CEON/demo/construction/TreatmentPolicy

**Sub Class Of** http://w3id.org/CEON/ontology/resourceODP/Information

In Range Of policyOnTreatment<sup>op</sup>

**Named Individuals** 

<u>refurbish<sup>ni</sup></u> reprocess ni reuse<sup>ni</sup>

Use Span Time <sup>C</sup>

**Sub Class Of** 

http://gudt.org/schema/gudt/QuantityValue<sup>c</sup>

 $\frac{\text{http://qudt.org/schema/qudt/hasUnit}^{op}}{\text{and}} \frac{\text{http://qudt.org/schema/qudt/Unit}^{op}}{\text{only}} \frac{\text{http://qudt.org/schema/qudt/Unit}^{op}}{\text{only}} \frac{\text{http://qudt.org/schema/qudt/Unit}}{\text{http://qudt.org/schema/qudt/Unit}}$ 

С

In Range Of

hasUseSpan op

<u>hasUseSpanRemaining</u><sup>op</sup> <u>hasUseSpanTotal</u><sup>op</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="http://qudt.org/schema/qudt/numericValue">UseSpanTime</a>

Use Stage Impact<sup>C</sup>

Sub Class Of <u>LifeCycleAssessmentImpact</u><sup>C</sup>

**Super Class Of** 

B1InstalledProductImpact<sup>c</sup> B2MaintenanceImpact<sup>c</sup>

B3RepairImpact<sup>C</sup>
B4ReplacementImpact<sup>C</sup>
B5RefurbishmentImpact<sup>C</sup>

B6OperationalEnergyConsumption<sup>c</sup>

B7OperationalWaterUse<sup>c</sup>

### **Object Properties**

has unit op

IRI http://qudt.org/schema/qudt/hasUnit

quantity value op

IRI http://qudt.org/schema/qudt/quantityValue

**Super Property Of** 

- hasConductivityValue op
- <u>hasDistanceToRecyclingPlant</u>op
- <u>hasGlobalWarmingPotential</u>op
- hasRecycledContentValue op
- hasRecyclingPlant<sup>op</sup>
- hasRecyclingPotential op
- <u>hasRecyclingSeparability</u>op
- <u>hasResistanceToEarth</u><sup>op</sup>
- hasReuseDeconstructability op
- <u>hasSystemWeight</u><sup>op</sup>
- hasUseSpan<sup>op</sup>

has accessory op

IRI http://w3id.org/CEON/demo/construction/hasAccessory

has conductivity property op

erty

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Domain product:Product<sup>c</sup> or product:Item<sup>c</sup>

Range ConductivityProperty<sup>C</sup>

has conductivity value op

http://w3id.org/CEON/demo/construction/hasConductivityValu

e

Sub Property Of <a href="http://qudt.org/schema/qudt/quantity/value">http://qudt.org/schema/qudt/quantity/value</a> op

**Domain** 

ConductivityProperty<sup>C</sup>

product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range Conductivity<sup>c</sup>

has contaminant op

IRI http://w3id.org/CEON/demo/construction/hasContaminant

<u>Domain</u> <u>product:Product<sup>c</sup> or product:Item<sup>c</sup></u>

Range Contaminant<sup>C</sup>

has dimensional deviation op

IRI http://w3id.org/CEON/demo/construction/hasDimensionalDevia

tion

Sub Property Of topObjectProperty op

**Domain** product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range <u>Dimensional Deviation</u><sup>C</sup>

has distance to recycling plant op

IRI http://w3id.org/CEON/demo/construction/hasDistanceToRecycl

ingPlant

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a> op

**Domain** product:Product<sup>c</sup> or product:Item<sup>c</sup>

Range <u>LocalRecyclingPlantDistance</u><sup>c</sup>

has fire resistance rating op

IRI http://w3id.org/CEON/demo/construction/hasFireResistanceRa

ting

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

**Domain** product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range <u>FireResistanceRating</u><sup>C</sup>

has global warming potential op

IRI http://w3id.org/CEON/demo/construction/hasGlobalWarmingPot

ential

Sub Property Of <a href="http://qudt.org/schema/qudt/quantity/value">http://qudt.org/schema/qudt/quantity/value</a> op

**Domain** 

<u>LifeCycleAssessmentImpact<sup>C</sup></u>
 <u>product:Product<sup>C</sup> or product:Item<sup>C</sup></u>

Range <u>GlobalWarmingPotential</u><sup>C</sup>

has installation location op

IRI http://w3id.org/CEON/demo/construction/hasInstallationLoca

tion

Sub Property Of <a href="http://w3id.org/CEON/ontology/location/hasLocation">http://w3id.org/CEON/ontology/location/hasLocation</a>

<u>Domain</u> <u>product:Item</u> or <u>product:Product</u>

has market value for new product op

wProduct

Sub Property Of <a href="http://w3id.org/CEON/ontology/quantity/hasMarketValue">http://w3id.org/CEON/ontology/quantity/hasMarketValue</a>

Domain product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range MarketValueForProduct<sup>C</sup>

has market value for reused product op

IRI http://w3id.org/CEON/demo/construction/hasMarketValueForRe

 ${\tt usedProduct}$ 

**Sub Property Of** <a href="http://w3id.org/CEON/ontology/quantity/hasMarketValue">http://w3id.org/CEON/ontology/quantity/hasMarketValue</a>

<u>Domain</u> <u>product:Product<sup>c</sup> or product:Item<sup>c</sup></u>

Range <u>MarketValueForProduct</u><sup>C</sup>

has product quality op

Sub Property Of topObjectProperty op

<u>Domain</u> <u>product:Item<sup>c</sup> or product:Product<sup>c</sup></u>

Range ConstructionProductQuality<sup>C</sup>

has recycled content value op

alue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a> op

Range RecycledContentValue<sup>C</sup>

has recycling plant op

IRI http://w3id.org/CEON/demo/construction/hasRecyclingPlant

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a> op

Range <u>LocalRecyclingPlantDistance</u><sup>C</sup>

has recycling potential op

al

Sub Property Of <a href="http://qudt.org/schema/qudt/quantity/value">http://qudt.org/schema/qudt/quantity/value</a> op

**Domain** 

• ReusePotential<sup>C</sup>

• product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range RecyclingPotentialValue<sup>C</sup>

has recycling separability op

http://w3id.org/CEON/demo/construction/hasRecyclingSeparab

ility

Sub Property Of <a href="http://qudt.org/schema/qudt/quantity/value">http://qudt.org/schema/qudt/quantity/value</a> op

**Domain** 

RecyclingSeparabilityProperty<sup>C</sup>
 product:Item<sup>C</sup> or product:Product<sup>C</sup>

Range RecyclingSeparability<sup>c</sup>

has resistance to earth op

http://w3id.org/CEON/demo/construction/hasResistanceToEart

h

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a> op

**Domain** 

ResistanceToEarthProperty<sup>C</sup>

product:Product<sup>c</sup> or product:Item<sup>c</sup>

Range ResistanceToEarth<sup>C</sup>

has reuse deconstructability op

ability

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a> op

**Domain** 

ReuseDeconstructabilityProperty<sup>c</sup>

• product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range RecyclingDeconstructability<sup>C</sup>

has reuse potential op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Domain product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range ReusePotential<sup>C</sup>

has system weight op

IRI http://w3id.org/CEON/demo/construction/hasSystemWeight

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a> op

**Domain** 

 <u>SystemMinimalWeightProperty</u><sup>c</sup> or <u>SystemWeightProperty</u><sup>c</sup> or <u>SystemMaximalWeightProperty</u><sup>c</sup>

• product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range SystemWeight<sup>C</sup>

has take back program op

has takeback price op

Sub Property Of <a href="http://w3id.org/CEON/ontology/quantity/hasPrice">http://w3id.org/CEON/ontology/quantity/hasPrice</a>

has use span op

Sub Property Of <a href="http://qudt.org/schema/qudt/quantity/alue">http://qudt.org/schema/qudt/quantity/alue</a> op

**Super Property Of** 

<u>hasUseSpanRemaining</u> op
 hasUseSpanTotal op

Domain product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range UseSpanTime<sup>c</sup>

has use span remaining op

IRI http://w3id.org/CEON/demo/construction/hasUseSpanRemaining

Sub Property Of hasUseSpan op

Range <u>UseSpanTime</u><sup>C</sup>

has use span total op

Sub Property Of hasUseSpan op

Range UseSpanTime<sup>C</sup>

installation location op

IRI http://w3id.org/CEON/demo/construction/installationLocatio

n

located in building op

Sub Property Of <u>locatedInZone op</u>

located in room op

IRI http://w3id.org/CEON/demo/construction/locatedInRoom

Sub Property Of <u>locatedInZone op</u>

located in storey op

Sub Property Of locatedInZone op

located in zone op

http://w3id.org/CEON/demo/construction/locatedInZone

**Super Property Of** 

<u>locatedInBuilding</u> op
 <u>locatedInRoom</u> op

• locatedInStorey op

Range <a href="https://w3id.org/bot#Zone">https://w3id.org/bot#Zone</a>

policy on treatment op

Sub Property Of topObjectProperty op

Domain product:Product<sup>c</sup> or product:Item<sup>c</sup>

Range <u>TreatmentPolicy</u><sup>C</sup>

### **Datatype Properties**

numeric value <sup>dp</sup>

IRI http://qudt.org/schema/qudt/numericValue

construction year dp

Sub Property Of topDataProperty dp

Range <u>xsd:gYear</u>

has accessories dp

Domain product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range xsd:string

has deconstructability description dp

tyDescription

has dismantling instruction dp

IRI http://w3id.org/CEON/demo/construction/hasDismantlingInstr

uction

Sub Property Of topDataProperty dp

Domain product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range xsd:anyURI

has dismantling method dp

IRI http://w3id.org/CEON/demo/construction/hasDismantlingMetho

d

Sub Property Of topDataProperty dp

**Domain** product:Product<sup>c</sup> or product:Item<sup>c</sup>

Range <u>xsd:string</u>

has image dp

 has installation date dp

Sub Property Of topDataProperty dp

**Domain** product:Item

Range xsd:date

has packaging recommendations after dismantling dp

IRI http://w3id.org/CEON/demo/construction/hasPackagingRecomme

ndationsAfterDismantling

Sub Property Of topDataProperty dp

Domain product:Product<sup>c</sup> or product:Item<sup>c</sup>

Range <u>xsd:string</u>

has preuse description dp

n

has product description dp

on

Sub Property Of topDataProperty dp

**Domain** product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range xsd:string

has product id dp

Sub Property Of topDataProperty dp

<u>Domain</u> <u>product:Product<sup>c</sup> or product:Item<sup>c</sup></u>

Range <u>xsd:int</u>

has production date dp

IRI http://w3id.org/CEON/demo/construction/hasProductionDate

Sub Property Of topDataProperty dp

**Domain** product:Item

Range <u>xsd:date</u>

has production site dp

Sub Property Of topDataProperty dp

Domain product:Product<sup>c</sup> or product:Item<sup>c</sup>

Range <u>xsd:string</u>

has refurbishment method dp

IRI http://w3id.org/CEON/demo/construction/hasRefurbishmentMet

hod

Sub Property Of topDataProperty dp

<u>Domain</u> <u>product:Product<sup>c</sup> or product:Item<sup>c</sup></u>

Range xsd:string

has removal date dp

IRI http://w3id.org/CEON/demo/construction/hasRemovalDate

Domain product:Item

Range xsd:date

has reusability description dp

IRI http://w3id.org/CEON/demo/construction/hasReusabilityDescr

iption

has take back program from original manufacturer dp

IRI http://w3id.org/CEON/demo/construction/hasTakeBackProgramF

romOriginalManufacturer

Sub Property Of topDataProperty dp

Domain product:Product

Range <u>xsd:boolean</u>

has technical requirements for take back for recycling dp

mentsForTakeBackForRecycling

Sub Property Of topDataProperty dp

<u>Domain</u> <u>product:Product<sup>c</sup> or product:Item<sup>c</sup></u>

Range <u>xsd:string</u>

has technical requirements for take back for reuse dp

IRI http://w3id.org/CEON/demo/construction/hasTechnicalRequire

mentsForTakeBackForReuse

Sub Property Of topDataProperty dp

**Domain** product:Item<sup>c</sup> or product:Product<sup>c</sup>

Range <u>xsd:string</u>

is contaminated <sup>dp</sup>

Sub Property Of topDataProperty dp

<u>Domain</u> <u>product:Item<sup>c</sup> or product:Product<sup>c</sup></u>

Range xsd:boolean

is take back program from other manufacturer available <sup>dp</sup>

IRI http://w3id.org/CEON/demo/construction/isTakeBackProgramFr

omOtherManufacturerAvailable

Sub Property Of topDataProperty dp

**Domain** product:Product

Range xsd:boolean

needs refurbishment before reuse dp

eforeReuse

**Annotation Properties** 

contributor ap

IRI http://purl.org/dc/terms/contributor

created <sup>ap</sup>

IRI http://purl.org/dc/terms/created

creator ap

IRI http://purl.org/dc/terms/creator

```
description ap
IRI
                  http://purl.org/dc/terms/description
license ap
IRI
                  http://purl.org/dc/terms/license
title <sup>ap</sup>
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
                  \verb|http://www.ontologydesignpatterns.org/schemas/cpannotation|\\
IRI
                  schema.owl#coversRequirements
max qualified cardinality ap
IRI
                  http://www.w3.org/2002/07/owl#maxQualifiedCardinality
Namespaces
    http://w3id.org/CEON/demo/construction/
    http://w3id.org/CEON/ontology/actor/
    http://w3id.org/CEON/ontology/actorODP/
```

```
http://w3id.org/CEON/demo/construction/
actor

http://w3id.org/CEON/ontology/actor/
actorODP
http://w3id.org/CEON/ontology/actorODP/
dcterms
http://purl.org/dc/terms/
material
http://w3id.org/CEON/ontology/material/
odp
http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#
owl
http://www.w3.org/2002/07/owl#
product
http://w3id.org/CEON/ontology/product/
```

```
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/
xsd
    http://www.w3.org/2001/XMLSchema#
```

# Legend

С	Classes
op	Object Properties
dp	Datatype Properties
ap	Annotation Properties