

Web Offering Ontology Model

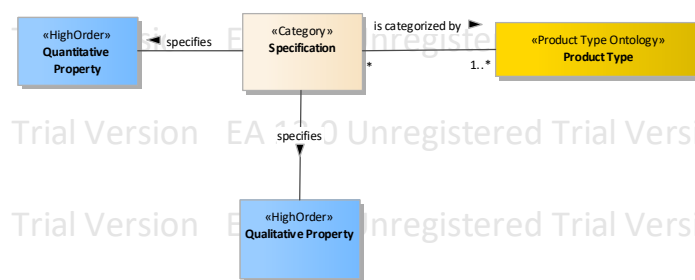
Package in package 'Model'

WOOM
Version Phase 1.0 Proposed

Offering Item Properties diagram

Class diagram in package 'WOOM'

Offering Item Properties
Version 1.0

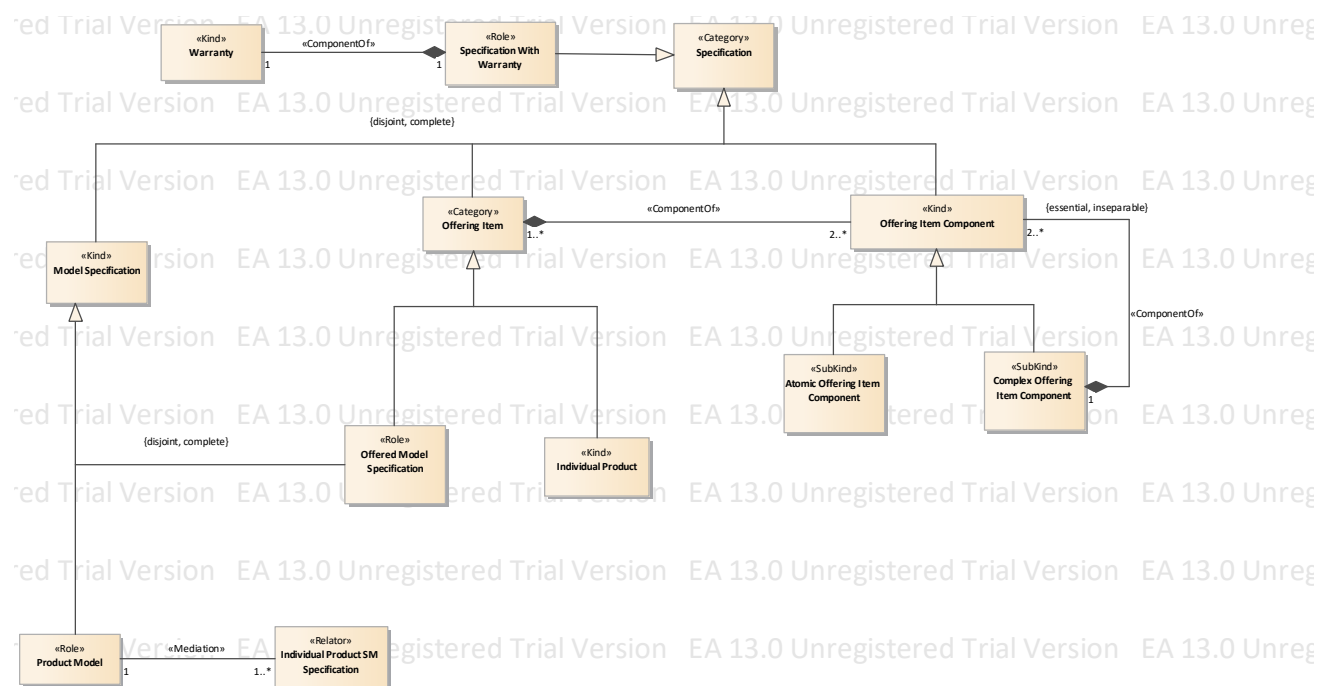


Offering Item Properties

Offering Item Types diagram

Class diagram in package 'WOOM'

Offering Item Types
Version 1.0

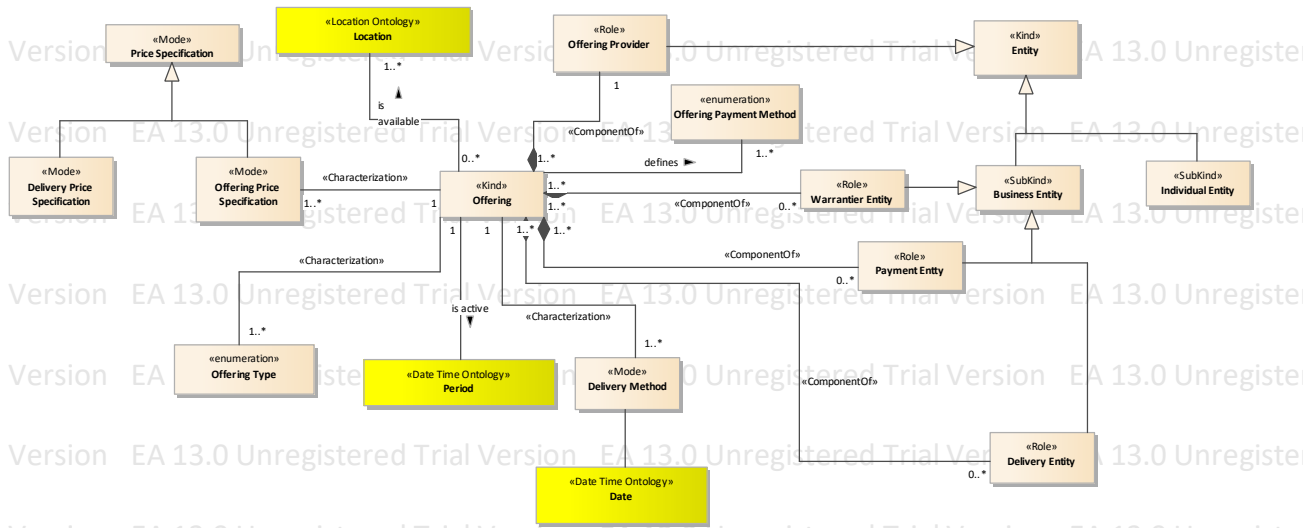


Offering Item Types

Offering Specification diagram

OntoUML diagram in package 'WOOM'

Offering Specification
Version 1.0



Offering Specification

Atomic Offering Item Component

SubKind «SubKind» in package 'WOOM'

An Offering Item Component that is not decomposed in more parts.

Atomic Offering Item Component
Version 1.0 Phase 1.0 Proposed
Extends Offering Item Component

OUTGOING STRUCTURAL RELATIONSHIPS

- Generalization from «SubKind» Atomic Offering Item Component to «Kind» Offering Item Component
[Direction is 'Source -> Destination'.]

Business Entity

SubKind «SubKind» in package 'WOOM'

A company responsible for whether offering, delivery or payment.

Business Entity
Version 1.0 Phase 1.0 Proposed
Extends Entity

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Generalization from «SubKind» Business Entity to «Kind» Entity

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from «Role» Payment Entity to «SubKind» Business Entity

[Direction is 'Source -> Destination'.]

⇒ Generalization from «Role» Warrantier Entity to «SubKind» Business Entity

[Direction is 'Source -> Destination'.]

⇒ Generalization from «Role» Delivery Entity to «SubKind» Business Entity

[Direction is 'Source -> Destination'.]

Complex Offering Item Component

SubKind «SubKind» in package 'WOOM'

An Offering component that has other components.

Complex Offering Item Component
Version 1.0 Phase 1.0 Proposed

Extends Offering Item Component

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Generalization from «SubKind» Complex Offering Item Component to «Kind» Offering Item Component

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

🔑 ComponentOf «ComponentOf»

Source: Public (SubKind) Complex Offering Item Component
«SubKind»

Cardinality: [1]

Target: Public (Kind) Offering Item Component
«Kind»

Cardinality: [2..*]

Date

Class «Date Time Ontology» in package 'WOOM'

The period of time in which the offering is available.

Date
Version 1.0 Phase 1.0 Proposed

Delivery Entity

Role «Role» in package 'WOOM'

The Business entity responsible for delivering.

Delivery Entity
Version 1.0 Phase 1.0 Proposed
Extends Business Entity

OUTGOING STRUCTURAL RELATIONSHIPS

 Generalization from «Role» Delivery Entity to «SubKind» Business Entity

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

 ComponentOf «ComponentOf»

Source: Public (Kind) Offering «Kind»

Cardinality: [1..*]

Target: Public (Role) Delivery Entity «Role»

Cardinality: [0..*]

Delivery Method

Mode «Mode» in package 'WOOM'

An offering can specify which delivery methods that can be chosen.

Delivery Method
Version 1.0 Phase 1.0 Proposed

ASSOCIATIONS

 Characterization «Characterization»

Source: Public (Kind) Offering «Kind»

Cardinality: [1]

Target: Public (Mode) Delivery Method «Mode»

Cardinality: [1..*]

Delivery Price Specification

Mode «Mode» in package 'WOOM'

A Price Specification that can specify either the offering price or the delivery price.

Delivery Price Specification
Version 1.0 Phase 1.0 Proposed
Extends Price Specification

OUTGOING STRUCTURAL RELATIONSHIPS
Generalization from «Mode» Delivery Price Specification to «Mode» Price Specification [Direction is 'Source -> Destination'.]

Entity

Kind «Kind» in package 'WOOM'

An entity is a general concept that can be a Company or a Natural Person specified in an offering.

Entity
Version 1.0 Phase 1.0 Proposed

INCOMING STRUCTURAL RELATIONSHIPS	
⇒ Generalization from «SubKind» Individual Entity to «Kind» Entity	[Direction is 'Source -> Destination'.]
⇒ Generalization from «SubKind» Business Entity to «Kind» Entity	[Direction is 'Source -> Destination'.]
⇒ Generalization from «Role» Offering Provider to «Kind» Entity	[Direction is 'Source -> Destination'.]

Individual Entity

SubKind «SubKind» in package 'WOOM'

A Natural Person that may be the Offering Provider.

Individual Entity
Version 1.0 Phase 1.0 Proposed
Extends Entity

OUTGOING STRUCTURAL RELATIONSHIPS	
⇐ Generalization from «SubKind» Individual Entity to «Kind» Entity	[Direction is 'Source -> Destination'.]

Individual Product

Kind «Kind» in package 'WOOM'

A specific Product that has individual characteristics. For example a handcraft made in a specific date and by a specific person.

Individual Product
Version 1.0 Phase 1.0 Proposed
Extends Offering Item

OUTGOING STRUCTURAL RELATIONSHIPS

⚡ Generalization from «Kind» Individual Product to «Category» Offering Item

[Direction is 'Source -> Destination'.]

⚡ Generalization from «Kind» Individual Product to «Category» Offering Item

[Direction is 'Source -> Destination'.]

Individual Product SM Specification

Relator «Relator» in package 'WOOM'

A Individual Product that has Individual characteristics but it is also specified in by a model.

Individual Product SM Specification
Version 1.0 Phase 1.0 Proposed

ASSOCIATIONS

🔗 Mediation «Mediation»

Source: Public (Relator) Individual Product SM Specification
«Relator»
Cardinality: [1..*]

Target: Public (Role) Product Model «Role»
Cardinality: [1]

Location

Class «Location Ontology» in package 'WOOM'

An Offering must specify the Locations in which the offering is available.

Location
Version 1.0 Phase 1.0 Proposed

ASSOCIATIONS

🔗 Association is available

Source: Public (Kind) Offering «Kind»
Cardinality: [0..*]

Target: Public (Class) Location «Location
Ontology»
Cardinality: [1..*]

Model Specification

Kind «Kind» in package 'WOOM'

A Model Specification is a prototypical description that defines characteristics of a Model.

Model Specification
Version 1.0 Phase 1.0 Proposed
Extends Offering Item, Specification

OUTGOING STRUCTURAL RELATIONSHIPS	
⇐ Generalization from «Kind» Model Specification to «Category» Specification	[Direction is 'Source -> Destination'.]
⇐ Generalization from «Kind» Model Specification to «Category» Offering Item	[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS	
⇒ Generalization from «Role» Offered Model Specification to «Kind» Model Specification	[Direction is 'Source -> Destination'.]
⇒ Generalization from «Role» Product Model to «Kind» Model Specification	[Direction is 'Source -> Destination'.]

Offering Item

Category «Category» in package 'WOOM'

A Offering Item is either a Individual Product or a Model Specification.

Offering Item
Version 1.0 Phase 1.0 Proposed
Extends Specification

OUTGOING STRUCTURAL RELATIONSHIPS	
⇐ Generalization from «Category» Offering Item to «Category» Specification	[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS	
⇒ Generalization from «Kind» Individual Product to «Category» Offering Item	[Direction is 'Source -> Destination'.]
⇒ Generalization from «Role» Offered Model Specification to «Category» Offering Item	[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS	
⇒ Generalization from «Kind» Individual Product to «Category» Offering Item	[Direction is 'Source -> Destination'.]
⇒ Generalization from «Kind» Model Specification to «Category» Offering Item	[Direction is 'Source -> Destination'.]

ASSOCIATIONS	
 ComponentOf «ComponentOf»	
Source: Public (Category) Offering Item «Category» Cardinality: [1..*]	Target: Public (Kind) Offering Item Component «Kind» Cardinality: [2..*]

Offered Model Specification

Role «Role» in package 'WOOM'

This Entity represents an offering item that is specified in terms of a Model Specification. Such Offering Items describe its characteristics generically for a set of products that attends its description.

Offered Model Specification
Version 1.0 Phase 1.0 Proposed
Extends Model Specification, Offering Item

OUTGOING STRUCTURAL RELATIONSHIPS	
⇐ Generalization from «Role» Offered Model Specification to «Kind» Model Specification	[Direction is 'Source -> Destination'.]
⇐ Generalization from «Role» Offered Model Specification to «Category» Offering Item	[Direction is 'Source -> Destination'.]

Offering

Kind «Kind» in package 'WOOM'

An Offering on the web that specifies items, location, delivery methods, etc.

Offering
Version 1.0 Phase 1.0 Proposed

ASSOCIATIONS	
 ComponentOf «ComponentOf»	
Source: Public (Kind) Offering «Kind» Cardinality: [1..*]	Target: Public (Role) Offering Provider «Role» Cardinality: [1]

ASSOCIATIONS

 Characterization «Characterization»	
Source: Public (Kind) Offering «Kind» Cardinality: [1]	Target: Public (Enumeration) Offering Type «enumeration» Cardinality: [1..*]
 Characterization «Characterization»	
Source: Public (Kind) Offering «Kind» Cardinality: [1]	Target: Public (Mode) Offering Price Specification «Mode» Cardinality: [1..*]
 Association is active	
Source: Public (Kind) Offering «Kind»	Target: Public (Class) Period «Date Time Ontology»
 Association defines	
Source: Public (Kind) Offering «Kind» Cardinality: [1..*]	Target: Public (Enumeration) Offering Payment Method «enumeration» Cardinality: [1..*]
 Association is available	
Source: Public (Kind) Offering «Kind» Cardinality: [0..*]	Target: Public (Class) Location «Location Ontology» Cardinality: [1..*]
 ComponentOf «ComponentOf»	
Source: Public (Kind) Offering «Kind» Cardinality: [1..*]	Target: Public (Role) Payment Entity «Role» Cardinality: [0..*]
 ComponentOf «ComponentOf»	
Source: Public (Kind) Offering «Kind» Cardinality: [1..*]	Target: Public (Role) Warrantier Entity «Role» Cardinality: [0..*]
 Characterization «Characterization»	
Source: Public (Kind) Offering «Kind» Cardinality: [1]	Target: Public (Mode) Delivery Method «Mode» Cardinality: [1..*]
 ComponentOf «ComponentOf»	
Source: Public (Kind) Offering «Kind» Cardinality: [1..*]	Target: Public (Role) Delivery Entity «Role» Cardinality: [0..*]

Offering Item Component

Kind «Kind» in package 'WOOM'

A Part of an Offering Item. For example a Engine is a Component of a Car.

Offering Item Component
Version 1.0 Phase 1.0 Proposed

Extends Specification

OUTGOING STRUCTURAL RELATIONSHIPS

↔ Generalization from «Kind» Offering Item Component to «Category» Specification
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «SubKind» Complex Offering Item Component to «Kind» Offering Item Component
[Direction is 'Source -> Destination'.]

➡ Generalization from «SubKind» Atomic Offering Item Component to «Kind» Offering Item Component
[Direction is 'Source -> Destination'.]

ASSOCIATIONS

 ComponentOf «ComponentOf»

Source: Public (Category) Offering Item «Category» Cardinality: [1..*]	Target: Public (Kind) Offering Item Component «Kind» Cardinality: [2..*]
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 ComponentOf «ComponentOf»

Source: Public (SubKind) Complex Offering Item Component «SubKind» Cardinality: [1]	Target: Public (Kind) Offering Item Component «Kind» Cardinality: [2..*]
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Offering Payment Method

Enumeration «enumeration» in package 'WOOM'

It's an Enumeration of the possible Payment Methods.

Offering Payment Method
Version 1.0 Phase 1.0 Proposed

ASSOCIATIONS

 Association defines

Source: Public (Kind) Offering «Kind»
Cardinality: [1..*]

Target: Public (Enumeration) Offering Payment
Method «enumeration»
Cardinality: [1..*]

Offering Price Specification

Mode «Mode» in package 'WOOM'

A Price Specification of an Offering.

Offering Price Specification
Version 1.0 Phase 1.0 Proposed

Extends Price Specification

OUTGOING STRUCTURAL RELATIONSHIPS

 Generalization from «Mode» Offering Price Specification to «Mode» Price Specification
[Direction is 'Source -> Destination'.]

ASSOCIATIONS

 Characterization «Characterization»

Source: Public (Kind) Offering «Kind»
Cardinality: [1]

Target: Public (Mode) Offering Price Specification
«Mode»
Cardinality: [1..*]

Offering Provider

Role «Role» in package 'WOOM'

The Offering Provider is the Entity responsible only for the offering and not necessarily for the delivery or the payment.

Offering Provider
Version 1.0 Phase 1.0 Proposed

Extends Entity

OUTGOING STRUCTURAL RELATIONSHIPS

 Generalization from «Role» Offering Provider to «Kind» Entity
[Direction is 'Source -> Destination'.]

ASSOCIATIONS

 ComponentOf «ComponentOf»

Source: Public (Kind) Offering «Kind»
Cardinality: [1..*]

Target: Public (Role) Offering Provider «Role»
Cardinality: [1]

Offering Type

Enumeration «enumeration» in package 'WOOM'

An Offering Type is an enumeration of the possible forms that someone can offer something (selling, renting, etc)

Offering Type
Version 1.0 Phase 1.0 Proposed

ASSOCIATIONS

 Characterization «Characterization»

Source: Public (Kind) Offering «Kind»
Cardinality: [1]

Target: Public (Enumeration) Offering Type
«enumeration»
Cardinality: [1..*]

Payment Entty

Role «Role» in package 'WOOM'

The Business entity responsible by the Payment.

Payment Entty
Version 1.0 Phase 1.0 Proposed

Extends Business Entity

OUTGOING STRUCTURAL RELATIONSHIPS

 Generalization from «Role» Payment Entty to «SubKind» Business Entity

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

 ComponentOf «ComponentOf»

Source: Public (Kind) Offering «Kind»
Cardinality: [1..*]

Target: Public (Role) Payment Entty «Role»
Cardinality: [0..*]

Period

Class «Date Time Ontology» in package 'WOOM'

The Period of time that an Offering is available.

Period
Version 1.0 Phase 1.0 Proposed

ASSOCIATIONS

 Association is active

Source: Public (Kind) Offering «Kind»

Target: Public (Class) Period «Date Time Ontology»

Price Specification

Mode «Mode» in package 'WOOM'

A Price Specification that can be applied either for an offering or for delivering.

Price Specification
Version 1.0 Phase 1.0 Proposed

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from «Mode» Offering Price Specification to «Mode» Price Specification
[Direction is 'Source -> Destination'.]

⇒ Generalization from «Mode» Delivery Price Specification to «Mode» Price Specification
[Direction is 'Source -> Destination'.]

Product Model

Role «Role» in package 'WOOM'

A Product Model is used to specify an Individual Product in terms of a Model.

Product Model
Version 1.0 Phase 1.0 Proposed

Extends Model Specification

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Generalization from «Role» Product Model to «Kind» Model Specification
[Direction is 'Source -> Destination'.]

ASSOCIATIONS

ASSOCIATIONS

 Mediation «Mediation»

Source: Public (Relator) Individual Product SM Specification
«Relator»
Cardinality: [1..*]

Target: Public (Role) Product Model «Role»
Cardinality: [1]

Product Type

Class «Product Type Ontology» in package 'WOOM'

A Product Type must use the Product Type Ontology Resources to specify the categories of a Product.

Product Type
Version 1.0 Phase 1.0 Proposed

ASSOCIATIONS

 Association is categorized by

Source: Public (Category) Specification «Category»
Cardinality: [*]

Target: Public (Class) Product Type «Product Type
Ontology»
Cardinality: [1..*]

Qualitative Property

HighOrder «HighOrder» in package 'WOOM'

A Offering Element Characteristic that is qualitative. For example color.

Qualitative Property
Version 1.0 Phase 1.0 Proposed

ASSOCIATIONS

 Association

Source: Public (HighOrder) Qualitative Property «HighOrder»

Target: Public (Category) Offering Item
«Category»

 Association specifies

Source: Public (Category) Specification «Category»

Target: Public (HighOrder) Qualitative Property
«HighOrder»

Quantitative Property

A Offering Element Characteristic that is quantitative. For example weight.

Quantitative Property
Version 1.0 Phase 1.0 Proposed

ASSOCIATIONS	
 Association specifies	
Source: Public (Category) Specification «Category»	Target: Public (HighOrder) Quantitative Property «HighOrder»

Specification

Category «Category» in package 'WOOM'

Specification means anything that I can specify in terms of an of offering

Specification
Version 1.0 Phase 1.0 Proposed

INCOMING STRUCTURAL RELATIONSHIPS	
 Generalization from «Kind» Offering Item Component to «Category» Specification	[Direction is 'Source -> Destination'.]
 Generalization from «Kind» Model Specification to «Category» Specification	[Direction is 'Source -> Destination'.]
 Generalization from «Role» Specification With Warranty to «Category» Specification	[Direction is 'Source -> Destination'.]

ASSOCIATIONS	
 Association specifies	
Source: Public (Category) Specification «Category»	Target: Public (HighOrder) Qualitative Property «HighOrder»
 Association specifies	
Source: Public (Category) Specification «Category»	Target: Public (HighOrder) Quantitative Property «HighOrder»
 Association is categorized by	
Source: Public (Category) Specification «Category» Cardinality: [*]	Target: Public (Class) Product Type «Product Type Ontology»

ASSOCIATIONS
Cardinality: [1..*]

Specification With Warranty

Role «Role» in package 'WOOM'

Any Offering element can have its own warranty. It may apply for an Individual Product, Model or Component.

Specification With Warranty
Version 1.0 Phase 1.0 Proposed

Extends Specification

OUTGOING STRUCTURAL RELATIONSHIPS
 Generalization from «Role» Specification With Warranty to «Category» Specification [Direction is 'Source -> Destination'.]

ASSOCIATIONS
 ComponentOf «ComponentOf» Source: Public (Role) Specification With Warranty «Role» Target: Public (Kind) Warranty «Kind» Cardinality: [1] Cardinality: [1]

Warrantier Entity

Role «Role» in package 'WOOM'

The entity responsible for the Warranty.

Warrantier Entity
Version 1.0 Phase 1.0 Proposed

Extends Business Entity

OUTGOING STRUCTURAL RELATIONSHIPS
 Generalization from «Role» Warrantier Entity to «SubKind» Business Entity [Direction is 'Source -> Destination'.]

ASSOCIATIONS
 ComponentOf «ComponentOf» Source: Public (Kind) Offering «Kind» Target: Public (Role) Warrantier Entity «Role» Cardinality: [1..*] Cardinality: [0..*]

Warranty

Kind «Kind» in package 'WOOM'

The Specification of a Warranty.

Warranty
Version 1.0 Phase 1.0 Proposed

ASSOCIATIONS	
 ComponentOf «ComponentOf»	
Source: Public (Role) Specification With Warranty «Role» Cardinality: [1]	Target: Public (Kind) Warranty «Kind» Cardinality: [1]