



NAFv4 Based
ADMBw Profile
for SPARX EA

Version 2025.10

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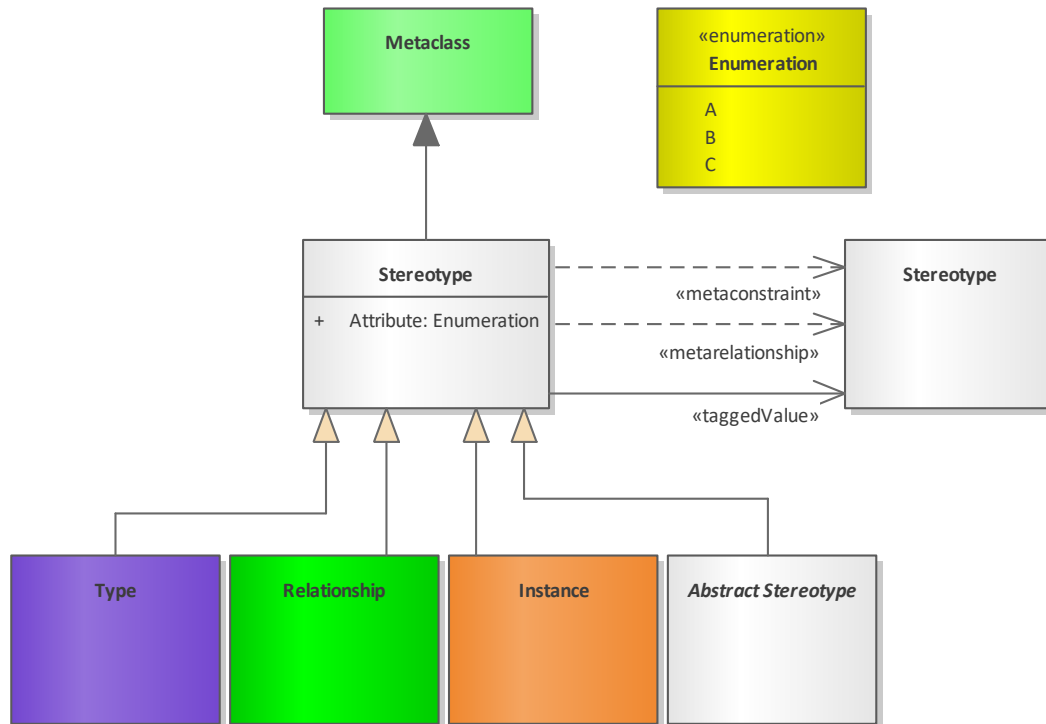
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1 Overview

This document describes the rows, viewpoints, elements and relationships of the NATO Architecture Framework v4 (NAFv4).

1.1 Basic Concepts

The following section describes the basic concepts of the NAFv4 metamodel:



1.2 Metaclass

A metaclass is a profile class from uml, which may be extended through one or more stereotypes

1.3 Stereotype

A stereotype is a profile class which defines how an existing metaclass may be extended as part of a profile like NAFv4. There are four different colors used in the documentation to distinguish between type, relationship, instance and abstract stereotype in the NAFv4 meta model. A stereotype describes a relationship or an element.

1.4 Enumeration

An enumeration is a profile class are model that represent named values in an enumeration and can be used to generate a drop-down list of values for a **tagged value** associated with a stereotype element.

1.5 Meta-Relationship

A meta-relationship connector between two stereotypes is used to specify a valid uml connector between these two stereotypes. The constraint should be set in the tag “metaclass” on the meta-relationship connector.

1.6 TaggedValue

An additional meta-information for a stereotype by adding various types of **tagged value**, which you identify as attributes of the stereotype. The connector points to the stereotype of the elements which can be selected at the considered tagged value.

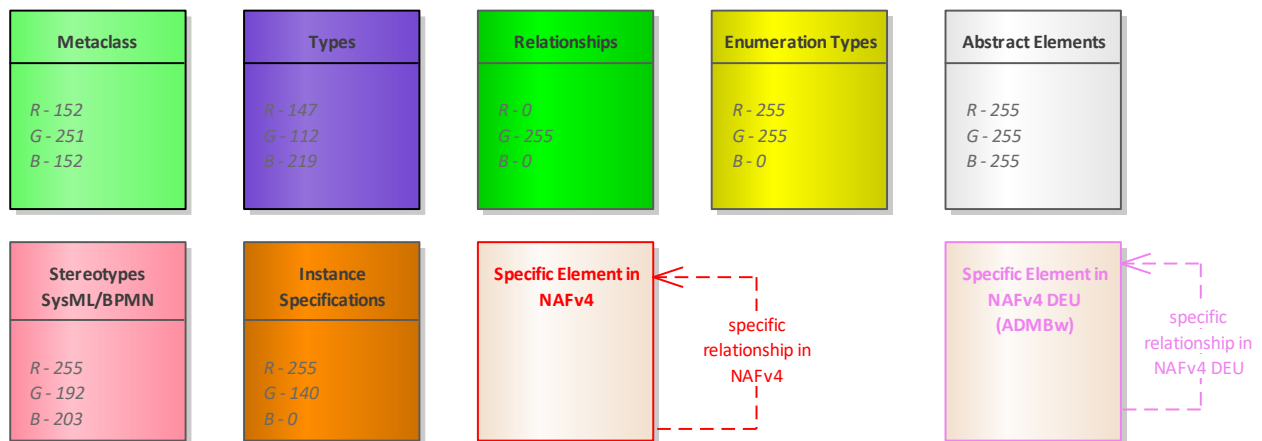
1.7 Meta-Constraint

A meta-constraint connector between two stereotypes is used to specify, how these two stereotypes are related to each other. The constraint should be set in the tag “umlRole” on the Meta-Constraint connector, which the relationship defines. The following types of “umlRoles” can be distinguished:

- **classifier/definingFeature**
Restricts the classifier for the source Stereotype element to the target Stereotype element. The connector points to possible classifiers of the considered element.
- **type**
Restricts the type for the source Stereotype element to the target Stereotype element. The connector points to possible property types of the considered element.
- **behavior**
Restricts the behavior for the source Stereotype element to the target Stereotype element. The connector points to possible behavioral classifiers of the considered element.
- **conveyed**
Restricts the conveyed element for the source Stereotype element to the target Stereotype element. The connector points to possible conveyed elements of the considered relation.
- **client/source/end[0].role/informationSource**
Restricts the source of a connector to the target Stereotype element. The connector points to the source of the considered relation.
- **supplier/target/end[1].role/informationTarget**
Restricts the target of a connector to the target Stereotype element. The connector points to the target of the considered relation.
- **realizingConnector/realizingActivityEdge/realizingMessage**
Restricts the relationship that can realize an information flow. The connector points to the relation which can be realized by the considered relation.
- **typedElement/instanceSpecification**
When dropping as classifier from the Browser window, this constraint restricts the type to the target Stereotype element. (Note: Not used in the NAF v4 metamodel.)
- **owner/class/activity/owningInstance**
Restricts the container of this element to the target Stereotype element. This constraint is used to create embedded element rules for the Quick Linker and validate nesting during Model Validation. The connector points to possible owning instances of the considered element.
- **ownedElement/ownedAttribute/ownedOperation/ownedParameter/ownedPort**
Restricts the element/attribute/operation/parameter/port that can be owned by the source Stereotype element. This constraint is typically used to validate nesting during Model Validation. The connector points to the element which can be owned by the considered element.
- **method**
Restricts the method of an element to a Stereotype element. The connector points to the
- **realizes**
Restricts the relationship that can realize the considered relationship. The connector points to the relation which realizes the considered relation.

1.8 Color

The following diagram summarizes the colors used for the different meta model elements.



2 Viewpoints

2.1 General concepts

This section presents concepts that are used in all areas of the ADMBw.

2.1.1 Conforms To Standard

Purpose

With the ConformsTo relationship, one or more standards can be assigned to each stereotype of the ADMBw.

Meta Model

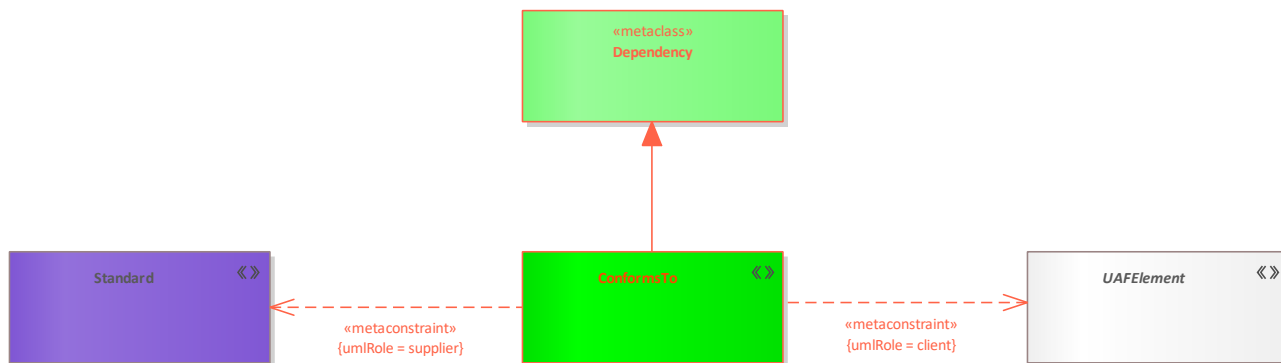


Figure 1: Conforms To Standard

Meta Model Elements

Name	Definition
ConformsTo	A relationship that expresses that an UAFElement conforms to a standard.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

2.1.2 Constraints

Purpose

Constraints are present in the ADMBw in various forms. All forms use the same basic concepts for the assignment and derivation of constraints.

Meta Model

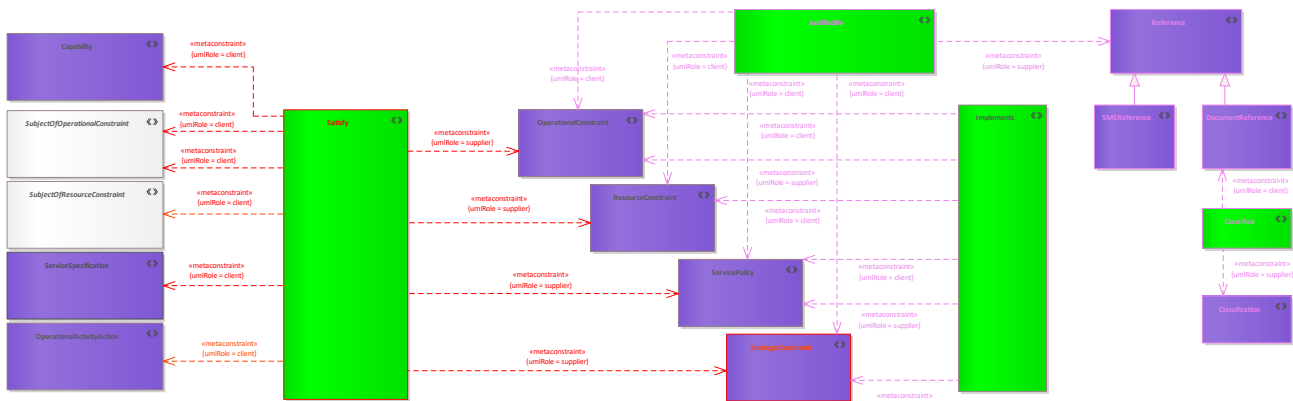


Figure 2: Constraints

Meta Model Elements

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
Classification	Classification according to STANAG 1059.
Classified	Relationship that indicates which classification an element has.
DocumentReference	The element describes a regulation, instruction or a general document.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
Reference	Element describes all types of references.
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
Satisfy	This relation states that an constraint affects an element.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
SMEReference	Element stands for a result of a workshop or expert knowledge.
StrategicConstraint	A Rule governing a capability.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.

2.1.3 Finding & Recommendation

Purpose

An ascertainment made in the model, which relates to the methodology used, the subject under consideration, the tool or something else.

Meta Model



Figure 3: Finding & Recommendation

Meta Model Elements

Name	Definition
Finding	An ascertainment made in the model, which relates to the methodology used, the subject under consideration, the tool or something else.
FitCriterion	This element represents an acceptance criterion for a functional or non-functional requirement.
FulfilmentCriterion	This element represents a criterion for evaluating the degree of implementation of a functional or non-functional requirement.
RealizesRecommendation	Relation states that a Recommendation is realized through this element.
Recommendation	Need for action from a finding.
RefersTo	Relationship that assigns a finding to a recommendation.
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

2.1.4 Measurements

Purpose

A measurement is a property of an element representing something in the physical world, expressed in amounts of a unit of measure.

Meta Model

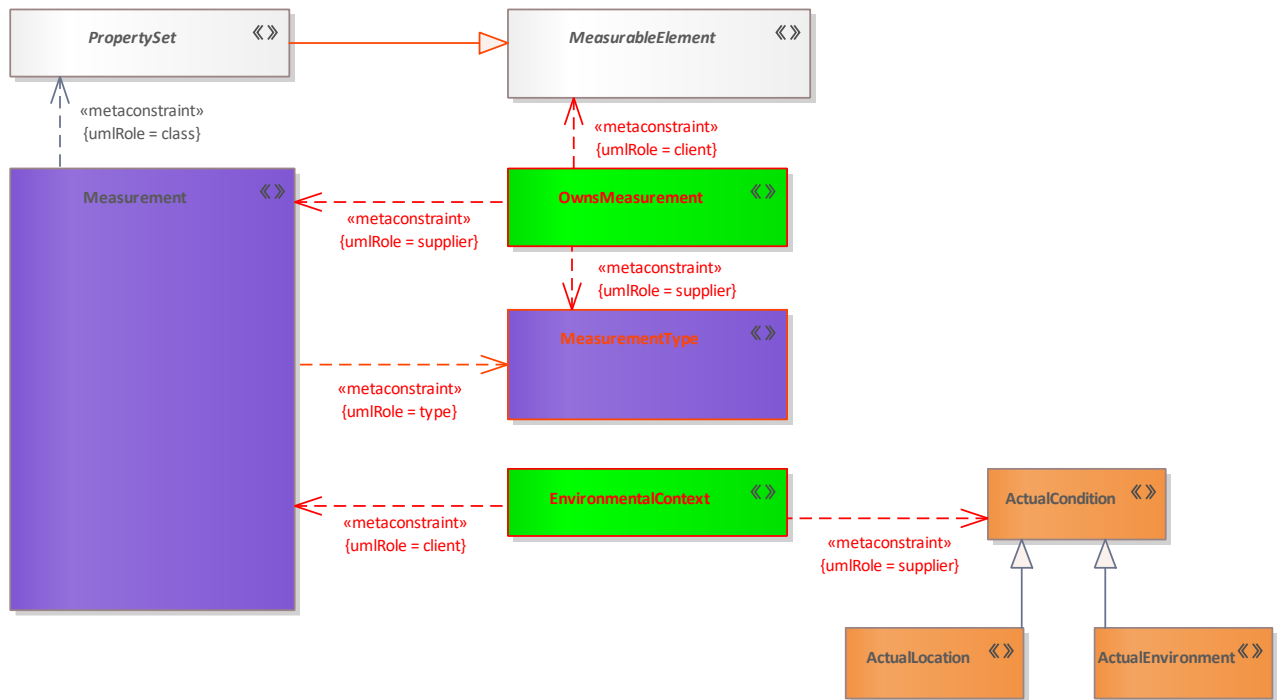


Figure 4: Measurements

Meta Model Elements

Name	Definition
ActualCondition	An individual describing an actual situation with respect to circumstances under which an OperationalActivity, Function or ServiceFunction can be performed.
ActualEnvironment	The ActualState that describes the circumstances of an Environment.
ActualLocation	The ActualState that describes a physical location, for example using text to provide an address, Geo-coordinates, etc.
EnvironmentalContext	Relationship that indicates under which condition an measurement counts.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
OwnsMeasurement	A relationship that expresses which measurement or measurement type an element owns.
PropertySet	An abstract type grouping architectural elements that can own Measurements.

2.2 Concept Viewpoints

The Viewpoints in the Concepts row of the NAF grid support the process of analyzing and optimizing the delivery of capability in line with the enterprise strategic intent.

2.2.1C1 - Capability Taxonomy

Purpose

The C1 Viewpoint specifies all the capabilities that are referenced throughout one or more architectures – i.e. one C1 may provide the definitive list of capabilities for a number of logical and resource architectures. The capabilities may be organised into specialisation hierarchies (taxonomies). Measures of Effectiveness (MoE) may be specified for each capability. Note that MoEs are inherited down a capability taxonomy.

Meta Model

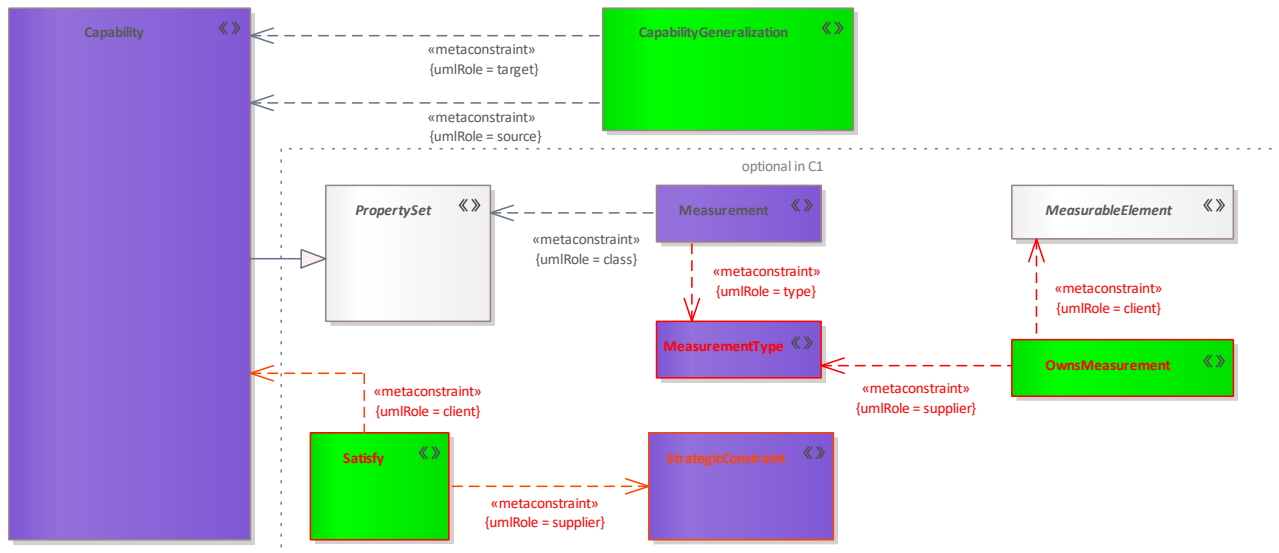


Figure 5: C1 - Capability Taxonomy

Meta Model Elements

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityGeneralization	A CapabilityGeneralization is a taxonomic relationship between a more general Capability and a more specific Capability.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
OwnsMeasurement	A relationship that expresses which measurement or measurement type an element owns.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
Satisfy	This relation states that an constraint affects an element.
StrategicConstraint	A Rule governing a capability.

2.2.2C2 - Enterprise Vision

Purpose

The purpose of the C2 Viewpoint is to provide a strategic context for the capabilities described in the architecture and to specify the scope for the architecture. The C2 Viewpoint is high-level and describes the vision, goals, enduring tasks and capabilities using terminology that is easily understood by non-technical readers.

Meta Model

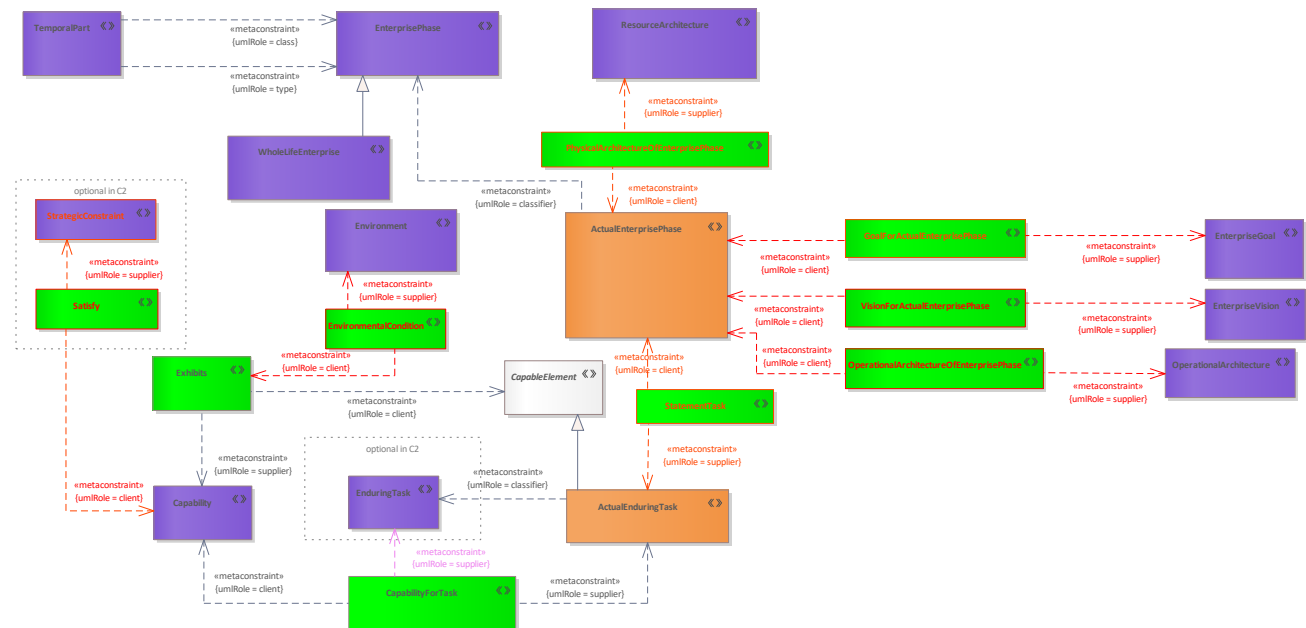


Figure 6: C2 - Enterprise Vision

Meta Model Elements

Name	Definition
ActualEnduringTask	An actual undertaking recognized by an enterprise as being essential to achieving its goals - i.e. a strategic specification of what the enterprise does.
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityForTask	A tuple that asserts that a Capability is required in order for an Enterprise to conduct a phase of an EnduringTask.
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
EnduringTask	A type of template behavior recognized by an enterprise as being essential to achieving its goals - i.e. a template for a strategic specification of what the enterprise does.
EnterpriseGoal	A statement about a state or condition of the enterprise to be brought about or sustained through appropriate Means. An EnterpriseGoal amplifies an EnterpriseVision that is, it indicates what must be satisfied on a continuing basis to effectively attain the EnterpriseVision.
EnterprisePhase	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.
EnterpriseVision	A Vision describes the future state of the enterprise, without regard to how it is to be achieved.
Environment	A definition of the environmental factors in which something exists or functions. The definition of an Environment element can be further defined using EnvironmentKind.
EnvironmentalCondition	Relationship that indicates under which environment an exhibits-relationship takes place.
Exhibits	A tuple that exists between a CapableElement and a Capability that it meets under specific environmental conditions.

Name	Definition
<u>GoalForActualEnterprisePhase</u>	A relationship that expresses which actual enterprisephase implements an enterprisegoal.
<u>OperationalArchitecture</u>	A type used to denote a model of the Architecture, described from the Operational perspective.
<u>OperationalArchitectureOfEnterprisePhase</u>	Relationship that says that in a actual enterprisephase an operational architecture is valid.
<u>PhysicalArchitectureOfEnterprisePhase</u>	A relationship that expresses that an actual enterprise phase has resource architectures.
<u>ResourceArchitecture</u>	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
<u>Satisfy</u>	This relation states that an constraint affects an element.
<u>StatementTask</u>	A relationship that expresses that an actual enterprise phase fulfills a actual enduring task.
<u>StrategicConstraint</u>	A Rule governing a capability.
<u>TemporalPart</u>	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.
<u>VisionForActualEnterprisePhase</u>	A relationship that expresses which actual enterprisephase implements an enterprisevision.
<u>WholeLifeEnterprise</u>	A WholeLifeEnterprise is a purposeful endeavor of any size involving people, organizations and supporting systems. It is made up of TemporalParts and StructuralParts.

2.2.3C3 - Capability Dependencies

Purpose

The C3 Viewpoint is intended to provide a means of analysing the dependencies between capabilities and between capability clusters. The composition of capabilities (into clusters) is logical and the purpose of the clusters is to guide enterprise management.

Meta Model

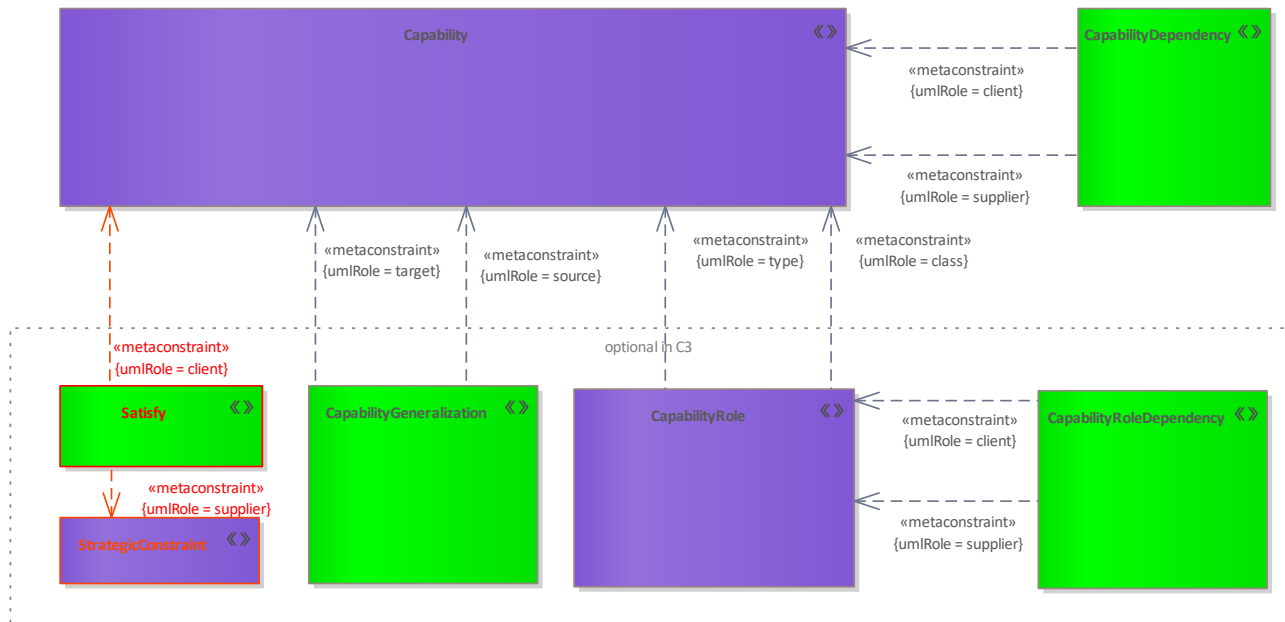


Figure 7: C3 - Capability Dependencies

Meta Model Elements

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityDependency	A tuple that asserts that one Capability is dependent from another.
CapabilityGeneralization	A CapabilityGeneralization is a taxonomic relationship between a more general Capability and a more specific Capability.
CapabilityRole	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityRoleDependency	A tuple that asserts that one CapabilityRole is dependent from another.
Satisfy	This relation states that an constraint affects an element.
StrategicConstraint	A Rule governing a capability.

2.2.4C4 - Standard Processes

Purpose

The C4 Viewpoint specifies Standard Operational Activities that can be re-used across multiple logical architectures (e.g. in L4, Logical Activities).

Meta Model

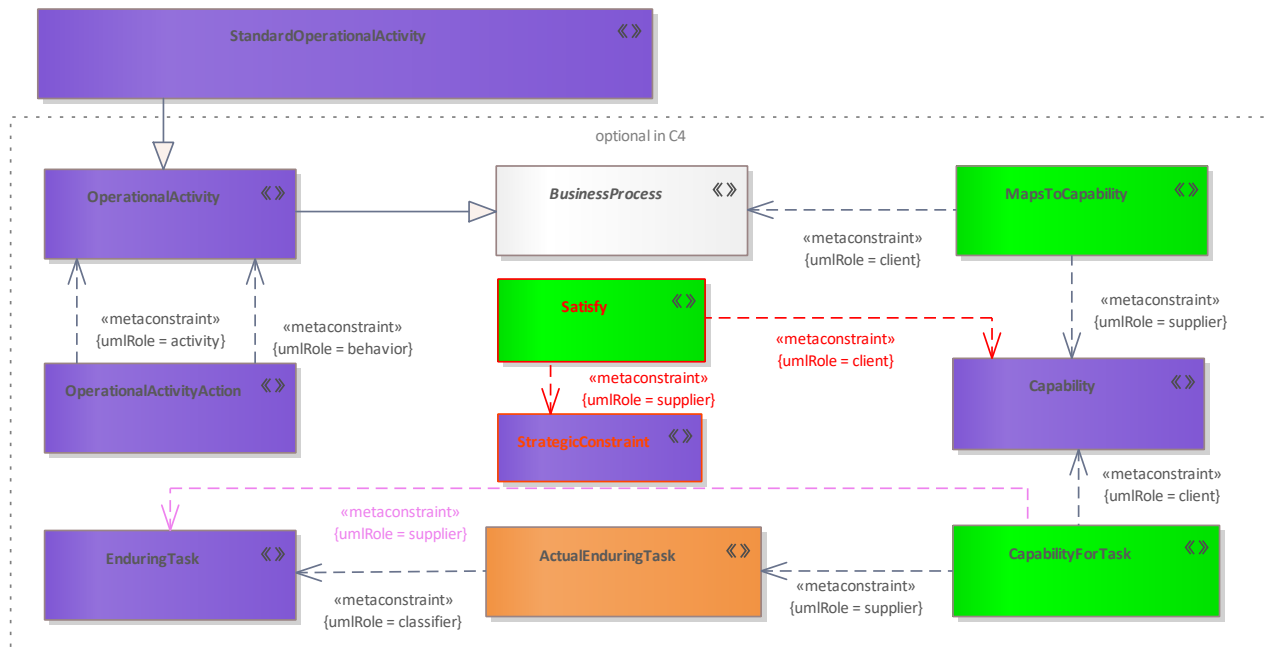


Figure 8: C4 - Standard Processes

Meta Model Elements

Name	Definition
ActualEnduringTask	An actual undertaking recognized by an enterprise as being essential to achieving its goals - i.e. a strategic specification of what the enterprise does.
BusinessProcess	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityForTask	A tuple that asserts that a Capability is required in order for an Enterprise to conduct a phase of an EnduringTask.
EnduringTask	A type of template behavior recognized by an enterprise as being essential to achieving its goals - i.e. a template for a strategic specification of what the enterprise does.
MapsToCapability	A tuple denoting that an Activity contributes to providing a Capability.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
Satisfy	This relation states that an constraint affects an element.
StandardOperationalActivity	A sub-type of OperationalActivity that is a standard operating procedure.
StrategicConstraint	A Rule governing a capability.

Name	Definition
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
DesiredEffect	A tuple relating the Desirer (a Capability or OrganizationalResource) to an ActualState.
Desirer	Abstract type used to group architecture elements that might desire a particular effect.
Environment	A definition of the environmental factors in which something exists or functions. The definition of an Environment element can be further defined using EnvironmentKind.
EnvironmentalCondition	Relationship that indicates under which environment an exhibits-relationship takes place.
Exhibits	A tuple that exists between a CapableElement and a Capability that it meets under specific environmental conditions.
FieldedCapability	An individual, fully-realized capability.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
Person	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).
Post	A type of job title or position that a person can fill (e.g. Lawyer, Solution Architect, Machine Operator or Chief Executive Officer).
RealizedDesiredEffect	Relationship that expresses which connector DesiredEffect the connector AchievedEffect realizes.
RealizingAchievedEffect	Relationship that expresses which connector AchievedEffect realizes the connector DesiredEffect.
Satisfy	This relation states that an constraint affects an element.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
StandardOperationalActivity	A sub-type of OperationalActivity that is a standard operating procedure.
StrategicConstraint	A Rule governing a capability.

2.2.6C7 - Performance Parameters

Purpose

In the C7 Viewpoint the capability requirements (and existing capabilities) can be expressed in terms of Measures of Effectiveness (MoEs). These are high-level metrics used to judge the level of capability.

Meta Model

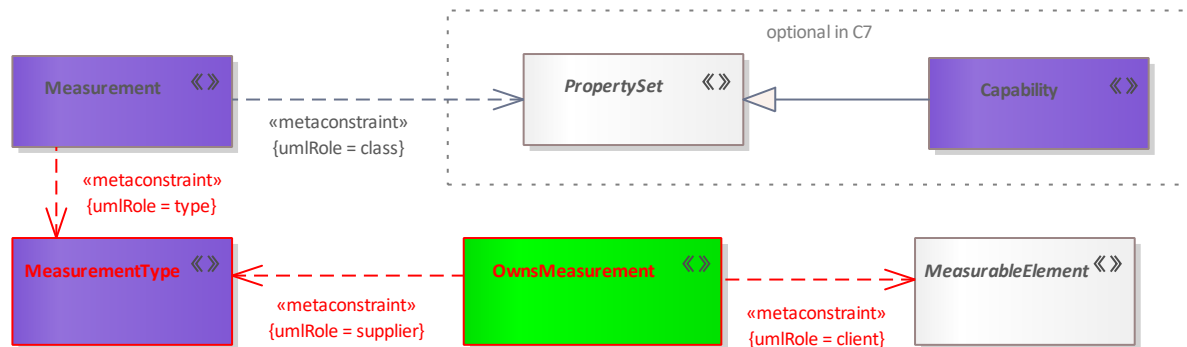


Figure 10: C7 - Performance Parameters

Meta Model Elements

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
OwnsMeasurement	A relationship that expresses which measurement or measurement type an element owns.
PropertySet	An abstract type grouping architectural elements that can own Measurements.

2.2.7C8 - Planning Assumption

Purpose

The C8 Viewpoint is concerned with identification and description of assumptions that have been made for the implementation of capabilities. Assumptions can be expressed by means of requirements.

Meta Model

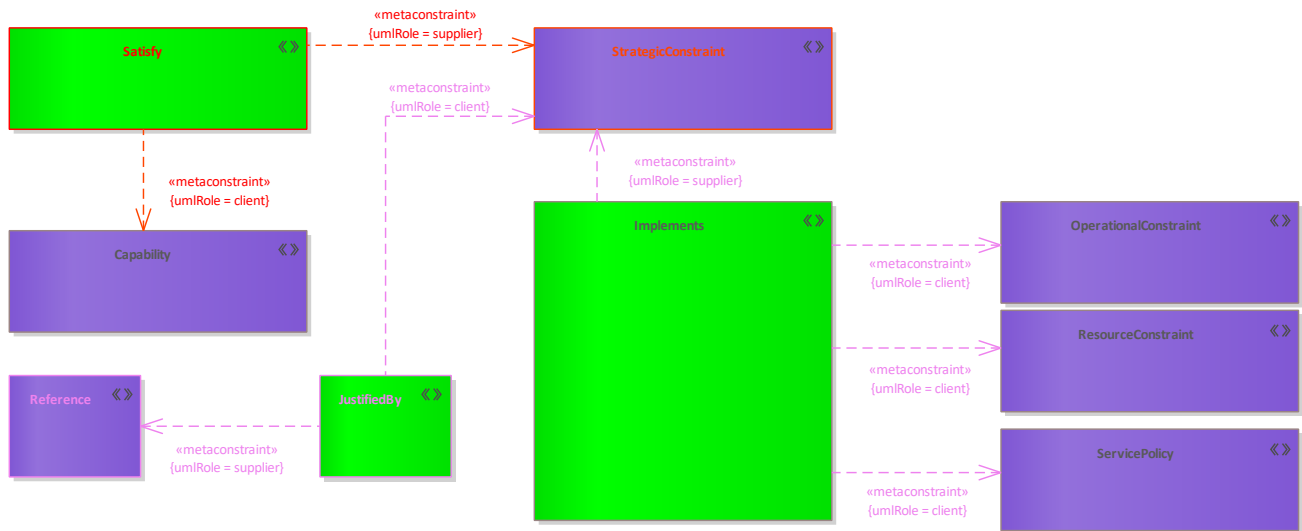


Figure 11: C8 - Planning Assumption

Meta Model Elements

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
Reference	Element describes all types of references.
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
Satisfy	This relation states that an constraint affects an element.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
StrategicConstraint	A Rule governing a capability.

Name	Definition
Exhibits	A tuple that exists between a CapableElement and a Capability that it meets under specific environmental conditions.
FieldedCapability	An individual, fully-realized capability.
MilestoneDependency	A tuple between two ActualProjectMilestones that denotes one ActualProjectMilestone follows from another.
OwnedMilestone	Relationship that expresses that actual project has a actual milestone.
Project	A type that describes types of time-limited endeavours that are required to meet one or more Capability needs.
ProjectMilestone	A type of event in a Project by which progress is measured.
ProjectMilestoneRole	The role played by a ProjectMilestone in the context of a Project.
ProjectMilestoneToProjectTheme	A relationship that expresses which project theme is handled by which project milestone.
ProjectSequence	A tuple between two ActualProjects that denotes one ActualProject cannot start before the previous ActualProject is finished.
ProjectTheme	A property of a ProjectMilestone that captures an aspect by which the progress of ActualProjects may be measured.
RequiredResource	Relationship that indicates which resources a project milestone requires
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
VersionedElement	An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.
VersionReleased	A relationship that expresses that an actual project milestone releases an versioned element.
VersionWithdrawn	A relationship that expresses that an actual project milestone withdraws an versioned element.

2.3 Service Specification Viewpoints

The Viewpoints in the Service Specifications row of the NAF grid support the description of services independently of how they are implemented or used. A service is understood in its broadest sense as a unit of work through which a provider provides a useful result to a consumer.

2.3.1S1 - Service Taxonomy

Purpose

The purpose of the S1 Viewpoint is to provide a governance structure for a Service-Oriented Architecture. Along with S3, Service Interfaces, it specifies a standard library of service specifications for an enterprise, to which service implementers are expected to conform.

Meta Model

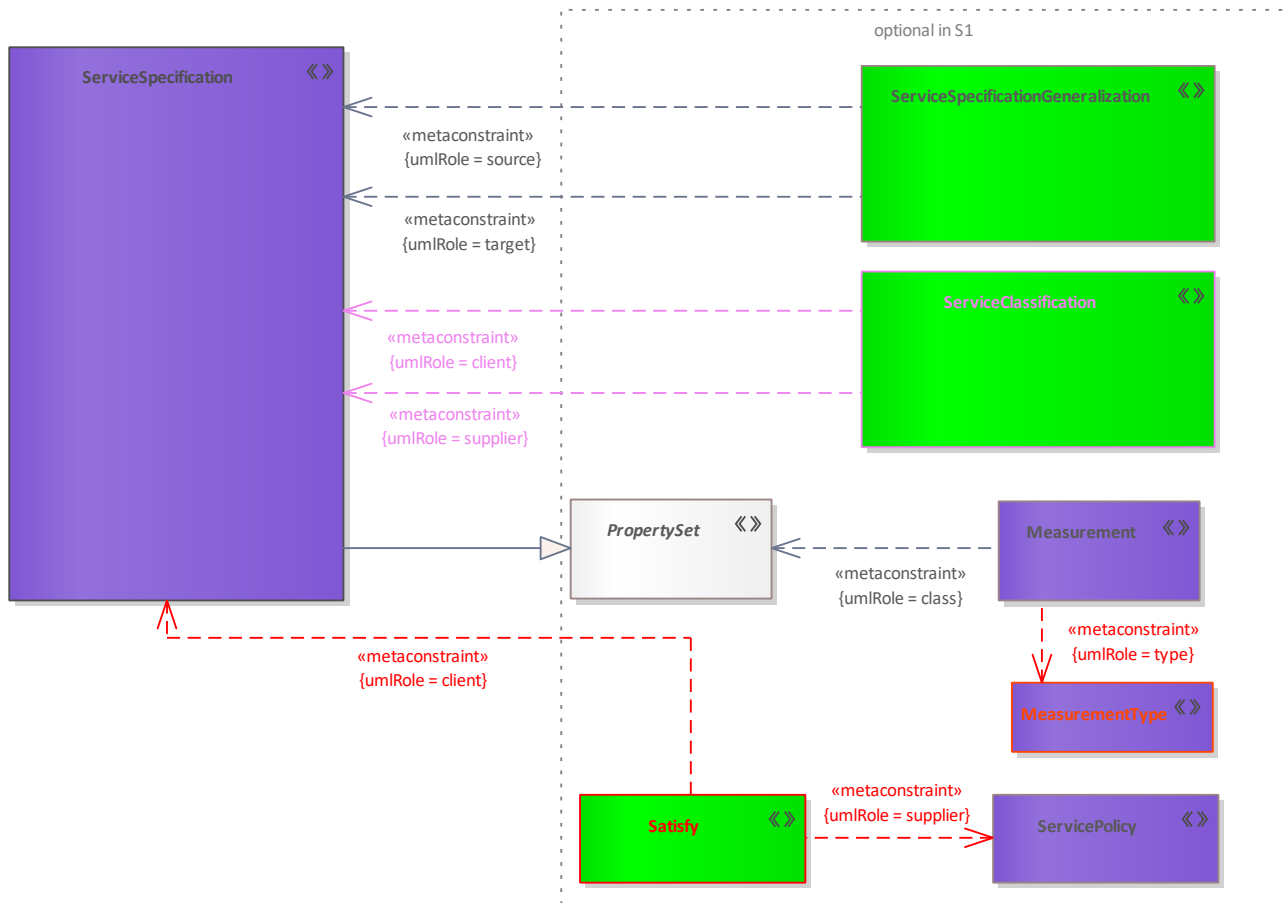


Figure 13: S1 - Service Taxonomy

Meta Model Elements

Name	Definition
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
Satisfy	This relation states that an constraint affects an element.
ServiceClassification	Relation is used to show that two services have a relationship in the sense of a taxonomy.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Name	Definition
ServiceSpecificationGeneralization	A ServiceSpecificationGeneralization is a taxonomic relationship between a more general ServiceSpecification and a more specific ServiceSpecification.

Name	Definition
<u>ServiceDependency</u>	Relationship that is a dependency of a service on a service, operational node or resource.
<u>ServiceFunction</u>	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
<u>ServiceInterface</u>	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
<u>ServiceMethod</u>	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
<u>ServiceParameter</u>	A type that represents inputs and outputs of a ServiceFunction, represents inputs and outputs of a ServiceSpecification.
<u>ServicePort</u>	An interaction point for a ServiceSpecification through which it can interact with the outside environment and which is defined by a ServiceInterface.
<u>ServiceSpecification</u>	The specification of a set of functionality provided one element for the use of others.
<u>ServiceSpecificationRole</u>	An assertion that a ServiceSpecification calls upon another ServiceSpecification in order to deliver its stated functionality.

2.3.3S3 - Service Interfaces

Purpose

The S3 Viewpoint is concerned with the identification and definition of service interfaces.

Meta Model

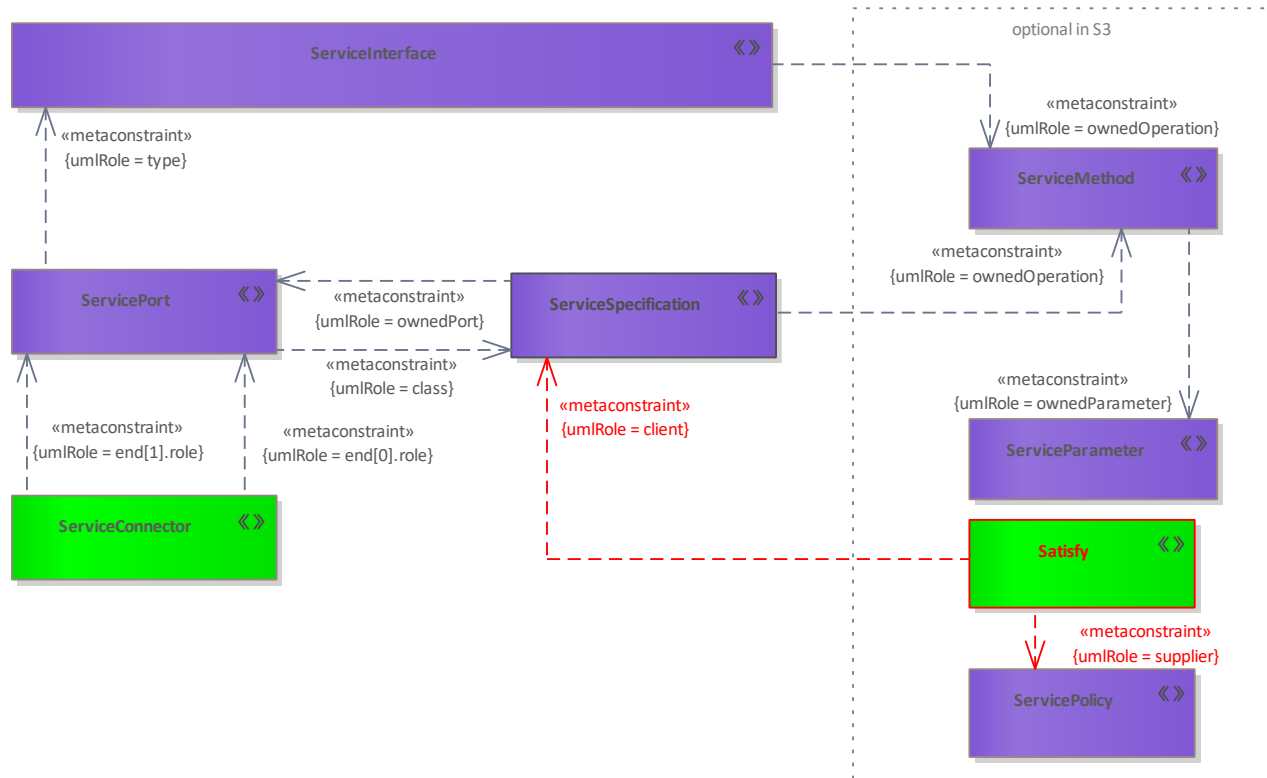


Figure 15: S3 - Service Interfaces

Meta Model Elements

Name	Definition
Satisfy	This relation states that an constraint affects an element.
ServiceConnector	A channel for exchange between two ServiceSpecifications. Where one acts as the consumer of the other.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
ServiceParameter	A type that represents inputs and outputs of a ServiceFunction, represents inputs and outputs of a ServiceSpecification.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
ServicePort	An interaction point for a ServiceSpecification through which it can interact with the outside environment and which is defined by a ServiceInterface.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

2.3.4S4 - Service Functions

Purpose

The S4 Viewpoint is the key behavioural specification for services. Equivalent in nature to L4, Logical Activities and P4, Resources Functions, it specifies a set of functions that a service implementation is expected to perform. Implementation of that behaviour is represented in P4, Resource Functions, and L4-P4, Activity to Function Mapping.

Meta Model

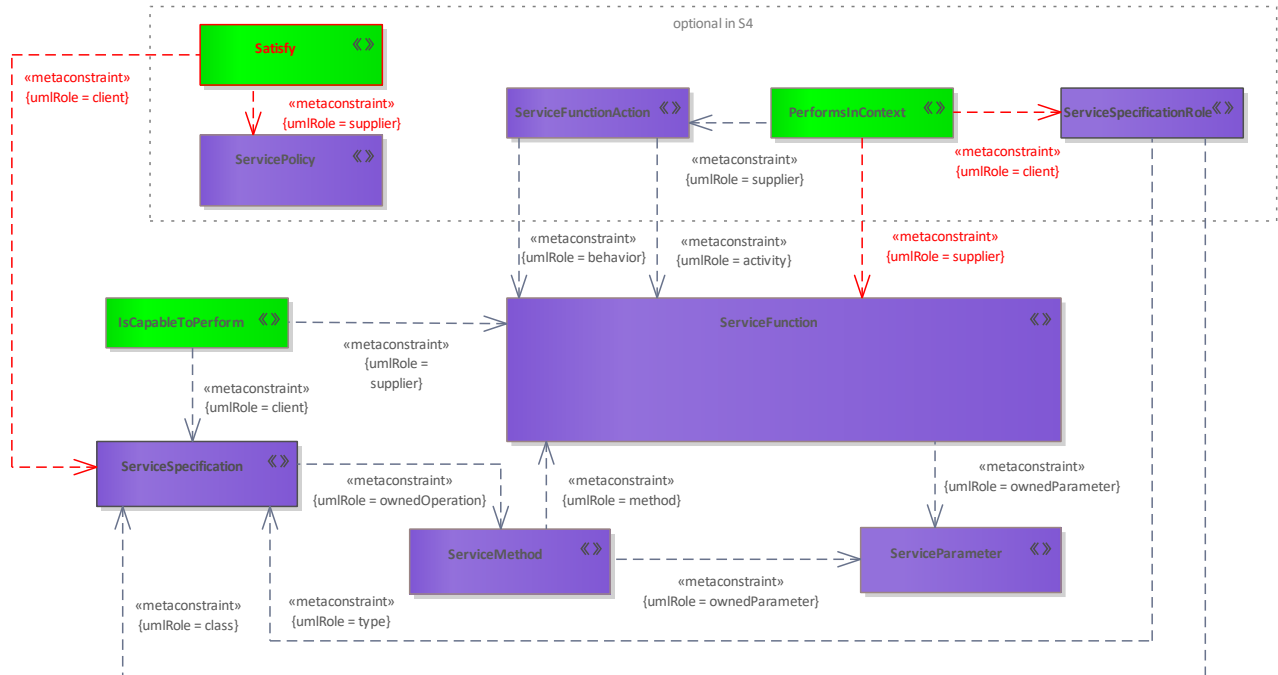


Figure 16: S4 - Service Functions

Meta Model Elements

Name	Definition
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
Satisfy	This relation states that an constraint affects an element.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceFunctionAction	A call of a ServiceFunction in the context of another ServiceFunction.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
ServiceParameter	A type that represents inputs and outputs of a ServiceFunction, represents inputs and outputs of a ServiceSpecification.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

2.3.5S5 - Service States

Purpose

The S5 Viewpoint is a specification of the allowable states of a service, and the possible transitions between them. This specification constrains how implementations of the service will behave. It is, though, generally considered a good practice to make services stateless - i.e. consumers of a service are not aware of what state the service is in.

Meta Model

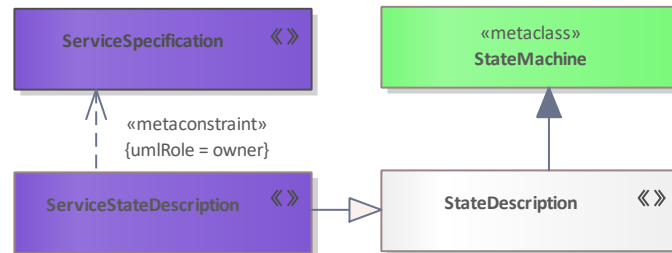


Figure 17: S5 - Service States

Meta Model Elements

Name	Definition
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceStateDescription	A state machine describing the behavior of a ServiceSpecification, depicting how the ServiceSpecification responds to various events and the actions.
StateDescription	An abstract type that represents a state machine (i.e. an OperationalStateDescription or ResourceStateDescription), depicting how the Asset responds to various events and the actions.

2.3.6S6 - Service Interactions

Purpose

Service Interaction Descriptions, sometimes called sequence diagrams, event scenarios or timing diagrams, allow the tracing of interactions between services in a composition or critical sequence of events.

Meta Model

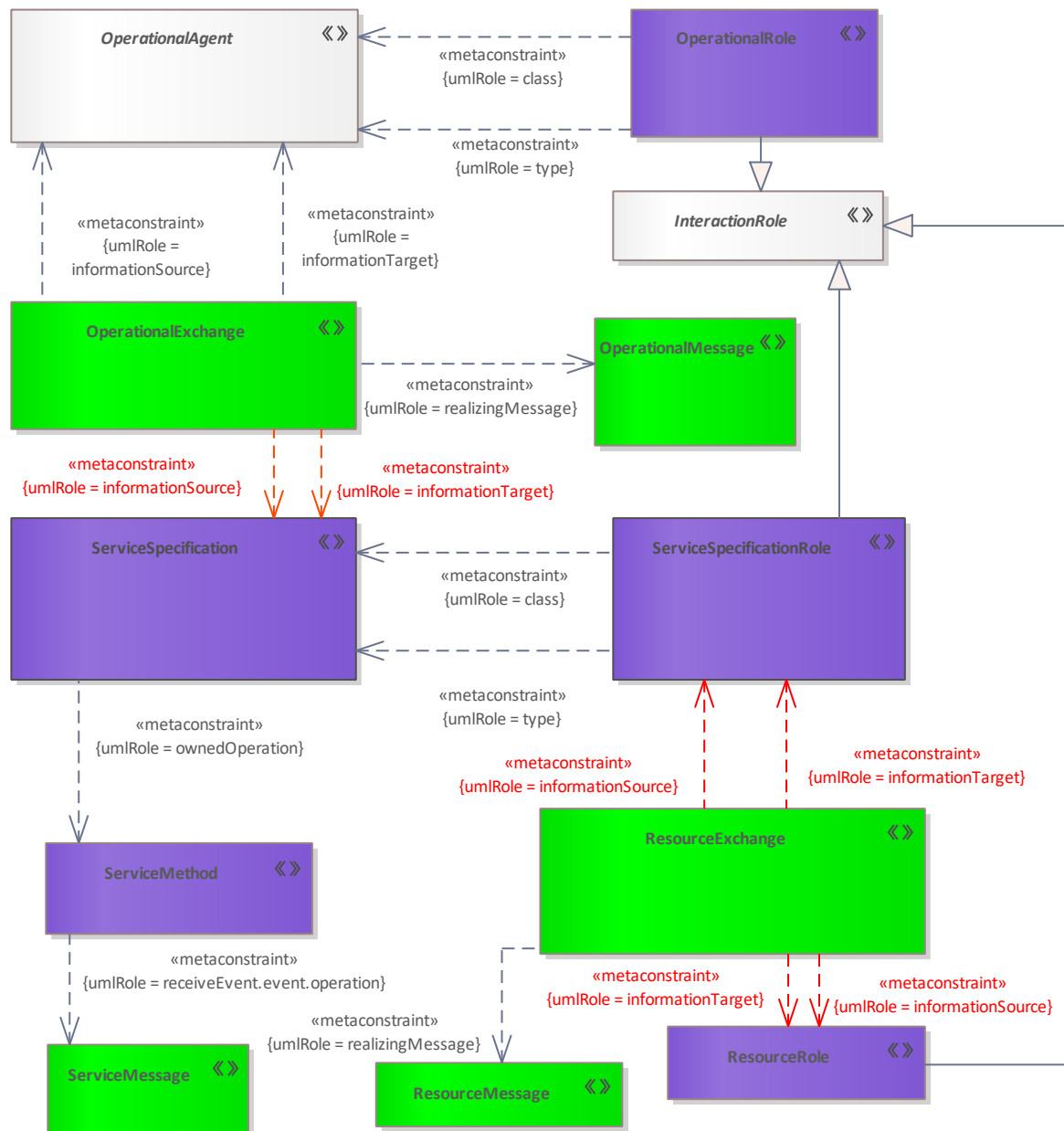


Figure 18: S6 - Service Interactions

Meta Model Elements

Name	Definition
InteractionRole	An abstract type that represents an individual participant in the InteractionScenario.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalMessage	Message for use in an Operational Event-Trace which carries any of the subtypes of OperationalExchange.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.

Name	Definition
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceMessage	Message for use in an Resource Event-Trace which carries any of the subtypes of ResourceExchange.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ServiceMessage	Message for use in a Service Event-Trace.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

2.3.7S7 - Service Interface Parameters

Purpose

Specifies the interfaces that a service provides and uses, defines which services are compatible with which other services.

Meta Model

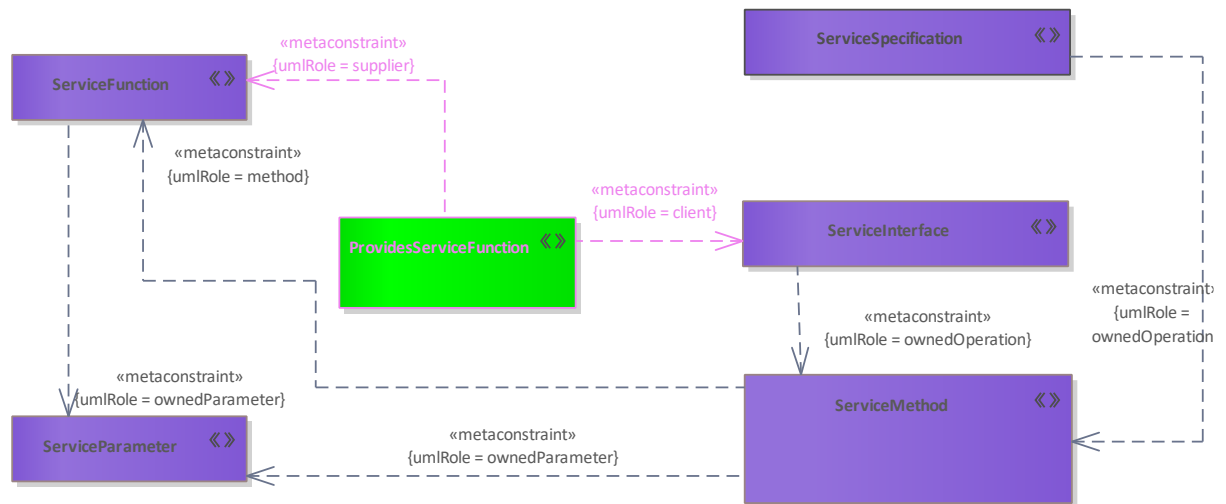


Figure 19: S7 - Service Interface Parameters

Meta Model Elements

Name	Definition
ProvidesServiceFunction	Relationship that expresses that a service function is provided by an interface.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
ServiceParameter	A type that represents inputs and outputs of a ServiceFunction, represents inputs and outputs of a ServiceSpecification.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

2.3.8S8 - Service Policy

Purpose

The S8 Viewpoint specifies constraints against services to which implementations must conform.

Meta Model

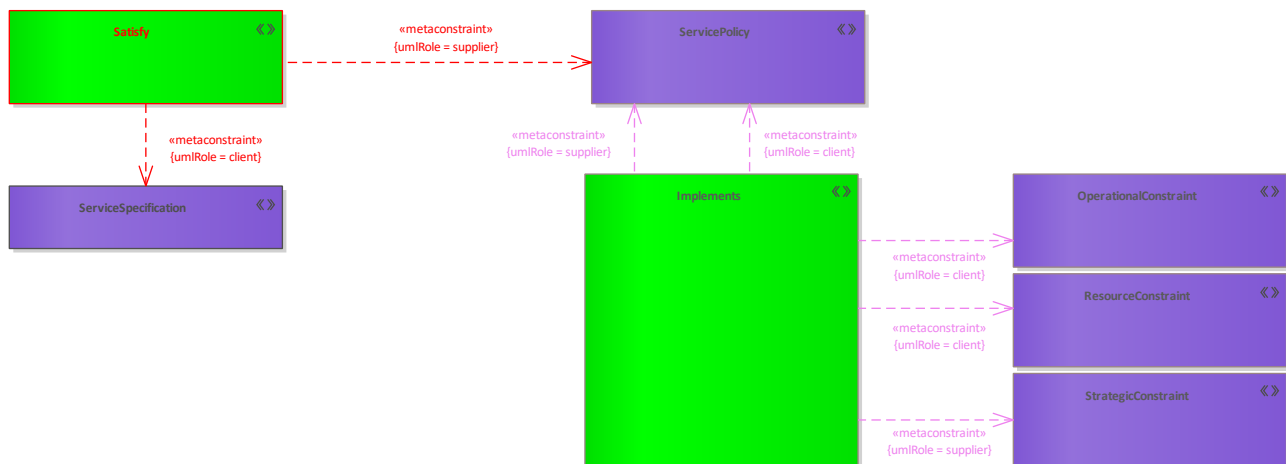


Figure 20: S8 - Service Policy

Meta Model Elements

Name	Definition
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
Satisfy	This relation states that an constraint affects an element.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
StrategicConstraint	A Rule governing a capability.

2.3.9Sr - Service Roadmap

Purpose

The Sr Viewpoint supports the Service Audit process by providing a method to identify gaps or duplications in service provision. Sr indicates service lifetime evolutions, which are derived from delivery milestones within acquisition projects.

Meta Model

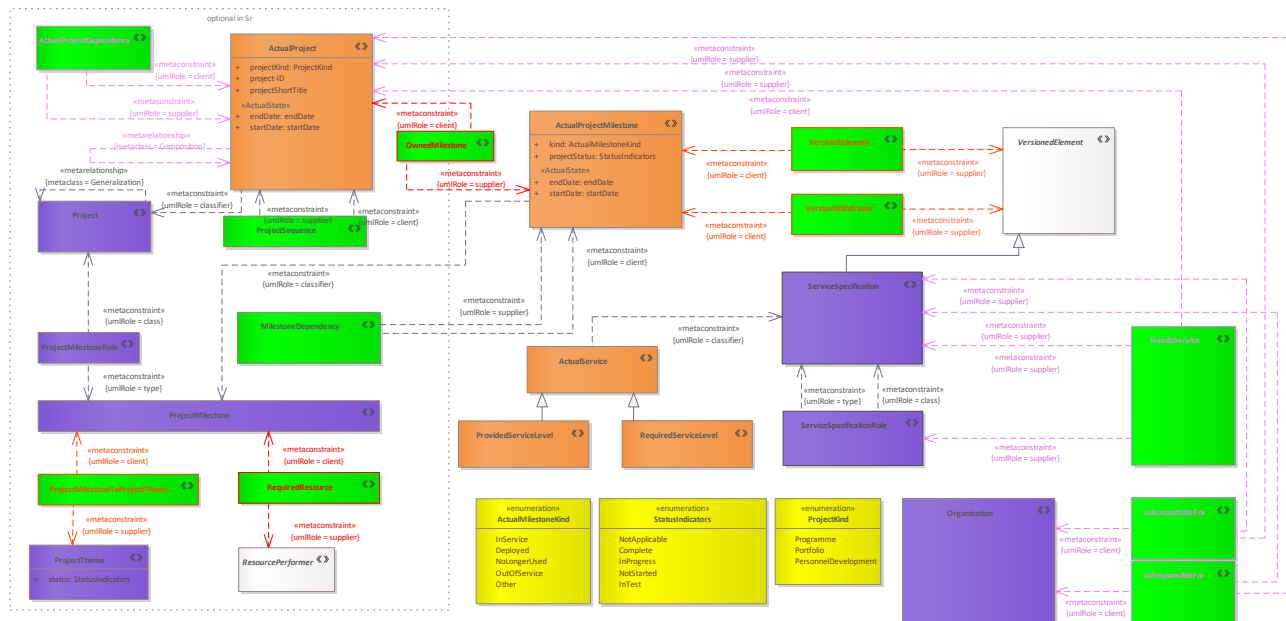


Figure 21: Sr - Service Roadmap

Meta Model Elements

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
ActualProjectDependency	Relationship that is a dependency of a actualproject on a actualproject.
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
ActualService	An individual ServiceSpecification.
IsAccountableFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project in the context of an approval.
IsResponsibleFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project.
MilestoneDependency	A tuple between two ActualProjectMilestones that denotes one ActualProjectMilestone follows from another.
NeedsService	A relation that expresses that a project needs a service
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
OwnedMilestone	Relationship that expresses that actual project has a actual milestone.
Project	A type that describes types of time-limited endeavours that are required to meet one or more Capability needs.
ProjectMilestone	A type of event in a Project by which progress is measured.
ProjectMilestoneRole	The role played by a ProjectMilestone in the context of a Project.
ProjectMilestoneToProjectTheme	A relationship that expresses which project theme is handled by which project milestone.
ProjectSequence	A tuple between two ActualProjects that denotes one ActualProject cannot start before the previous ActualProject is finished.
ProjectTheme	A property of a ProjectMilestone that captures an aspect by which the progress of ActualProjects may be measured.
ProvidedServiceLevel	A sub type of ActualService that details a specific service level delivered by the provider.
RequiredResource	Relationship that indicates which resources a project milestone requires

Name	Definition
RequiredServiceLevel	A sub type of ActualService that details a specific service level required of the provider.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.
VersionedElement	An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.
VersionReleased	A relationship that expresses that an actual project milestone releases an versioned element.
VersionWithdrawn	A relationship that expresses that an actual project milestone withdraws an versioned element.

2.3.10 C1-S1 - Capability to Service Mapping

Purpose

A C1-S1 Viewpoint presents a simple mapping of services to capabilities, showing which services contribute to which capability.

Meta Model

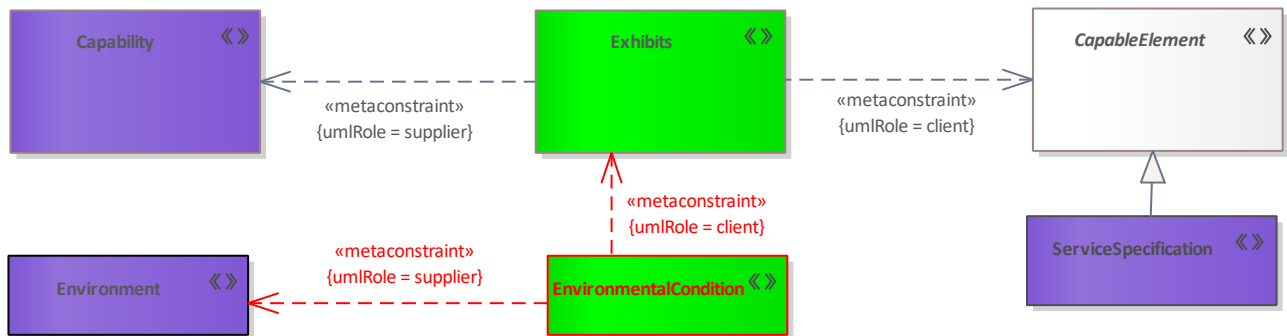


Figure 22: C1-S1 - Capability to Service Mapping

Meta Model Elements

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
Environment	A definition of the environmental factors in which something exists or functions. The definition of an Environment element can be further defined using EnvironmentKind.
EnvironmentalCondition	Relationship that indicates under which environment an exhibits-relationship takes place.
Exhibits	A tuple that exists between a CapableElement and a Capability that it meets under specific environmental conditions.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

2.4 Logical Specification Viewpoints

The Viewpoints in the Logical Specifications row of the NAF grid support the solution-independent description of the logical nodes (elements of capability), activities, and resource/information exchanges required to accomplish missions.

2.4.1L1 - Node Types

Purpose

The L1 Viewpoint defines all of the Nodes that will appear in a Logical Architecture. Nodes are elements of capability assembled and orchestrated in the Logical Architecture (see L2 - Logical Scenario and L4 - Logical Activities views). The levels of capability provided by each node are expressed as Measures of Performance (MoPs) and these may be dependent on the environments in which the Node is required to operate.

Meta Model

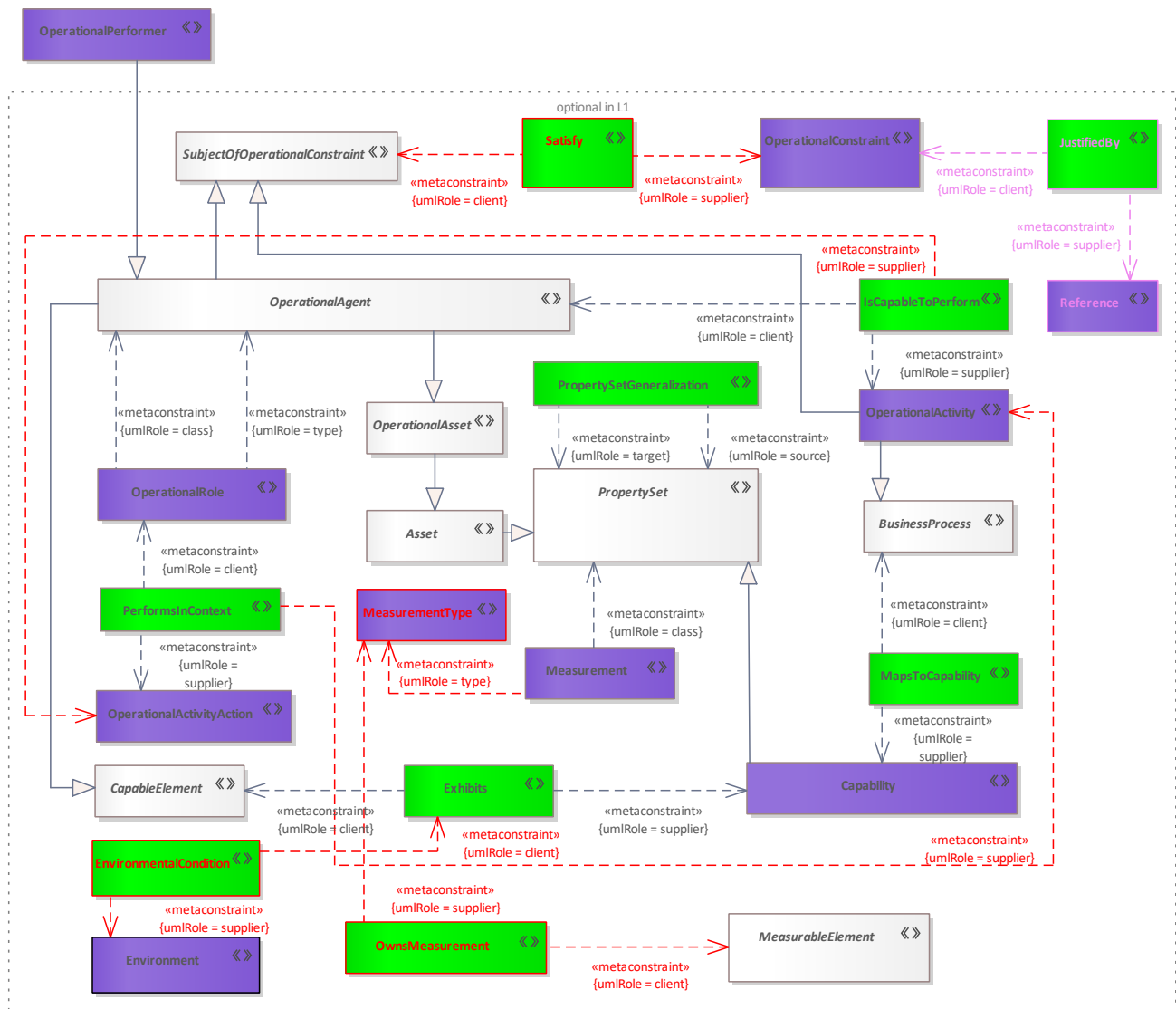


Figure 23: L1 - Node Types

Meta Model Elements

Name	Definition
Asset	Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.
BusinessProcess	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
Capability	A high level specification of the enterprise's ability to execute a specified course of action.

Name	Definition
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
Environment	A definition of the environmental factors in which something exists or functions. The definition of an Environment element can be further defined using EnvironmentKind.
EnvironmentalCondition	Relationship that indicates under which environment an exhibits-relationship takes place.
Exhibits	A tuple that exists between a CapableElement and a Capability that it meets under specific environmental conditions.
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
MapsToCapability	A tuple denoting that an Activity contributes to providing a Capability.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalAsset	An abstract element used to group the elements of OperationalAgent and InformationElement allowing them to own InformationRoles.
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
OwnsMeasurement	A relationship that expresses which measurement or measurement type an element owns.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
Reference	Element describes all types of references.
Satisfy	This relation states that an constraint affects an element.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.

Name	Definition
<u>OperationalAsset</u>	An abstract element used to group the elements of OperationalAgent and InformationElement allowing them to own InformationRoles.
<u>OperationalConnector</u>	A Connector that goes between OperationalRoles representing a need to exchange Resources. It can carry a number of OperationalExchanges.
<u>OperationalConstraint</u>	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
<u>OperationalExchange</u>	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
<u>OperationalExchangeItem</u>	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
<u>OperationalInterface</u>	A declaration that specifies a contract between the OperationalPerformer it is related to, and any other OperationalPerformers it can interact with.
<u>OperationalPerformer</u>	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
<u>OperationalPort</u>	An interaction point for an OperationalAgent through which it can interact with the outside environment and which is defined by an OperationalInterface.
<u>OperationalRole</u>	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
<u>OwnsMeasurement</u>	A relationship that expresses which measurement or measurement type an element owns.
<u>PhysicalLocation</u>	A relationship that expresses that a location holder operates in an actual location.
<u>ProblemDomain</u>	A property associated with a logical architecture, used to specify the scope of the problem.
<u>PropertySet</u>	An abstract type grouping architectural elements that can own Measurements.
<u>Provides</u>	Asserts that a operational agent provides a service.
<u>Reference</u>	Element describes all types of references.
<u>RequiredEnvironment</u>	A relationship that expresses that a location holder operates under specific environmental conditions.
<u>Satisfy</u>	This relation states that an constraint affects an element.
<u>ServiceSpecification</u>	The specification of a set of functionality provided one element for the use of others.
<u>ServiceSpecificationRole</u>	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.
<u>SubjectOfOperationalConstraint</u>	An abstract type grouping elements that can be the subject of an OperationalConstraint.

Name	Definition
<u>OperationalConstraint</u>	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
<u>OperationalControlFlow</u>	An ActivityEdge that shows the flow of control between OperationalActivityActions.
<u>OperationalExchange</u>	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
<u>OperationalExchangeItem</u>	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
<u>OperationalInterface</u>	A declaration that specifies a contract between the OperationalPerformer it is related to, and any other OperationalPerformers it can interact with.
<u>OperationalObjectFlow</u>	An ActivityEdge that shows the flow of Resources (objects/information) between OperationalActivityActions.
<u>OperationalPerformer</u>	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
<u>OperationalPort</u>	An interaction point for an OperationalAgent through which it can interact with the outside environment and which is defined by an OperationalInterface.
<u>OperationalRole</u>	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
<u>OwnsMeasurement</u>	A relationship that expresses which measurement or measurement type an element owns.
<u>PerformsInContext</u>	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
<u>ProblemDomain</u>	A property associated with a logical architecture, used to specify the scope of the problem.
<u>Provides</u>	Asserts that a operational agent provides a service.
<u>Satisfy</u>	This relation states that an constraint affects an element.
<u>ServiceSpecification</u>	The specification of a set of functionality provided one element for the use of others.
<u>ServiceSpecificationRole</u>	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.
<u>SubjectOfOperationalConstraint</u>	An abstract type grouping elements that can be the subject of an OperationalConstraint.

2.4.4L4 - Logical Activities

Purpose

The L4 Viewpoint describes the operational activities that are being conducted within the mission or scenario. These activities are defined at a logical, solution-neutral level so as to enable different solutions in the physical layer. The L4 Viewpoint describes the activities associated with the logical architecture.

Meta Model

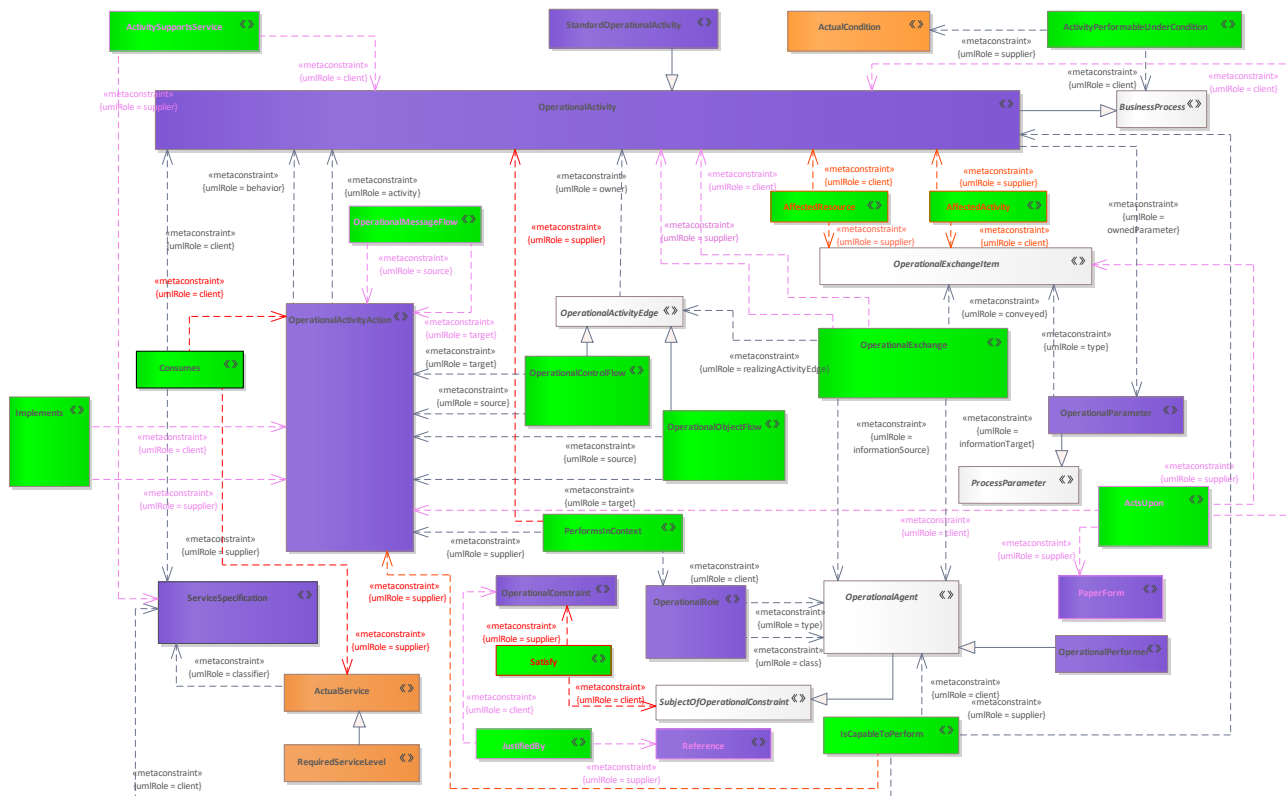


Figure 26: L4 - Logical Activities

Meta Model Elements

Name	Definition
ActivityPerformableUnderCondition	The ActualCondition under which an Activity is performed.
ActivitySupportsService	Relation states that a process is necessary for the implementation of a service.
ActsUpon	Asserts that something (subject) is acted upon by an OperationalActivity (activity).
ActualCondition	An individual describing an actual situation with respect to circumstances under which an OperationalActivity, Function or ServiceFunction can be performed.
ActualService	An individual ServiceSpecification.
AffectedActivity	A relationship that expresses which resource is affected by a operational activity.
AffectedResource	A relationship that expresses which operational activity is affected by a resource.
BusinessProcess	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
Consumes	A tuple that asserts that a service in someway contributes or assists in the execution of an OperationalActivity.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.

Name	Definition
<u>JustifiedBy</u>	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
<u>OperationalActivity</u>	An Activity that captures a logical process, specified independently of how the process is carried out.
<u>OperationalActivityAction</u>	A call of an OperationalActivity in the context of another OperationalActivity.
<u>OperationalActivityEdge</u>	A tuple that shows the flow of Resources (objects/information) between OperationalActivityActions.
<u>OperationalAgent</u>	An abstract type grouping Operational Architecture and Operational Performer.
<u>OperationalConstraint</u>	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
<u>OperationalControlFlow</u>	An ActivityEdge that shows the flow of control between OperationalActivityActions.
<u>OperationalExchange</u>	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
<u>OperationalExchangeItem</u>	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
<u>OperationalMessageFlow</u>	A ProcessMessageFlow that shows the flow of message between OperationalActivityActions of different ActivityPartitions like Pools.
<u>OperationalObjectFlow</u>	An ActivityEdge that shows the flow of Resources (objects/information) between OperationalActivityActions.
<u>OperationalParameter</u>	A type that represents inputs and outputs of an OperationalActivity. It is typed by an OperationalExchangeItem.
<u>OperationalPerformer</u>	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
<u>OperationalRole</u>	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
<u>PaperForm</u>	Form is a digitized or digitizable document, for example a scanned document.
<u>PerformsInContext</u>	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
<u>ProcessParameter</u>	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
<u>Reference</u>	Element describes all types of references.
<u>RequiredServiceLevel</u>	A sub type of ActualService that details a specific service level required of the provider.
<u>Satisfy</u>	This relation states that an constraint affects an element.
<u>ServiceSpecification</u>	The specification of a set of functionality provided one element for the use of others.
<u>StandardOperationalActivity</u>	A sub-type of OperationalActivity that is a standard operating procedure.
<u>SubjectOfOperationalConstraint</u>	An abstract type grouping elements that can be the subject of an OperationalConstraint.

2.4.5L5 - Logical States

Purpose

The L5 Viewpoint specifies the typical states a node may have and the possible transitions between those states (i.e. changes of state). Triggers for state changes may also be defined. Actions may be associated with a given state or with the transition between states in response to stimuli (e.g. triggers and events).

Meta Model

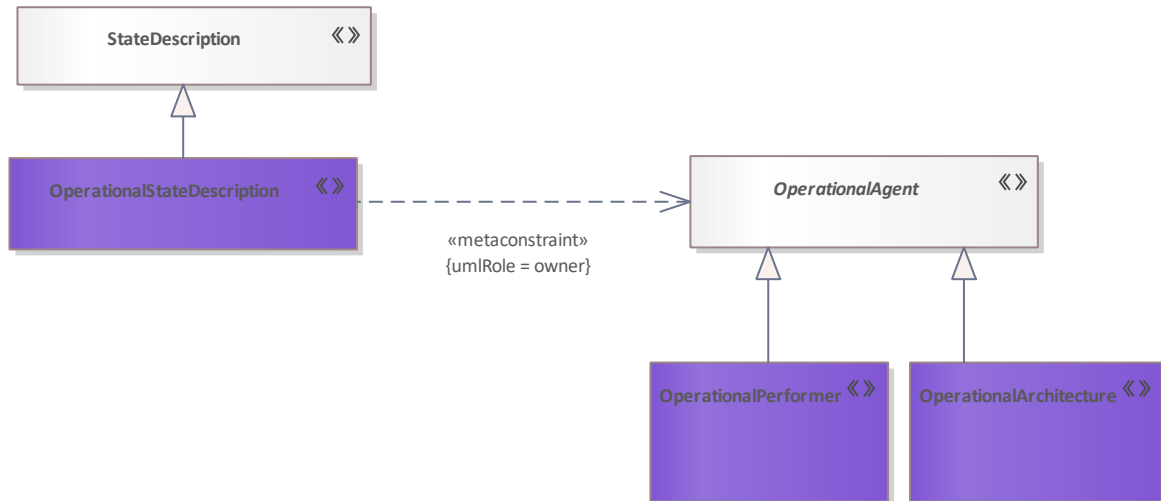


Figure 27: L5 - Logical States

Meta Model Elements

Name	Definition
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalArchitecture	A type used to denote a model of the Architecture, described from the Operational perspective.
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
OperationalStateDescription	A state machine describing the behavior of a OperationalPerformer, depicting how the OperationalPerformer responds to various events and the actions.
StateDescription	An abstract type that represents a state machine (i.e. an OperationalStateDescription or ResourceStateDescription), depicting how the Asset responds to various events and the actions.

2.4.6L6 - Logical Sequence

Purpose

Operational Event-Trace Descriptions, sometimes called sequence diagrams, event scenarios or timing diagrams, allow the tracing of interactions between nodes in a scenario or critical sequence of events. The node interactions usually correspond to flows of information but may describe flows of energy, materiel or people specified in the L2, Logical Scenario.

Meta Model

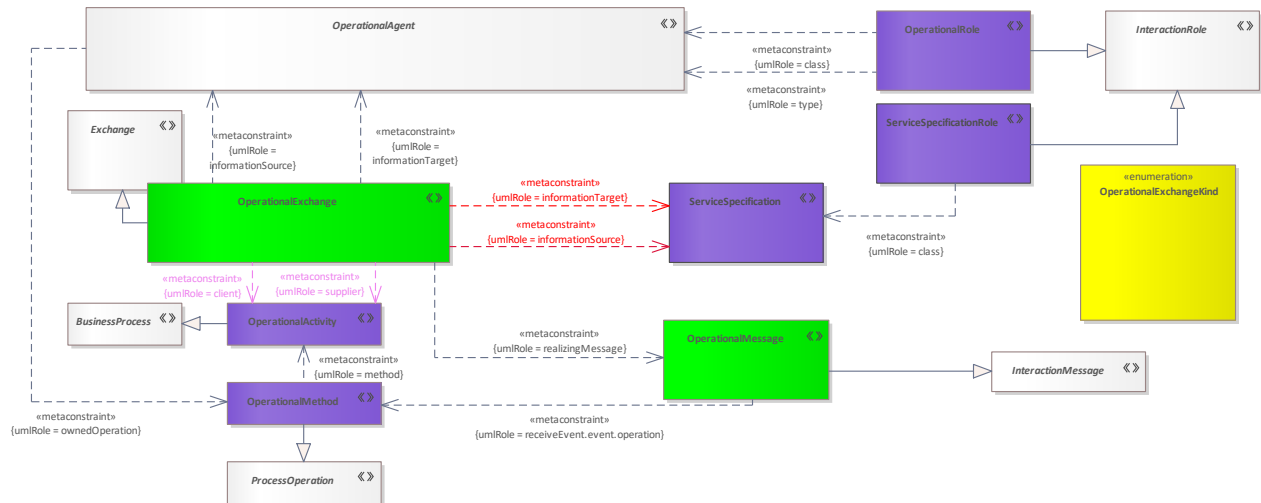


Figure 28: L6 - Logical Sequence

Meta Model Elements

Name	Definition
BusinessProcess	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
Exchange	Abstract tuple, grouping OperationalExchanges and ResourceExchanges that exchange Resources.
InteractionMessage	An abstract type that groups several types of messages used in the InteractionScenario.
InteractionRole	An abstract type that represents an individual participant in the InteractionScenario.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalMessage	Message for use in an Operational Event-Trace which carries any of the subtypes of OperationalExchange.
OperationalMethod	behavioral feature of a OperationalPerformer whose behavior is specified in an OperationalActivity.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
ProcessOperation	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

2.4.7L7 - Information Model

Purpose

The L7 Viewpoint is used to document the business information. It describes the information that can be exchanged along the logical flows in the architecture, specified in L2, L3 and L4.

Meta Model

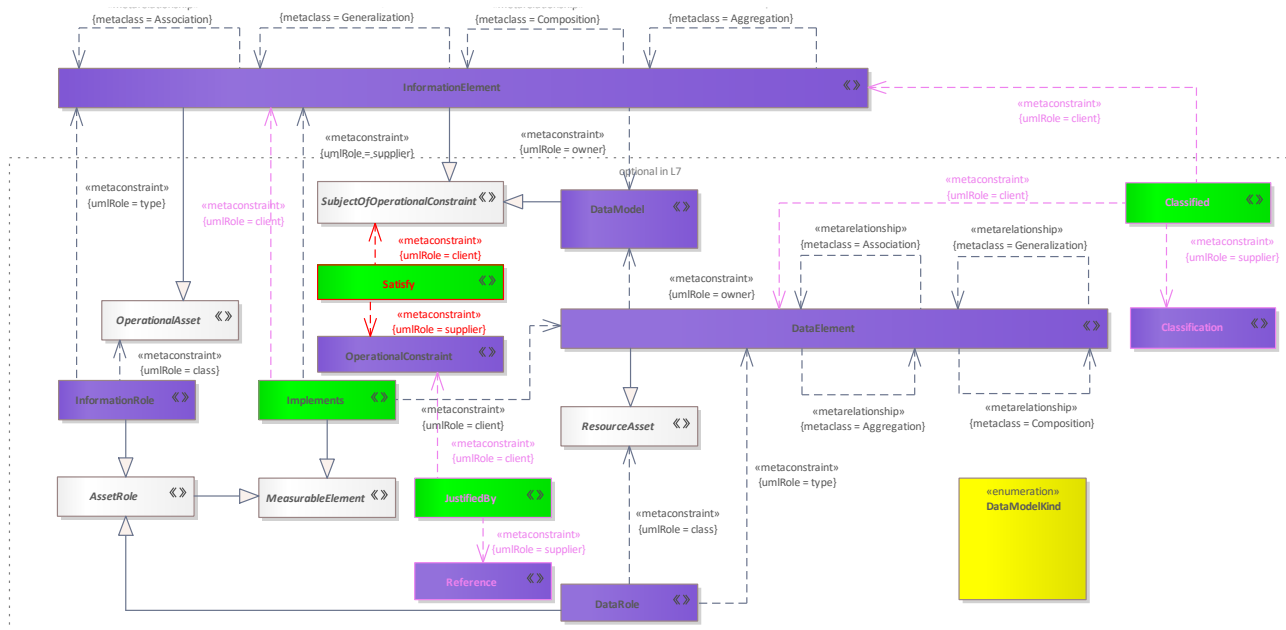


Figure 29: L7 - Information Model

Meta Model Elements

Name	Definition
AssetRole	AssetRole as applied to Security views, an abstract element that indicates the type of elements that can be considered as a subject for security analysis in the particular context (currently no security viewpoints in the framework).
Classification	Classification according to STANAG 1059.
Classified	Relationship that indicates which classification an element has.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DataModel	A structural specification of data types, showing relationships between them that is devoid of implementation detail. The type of data captured in the DataModel is described using the enumeration DataModelKind (Conceptual, Logical and Physical).
DataRole	A usage of DataElement that exists in the context of an ResourceAsset. It also allows the representation of the whole-part aggregation of DataElements.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
InformationElement	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable to perform (see IsCapableToPerform).
InformationRole	A usage of InformationElement that exists in the context of an OperationalAsset. It also allows the representation of the whole-part aggregation of InformationElements.
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalAsset	An abstract element used to group the elements of OperationalAgent and InformationElement allowing them to own InformationRoles.

Name	Definition
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
Reference	Element describes all types of references.
ResourceAsset	An abstract element used to group the elements of ResourcePerformer and DataElement allowing them to own DataRoles
Satisfy	This relation states that an constraint affects an element.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.

Name	Definition
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
StrategicConstraint	A Rule governing a capability.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.

Name	Definition
	comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
ArchitectureForProject	A relationship that expresses that a architectural description belongs to a actual project.
IsAccountableFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project in the context of an approval.
IsResponsibleFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project.
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
MilestoneDependency	A tuple between two ActualProjectMilestones that denotes one ActualProjectMilestone follows from another.
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
OwnedMilestone	Relationship that expresses that actual project has a actual milestone.
Project	A type that describes types of time-limited endeavours that are required to meet one or more Capability needs.
ProjectMilestone	A type of event in a Project by which progress is measured.
ProjectMilestoneRole	The role played by a ProjectMilestone in the context of a Project.
ProjectMilestoneToProjectTheme	A relationship that expresses which project theme is handled by which project milestone.
ProjectSequence	A tuple between two ActualProjects that denotes one ActualProject cannot start before the previous ActualProject is finished.
ProjectTheme	A property of a ProjectMilestone that captures an aspect by which the progress of ActualProjects may be measured.
Reference	Element describes all types of references.
RequiredResource	Relationship that indicates which resources a project milestone requires
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
Satisfy	This relation states that an constraint affects an element.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.
VersionedElement	An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.
VersionReleased	A relationship that expresses that an actual project milestone releases an versioned element.
VersionWithdrawn	A relationship that expresses that an actual project milestone withdraws an versioned element.

2.4.10 L2-L3 - Logical Concept Viewpoint

Purpose

The L2-L3 Viewpoint is concerned with providing an executive level, scenario-based communication of the architecture purpose, scope and content.

Meta Model

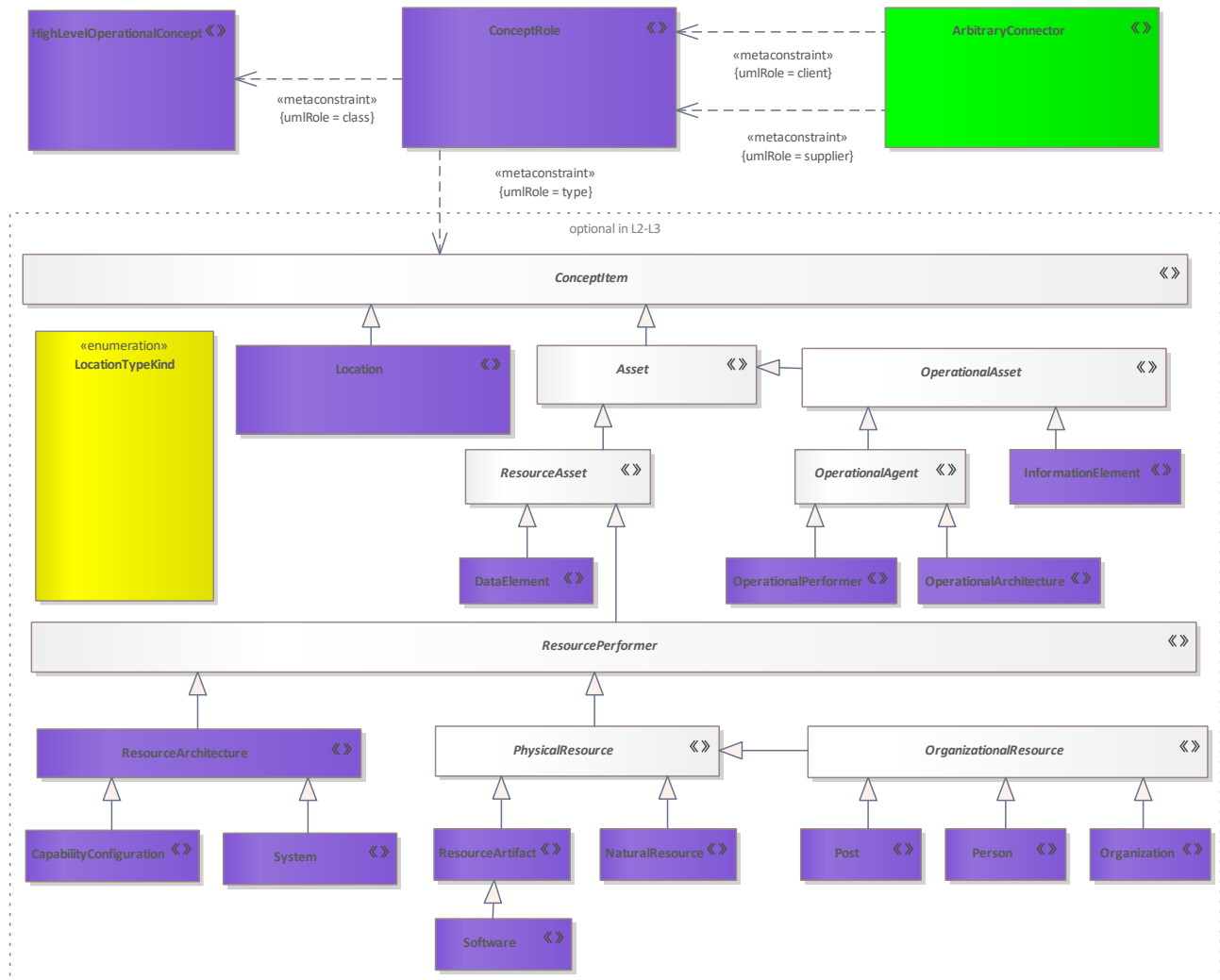


Figure 32: L2-L3 - Logical Concept Viewpoint

Meta Model Elements

Name	Definition
ArbitraryConnector	Represents a visual indication of a connection used in high level operational concept diagrams.
Asset	Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.
CapabilityConfiguration	A composite structure representing the physical and human resources (and their interactions) in an enterprise, assembled to meet a capability).
ConceptItem	Abstract, an item which may feature in a HighLevelOperationalConcept.
ConceptRole	Usage of a ConceptItem in the context of a HighLevelOperationalConcept.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
HighLevelOperationalConcept	Describes the Resources and Locations required to meet an operational scenario from an integrated systems point of view. It is used to communicate overall quantitative and qualitative system characteristics to stakeholders
InformationElement	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the

Name	Definition
	OperationalPerformers are capable to perform (see IsCapableToPerform).
Location	A specification of the generic area in which a LocationHolder is required to be located.
NaturalResource	Type of physical resource that occurs in nature.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalArchitecture	A type used to denote a model of the Architecture, described from the Operational perspective.
OperationalAsset	An abstract element used to group the elements of OperationalAgent and InformationElement allowing them to own InformationRoles.
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
Person	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).
Post	A type of job title or position that a person can fill (e.g. Lawyer, Solution Architect, Machine Operator or Chief Executive Officer).
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourceArtifact	A type of man-made object that contains no human beings (i.e. satellite, radio, petrol, gasoline, etc.).
ResourceAsset	An abstract element used to group the elements of ResourcePerformer and DataElement allowing them to own DataRoles
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
Software	A sub-type of ResourceArtifact that specifies an executable computer program.
System	An integrated set of elements, subsystems, or assemblies that accomplish a defined objective. These elements include products (hardware, software, firmware), processes, people, information, techniques, facilities, services, and other support elements (INCOSE SE Handbook V4, 2015).

2.5 Physical Resource Specification Viewpoints

Viewpoints in the Physical Resource Specifications row of the NAF grid support the description of the structure, connectivity and behaviour of the various types of Resources.

2.5.1P1- Resource Types

Purpose

The P1 Viewpoint collects together all the Resource Types in the architecture together with a depiction of their performance characteristics. P1 also provides a summary of the technologies and competencies that impact on the Resources that constitute the architecture.

Meta Model

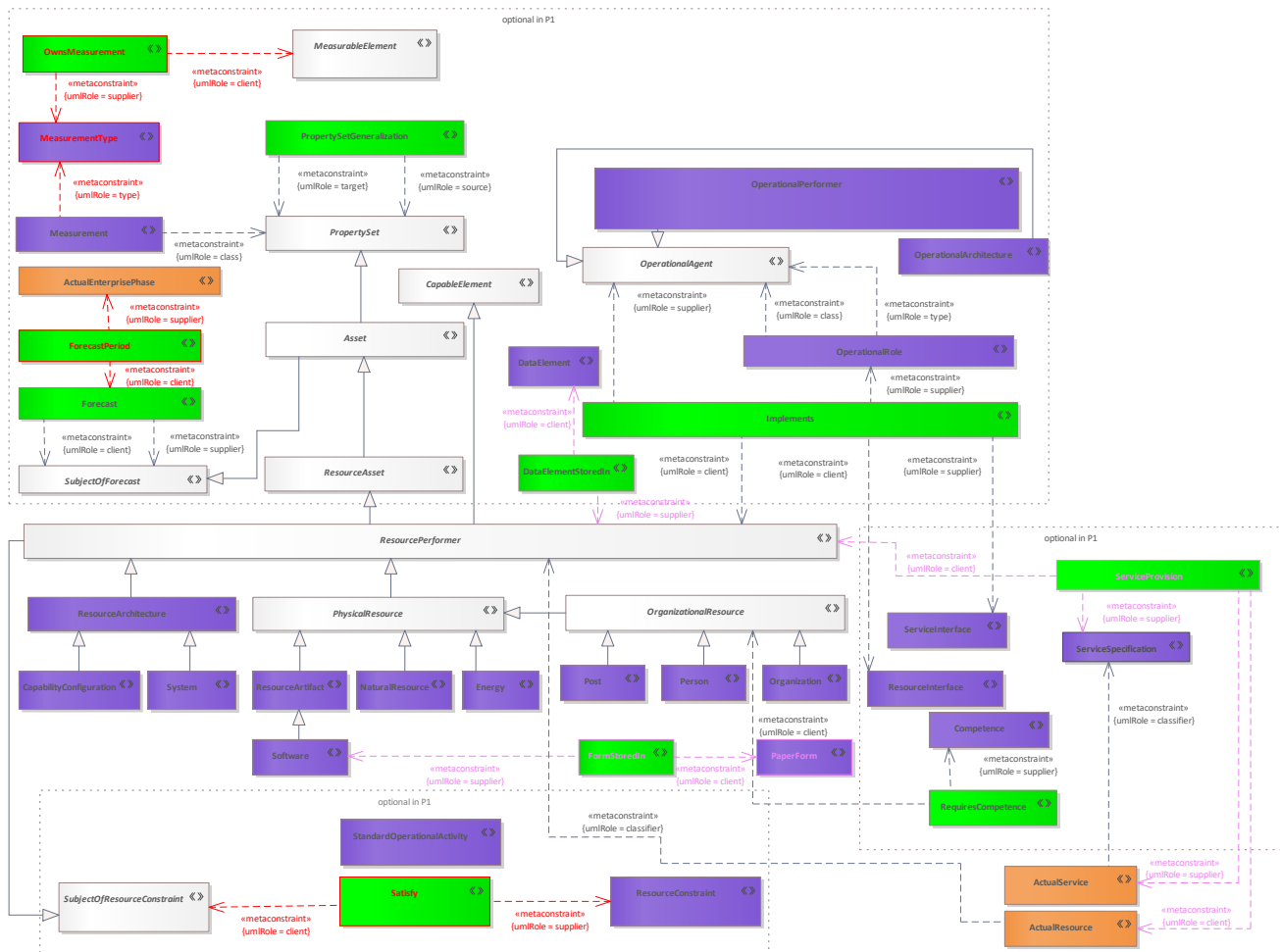


Figure 33: P1- Resource Types

Meta Model Elements

Name	Definition
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
ActualService	An individual ServiceSpecification.
Asset	Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.
CapabilityConfiguration	A composite structure representing the physical and human resources (and their interactions) in an enterprise, assembled to meet a capability).
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
Competence	A specific set of abilities defined by knowledge, skills and aptitude.

Name	Definition
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DataElementStoredIn	Relation says that a data is stored in software.
Energy	A representation of any kind of energy.
Forecast	A tuple that specifies a transition from one Asset, Standard, Competence to another future one. It is related to an ActualEnterprisePhase to give it a temporal context.
ForecastPeriod	Planning phase for which the forecast is valid.
FormStoredIn	Relation states that a digital form is stored in software.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
NaturalResource	Type of physical resource that occurs in nature.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalArchitecture	A type used to denote a model of the Architecture, described from the Operational perspective.
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
OwnsMeasurement	A relationship that expresses which measurement or measurement type an element owns.
PaperForm	Form is a digitized or digitizable document, for example a scanned document.
Person	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc.).
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).
Post	A type of job title or position that a person can fill (e.g. Lawyer, Solution Architect, Machine Operator or Chief Executive Officer).
PropertySet	An abstract type grouping architectural elements that can own Measurements.
RequiresCompetence	A tuple that asserts that an ActualOrganizationalResource is required to have a specific set of Competencies.
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourceArtifact	A type of man-made object that contains no human beings (i.e. satellite, radio, petrol, gasoline, etc.).
ResourceAsset	An abstract element used to group the elements of ResourcePerformer and DataElement allowing them to own DataRoles
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
ResourceInterface	A declaration that specifies a contract between the ResourcePerformers it is related to and any other ResourcePerformers it can interact with. It is also intended to be an implementation of a specification of an Interface in the Business and/or Service layer.

Name	Definition
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
Satisfy	This relation states that an constraint affects an element.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServiceProvision	An assertion that a Resource delivers a Service to a specified ServiceLevel.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
Software	A sub-type of ResourceArtifact that specifies an executable computer program.
StandardOperationalActivity	A sub-type of OperationalActivity that is a standard operating procedure.
SubjectOfForecast	An abstract type grouping elements that can be the subject of a Forecast.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.
System	An integrated set of elements, subsystems, or assemblies that accomplish a defined objective. These elements include products (hardware, software, firmware), processes, people, information, techniques, facilities, services, and other support elements (INCOSE SE Handbook V4, 2015).

Purpose

Meta Model



Name	Definition
<u>ActualEnvironment</u>	The ActualState that describes the circumstances of an Environment.
<u>ActualLocation</u>	The ActualState that describes a physical location, for example using text to provide an address, Geo-coordinates, etc.
<u>ActualProject</u>	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
<u>ActualProjectConsults</u>	A relation that expresses that a project consults an OrganizationalResource.
<u>ActualProjectInforms</u>	A relation that expresses that a project informs an OrganizationalResource.

Name	Definition
CapabilityConfiguration	A composite structure representing the physical and human resources (and their interactions) in an enterprise, assembled to meet a capability).
Command	A type of ResourceExchange that asserts that one OrganizationalResource commands another.
Competence	A specific set of abilities defined by knowledge, skills and aptitude.
CompetenceForRole	A tuple used to associate an organizational role with a specific set of required competencies.
Control	A type of ResourceExchange that asserts that one PhysicalResource controls another PhysicalResource (i.e. the driver of a vehicle controlling the vehicle speed or direction).
DataElement	A formalized representation of data that is managed by or exchanged between resources.
Energy	A representation of any kind of energy.
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
GeoPoliticalExtentType	A geospatial extent whose boundaries are defined by declaration or agreement by political parties.
HostedOn	Relation states that hardware (virtualized) or software is hosted on a virtualized platform or physical hardware.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
IsAccountableFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project in the context of an approval.
IsResponsibleFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project.
Location	A specification of the generic area in which a LocationHolder is required to be located.
LocationHolder	Abstract type, used to group elements that are allowed to be associated with a Location.
LocationType	A relationship that expresses which location is assigned to a location holder.
NaturalResource	Type of physical resource that occurs in nature.
NeedsModificationOf	Relation stats that a project makes adjustments to a resource.
NeedsResource	Relation stats that a project needs a resource.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalArchitecture	A type used to denote a model of the Architecture, described from the Operational perspective.
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
Person	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).
PhysicalLocation	A relationship that expresses that a location holder operates in an actual location.
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).

Name	Definition
Post	A type of job title or position that a person can fill (e.g. Lawyer, Solution Architect, Machine Operator or Chief Executive Officer).
PostRole	A usage of a post in the context of another OrganizationalResource. Creates a whole-part relationship.
ProjectProvidesFunction	Relation states that a project realizes a function.
ProjectSupportActivity	Relation states that a project supports an activity.
RequiredEnvironment	A relationship that expresses that a location holder operates under specific environmental conditions.
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourceArtifact	A type of man-made object that contains no human beings (i.e. satellite, radio, petrol, gasoline, etc.).
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
ResourceDependency	Relationship that is a dependency of a resource on a resource.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ResourceToServiceDependency	Relation states that a resource is dependent on a service.
Responsible	Relation states that a project is responsible for a service or a material resource.
Satisfy	This relation states that an constraint affects an element.
ServiceProvision	An assertion that a Resource delivers a Service to a specified ServiceLevel.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.
Software	A sub-type of ResourceArtifact that specifies an executable computer program.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.
SubOrganization	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).
System	An integrated set of elements, subsystems, or assemblies that accomplish a defined objective. These elements include products (hardware, software, firmware), processes, people, information, techniques, facilities, services, and other support elements (INCOSE SE Handbook V4, 2015).

2.5.3P3 - Resource Connectivity

Purpose

The networks and pathways documented in a P3 Viewpoint represent the physical implementation of the logical flows identified in a L2, Logical Scenario, or L3, Node Interactions View.

Meta Model

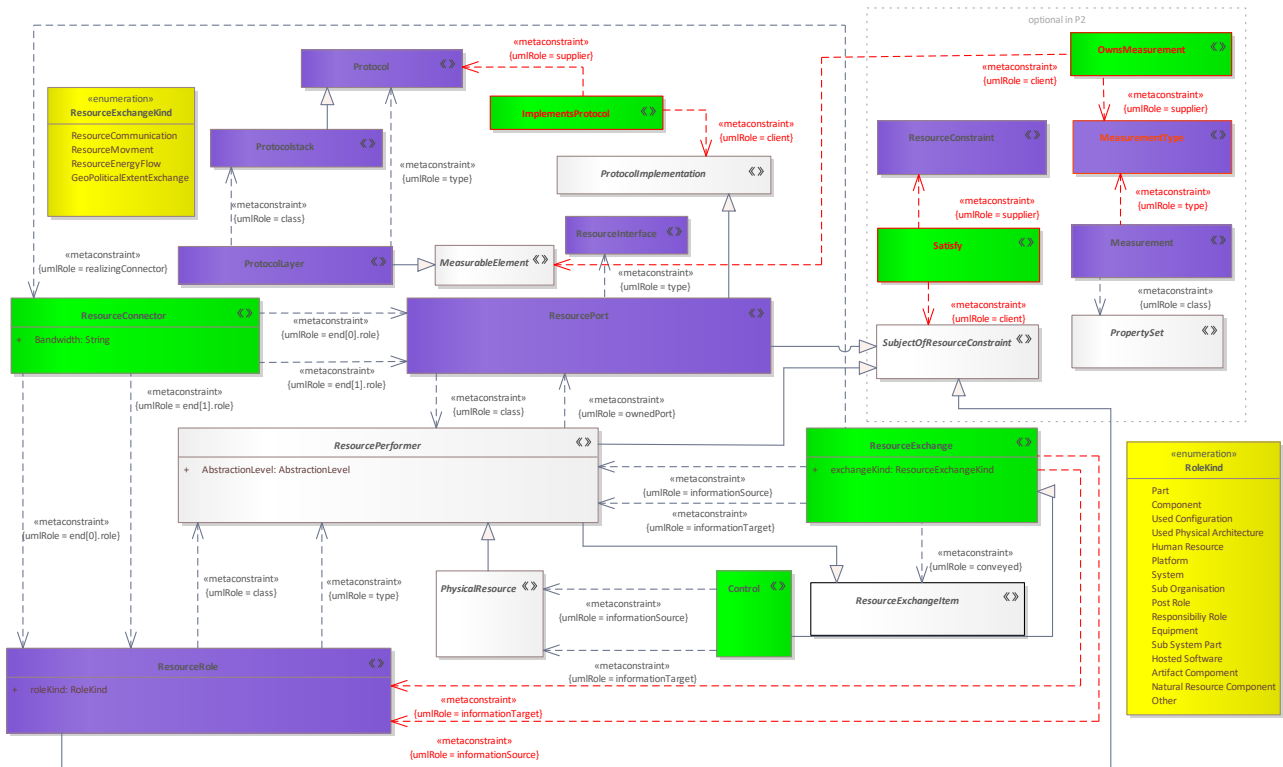


Figure 35: P3 - Resource Connectivity

Meta Model Elements

Name	Definition
Control	A type of ResourceExchange that asserts that one PhysicalResource controls another PhysicalResource (i.e. the driver of a vehicle controlling the vehicle speed or direction).
ImplementsProtocol	A relationship that expresses which protocol implements an architectural element.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
OwnsMeasurement	A relationship that expresses which measurement or measurement type an element owns.
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).
PropertySet	An abstract type grouping architectural elements that can own Measurements.
Protocol	A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.
ProtocolImplementation	An abstract type grouping architectural elements that can implement Protocols.
ProtocolLayer	Usage of a Protocol in the context of another Protocol. Creates a whole-part relationship.
Protocolstack	A sub type of Protocol that contains the ProtocolLayers, defining a complete stack.
ResourceConnector	A channel for exchange between two ResourceRoles.

Name	Definition
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.
ResourceInterface	A declaration that specifies a contract between the ResourcePerformers it is related to and any other ResourcePerformers it can interact with. It is also intended to be an implementation of a specification of an Interface in the Business and/or Service layer.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
Satisfy	This relation states that an constraint affects an element.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.

2.5.4P4 - Resource Functions

Purpose

The Functionality Description provides detailed information regarding the allocation of functions to resources, and flows between Resource Functions. The P4 Viewpoint is the Physical Resource counterpart to the L4 Logical Activities Viewpoint.

Meta Model

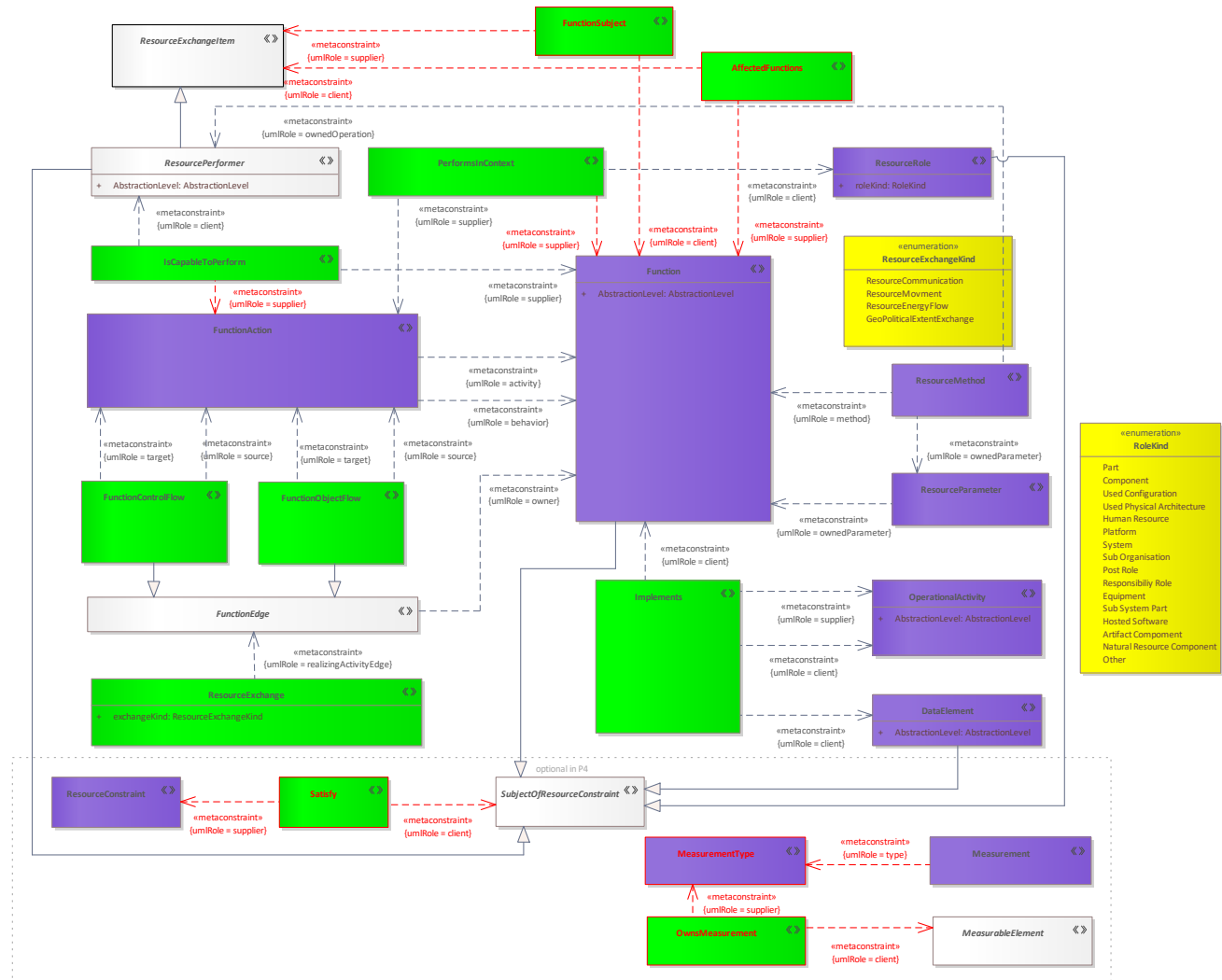


Figure 36: P4 - Resource Functions

Meta Model Elements

Name	Definition
AffectedFunctions	A relationship that expresses which function is affected by a resource.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
FunctionAction	A call of a Function indicating that the Function is performed by a ResourceRole in a specific context.
FunctionControlFlow	An ActivityEdge that shows the flow of control between FunctionActions.
FunctionEdge	A tuple that shows the flow of Resources (objects/data) between FunctionActions.
FunctionObjectFlow	An ActivityEdge that shows the flow of Resources (objects/data) between FunctionActions.
FunctionSubject	A relationship that expresses that a function uses certain resources.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.

Name	Definition
<u>IsCapableToPerform</u>	A relationship that says that a capable element performs an activity or action.
<u>MeasurableElement</u>	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
<u>Measurement</u>	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
<u>MeasurementType</u>	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
<u>OperationalActivity</u>	An Activity that captures a logical process, specified independently of how the process is carried out.
<u>OwnsMeasurement</u>	A relationship that expresses which measurement or measurement type an element owns.
<u>PerformsInContext</u>	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
<u>ResourceConstraint</u>	A rule governing the structural or functional aspects of an implementation.
<u>ResourceExchange</u>	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
<u>ResourceExchangeItem</u>	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.
<u>ResourceMethod</u>	A behavioral feature of a ResourcePerformer whose behavior is specified in a Function.
<u>ResourceParameter</u>	A type that represents inputs and outputs of an Function. It is typed by a ResourceInteractionItem.
<u>ResourcePerformer</u>	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
<u>ResourceRole</u>	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
<u>Satisfy</u>	This relation states that an constraint affects an element.
<u>SubjectOfResourceConstraint</u>	An abstract type grouping elements that can be the subject of a ResourceConstraint.

2.5.5P5 - Resource States

Purpose

The P5 Viewpoint identifies the states a Resource can be, the allowable changes between those states, and the stimuli (e.g. triggers and events) that cause the state changes.

Meta Model

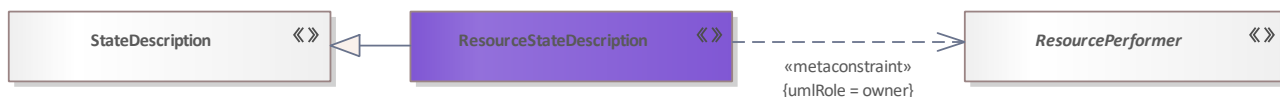


Figure 37: P5 - Resource States

Meta Model Elements

Name	Definition
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceStateDescription	A state machine describing the behavior of a ResourcePerformer, depicting how the ResourcePerformer responds to various events and the actions.
StateDescription	An abstract type that represents a state machine (i.e. an OperationalStateDescription or ResourceStateDescription), depicting how the Asset responds to various events and the actions.

2.5.6P6 - Resource Sequence

Purpose

The P6 Viewpoint is valuable for moving to the next level of detail from the initial solution design, to help define a sequence of functions and Resource Interactions, and to ensure that each participating Resource or Port has the necessary information, at the right time, in order to perform its assigned functionality.

Meta Model

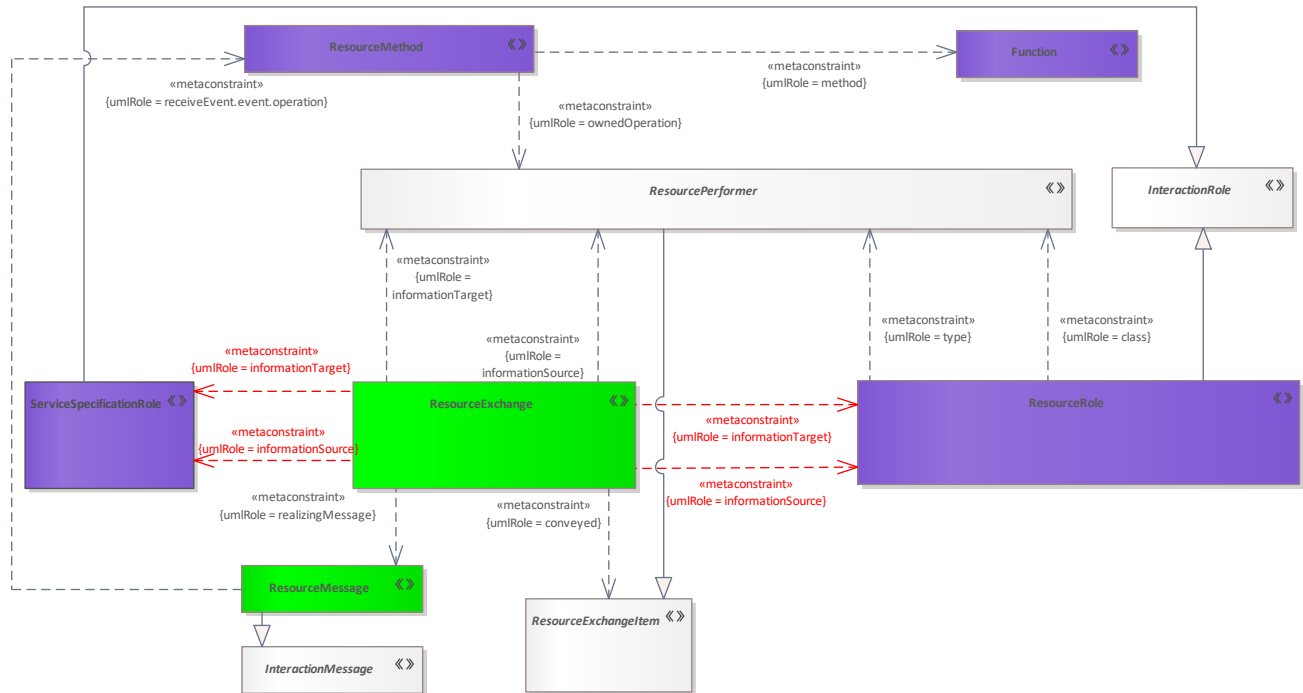


Figure 38: P6 - Resource Sequence

Meta Model Elements

Name	Definition
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
InteractionMessage	An abstract type that groups several types of messages used in the InteractionScenario.
InteractionRole	An abstract type that represents an individual participant in the InteractionScenario.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.
ResourceMessage	Message for use in an Resource Event-Trace which carries any of the subtypes of ResourceExchange.
ResourceMethod	A behavioral feature of a ResourcePerformer whose behavior is specified in a Function.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

2.5.7P7 - Data Model

Purpose

The P7 Viewpoint is one of the architectural products closest to actual system design in the NAF. It is used to describe how the information represented in the L7 Logical Data Model Viewpoint is implemented.

Meta Model

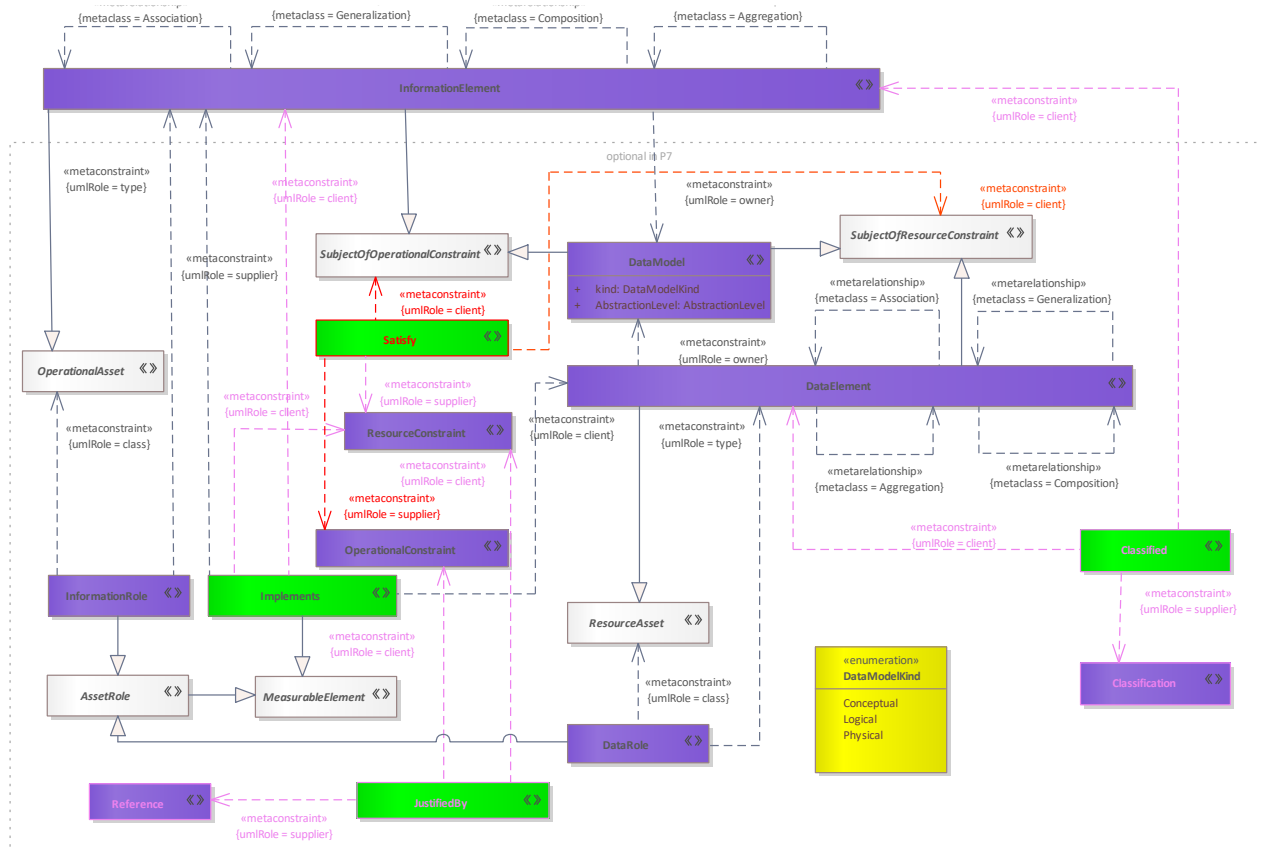


Figure 39: P7 - Data Model

Meta Model Elements

Name	Definition
AssetRole	AssetRole as applied to Security views, an abstract element that indicates the type of elements that can be considered as a subject for security analysis in the particular context (currently no security viewpoints in the framework).
Classification	Classification according to STANAG 1059.
Classified	Relationship that indicates which classification an element has.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DataModel	A structural specification of data types, showing relationships between them that is devoid of implementation detail. The type of data captured in the DataModel is described using the enumeration DataModelKind (Conceptual, Logical and Physical).
DataRole	A usage of DataElement that exists in the context of an ResourceAsset. It also allows the representation of the whole-part aggregation of DataElements.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
InformationElement	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable to perform (see IsCapableToPerform).

Name	Definition
InformationRole	A usage of InformationElement that exists in the context of an OperationalAsset. It also allows the representation of the whole-part aggregation of InformationElements.
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalAsset	An abstract element used to group the elements of OperationalAgent and InformationElement allowing them to own InformationRoles.
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
Reference	Element describes all types of references.
ResourceAsset	An abstract element used to group the elements of ResourcePerformer and DataElement allowing them to own DataRoles
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
Satisfy	This relation states that an constraint affects an element.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.

Name	Definition
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
Person	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).
Post	A type of job title or position that a person can fill (e.g. Lawyer, Solution Architect, Machine Operator or Chief Executive Officer).
Reference	Element describes all types of references.
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourceArtifact	A type of man-made object that contains no human beings (i.e. satellite, radio, petrol, gasoline, etc.).
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
Satisfy	This relation states that an constraint affects an element.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
Software	A sub-type of ResourceArtifact that specifies an executable computer program.
StrategicConstraint	A Rule governing a capability.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.
System	An integrated set of elements, subsystems, or assemblies that accomplish a defined objective. These elements include products (hardware, software, firmware), processes, people, information, techniques, facilities, services, and other support elements (INCOSE SE Handbook V4, 2015).

Name	Definition
ProjectSequence	A tuple between two ActualProjects that denotes one ActualProject cannot start before the previous ActualProject is finished.
ProjectTheme	A property of a ProjectMilestone that captures an aspect by which the progress of ActualProjects may be measured.
RequiredResource	Relationship that indicates which resources a project milestone requires
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.
SuccessorOf	A relationship between two elements that indicates that one element is the successor of the other.
VersionedElement	An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.
VersionOfConfiguration	A property of a WholeLifeConfiguration, used in version control of a VersionedElement. It asserts that a VersionedElement is a version of a WholeLifeConfiguration.
VersionReleased	A relationship that expresses that an actual project milestone releases an versioned element.
VersionSuccession	A tuple between two VersionOfConfigurations that denotes that one VersionOfConfiguration follows from another.
VersionWithdrawn	A relationship that expresses that an actual project milestone withdraws an versioned element.
WholeLifeConfiguration	A set of VersionedElements.

2.5.10 L4-P4 Activity to Function Mapping

Purpose

The L4-P4 Viewpoint depicts the mapping of Resource Functions (and optionally, the resources that provide them) to operational activities and/or service functions. For operational activities it thus identifies the transformation of an operational need into a purposeful action performed by a system or solution. For service functions it provides the link between the services used at the operational level and the specific Resource Functions provided by the resources supporting the services.

Meta Model

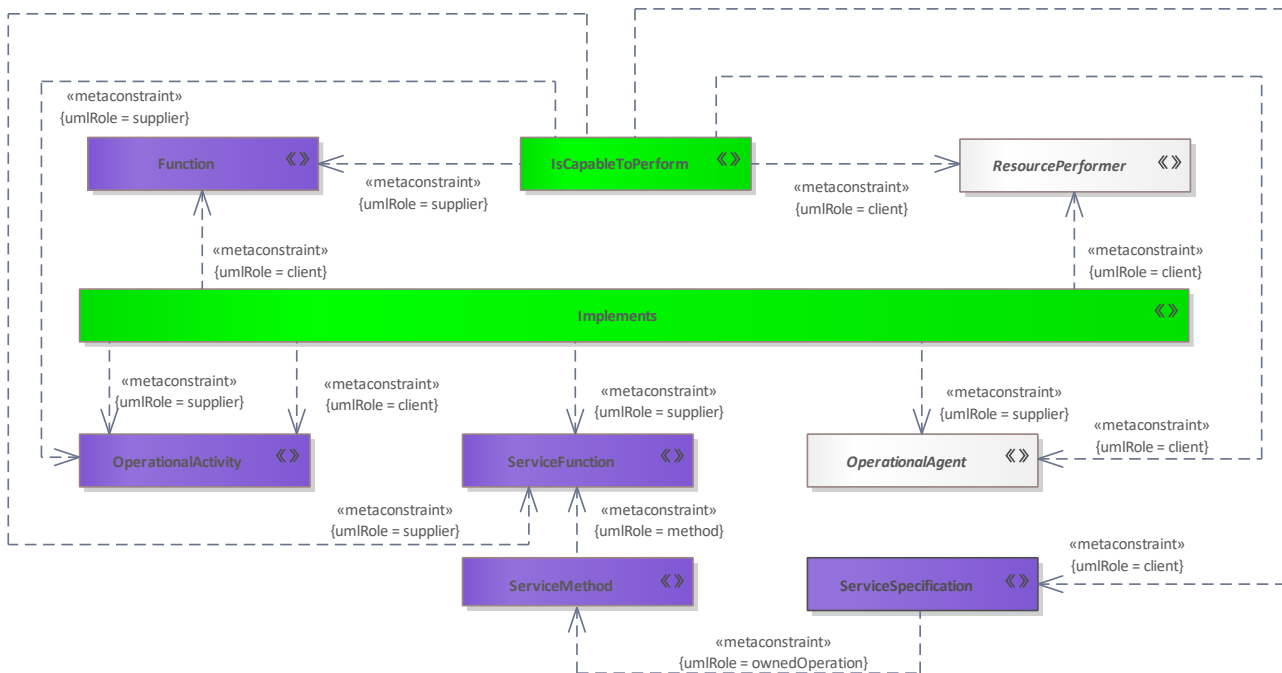


Figure 42: L4-P4 Activity to Function Mapping

Meta Model Elements

Name	Definition
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

2.6 Architecture Foundation

Viewpoints in the Architecture Meta-Data row of the NAF grid support the administrative aspects of the architecture, such as who created it, for whom and when.

2.6.1A1 - Meta-Data Definitions

Purpose

The A1 Viewpoint presents meta-data tags to aid with searching and discovery.

Meta Model

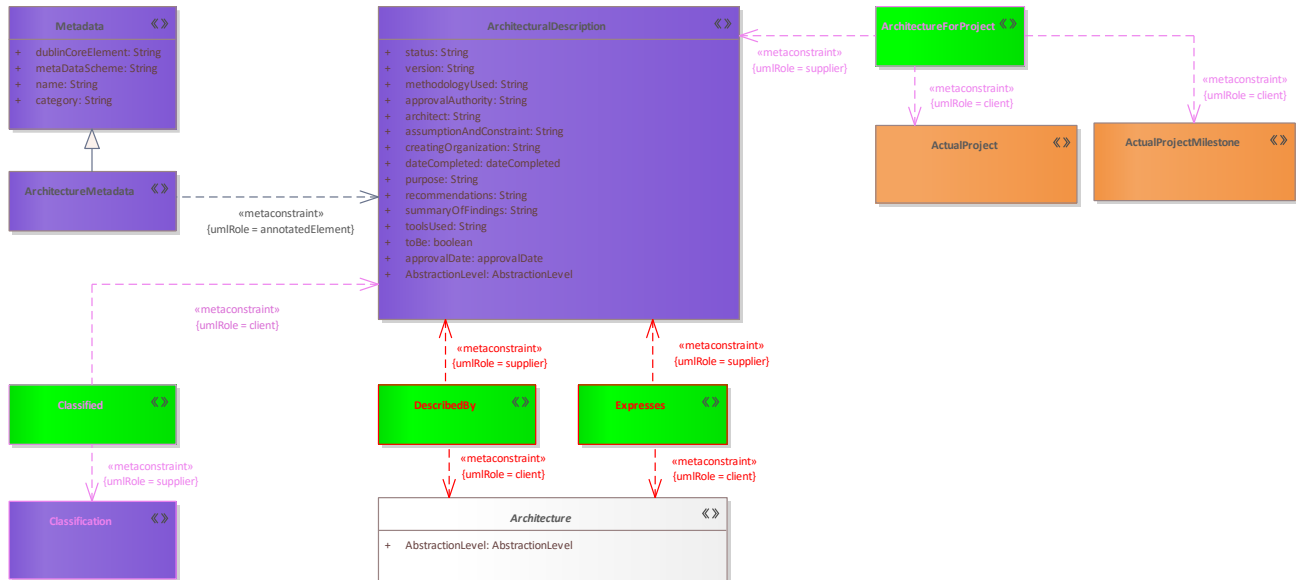


Figure 43: A1 - Meta-Data Definitions

Meta Model Elements

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
Architecture	An abstract type that represents a generic architecture. Subtypes are OperationalArchitecture and ResourceArchitecture.
ArchitectureForProject	A relationship that expresses that a architectural description belongs to a actual project.
ArchitectureMetadata	Information associated with an ArchitecturalDescription, that supplements the standard set of tags used to summarize the Architecture. It states things like what methodology was used, notation, etc.
Classification	Classification according to STANAG 1059.
Classified	Relationship that indicates which classification an element has.
DescribedBy	A relationship that expresses that an architectural description describes an architecture.
Expresses	A relationship that expresses that an architectural description includes the following architectures.
Metadata	A comment that can be applied to any element in the architecture. The attributes associated with this element details the relationship between the element and its related dublinCoreElement, metaDataScheme,

Name	Definition
	category and name. This allows the element to be referenced using the Semantic Web.

Name	Definition
EnterprisePhase	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.
Metadata	A comment that can be applied to any element in the architecture. The attributes associated with this element details the relationship between the element and its related dublinCoreElement, metaDataScheme, category and name. This allows the element to be referenced using the Semantic Web.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
Stakeholder	individual, team, organization, or classes thereof, having an interest in an EnterprisePhase [ISO/IEC/IEEE 42010:2011].
StakeholderConcern	A relationship that expresses which concern a stakeholder has.
View	An architecture view expresses the architecture of the system-of-interest in accordance with an architecture viewpoint (or simply, viewpoint). [ISO/IEC/IEEE 42010:2011(E)].
Viewpoint	An architecture viewpoint frames (to formulate or construct in a particular style or language) one or more concerns. A concern can be framed by more than one viewpoint. [ISO/IEC/IEEE 42010:2011(E)].
ViewpointsInArchitecturalDescription	A relationship that expresses that an architectural description includes the following viewpoints.
ViewpointToStakeholder	A relationship that expresses which stakeholder needs viewpoint.
ViewsInArchitecturalDescription	A relationship that expresses that an architectural description includes the following views.
WholeLifeEnterprise	A WholeLifeEnterprise is a purposeful endeavor of any size involving people, organizations and supporting systems. It is made up of TemporalParts and StructuralParts.

2.6.3A3 - Architecture Correspondence

Purpose

The A3 Viewpoint presents correspondence relations between elements of Architecture Descriptions. ISO/IEC/IEEE42010 introduces the idea of architecture correspondence and correspondence rules.

Quoting from ISO/IEC/IEEE 42010: "A correspondence defines a relation between AD (Architecture Description) elements. Correspondences are used to express architecture relations of interest within an architecture description (or between architecture descriptions). Correspondences can be governed by correspondence rules. Correspondence rules are used to enforce relations within an architecture description (or between architecture descriptions)."

Meta Model

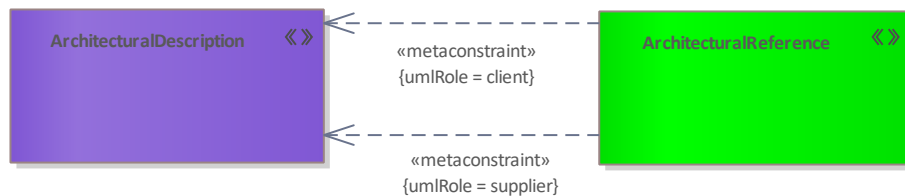


Figure 45: A3 - Architecture Correspondence

Meta Model Elements

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
ArchitecturalReference	A tuple that specifies that one architectural description refers to another.

2.6.4A4 - Methodology Used

Purpose

The A4 Viewpoint specifies the methodology used for the architecting activities.

Meta Model

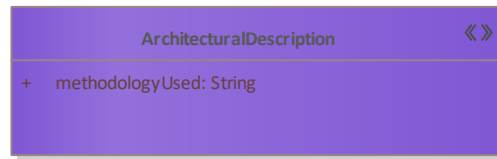


Figure 46: A4 - Methodology Used

Meta Model Elements

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.

2.6.5A5 - Architecture Status

Purpose

The A5 Viewpoint shows the current version number and approval status for the architecture.

Meta Model

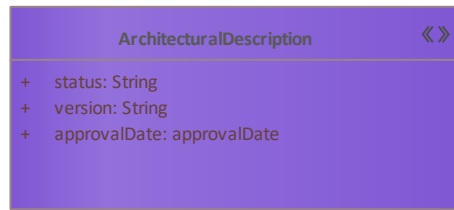


Figure 47: A5 - Architecture Status

Meta Model Elements

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.

2.6.6A6 - Architecture Versions

Purpose

The A6 Viewpoint shows the complete history of the architecture.

Meta Model

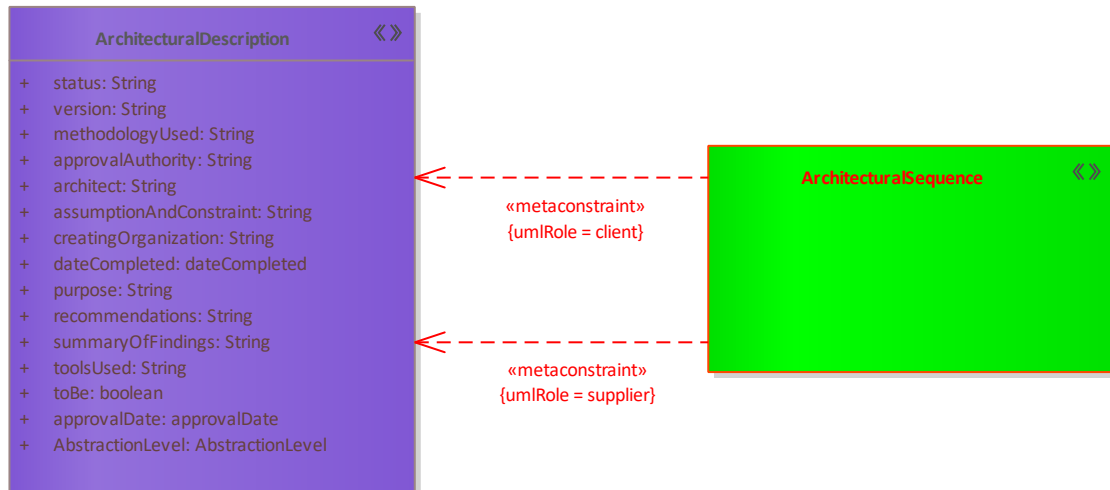


Figure 48: A6 - Architecture Versions

Meta Model Elements

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
ArchitecturalSequence	A relationship that specifies that one architectural description is the successor of another.

2.6.7A7 - Architecture Compliance

Purpose

The A7 Viewpoint gives the overall specification of architecture meta-data.

Meta Model

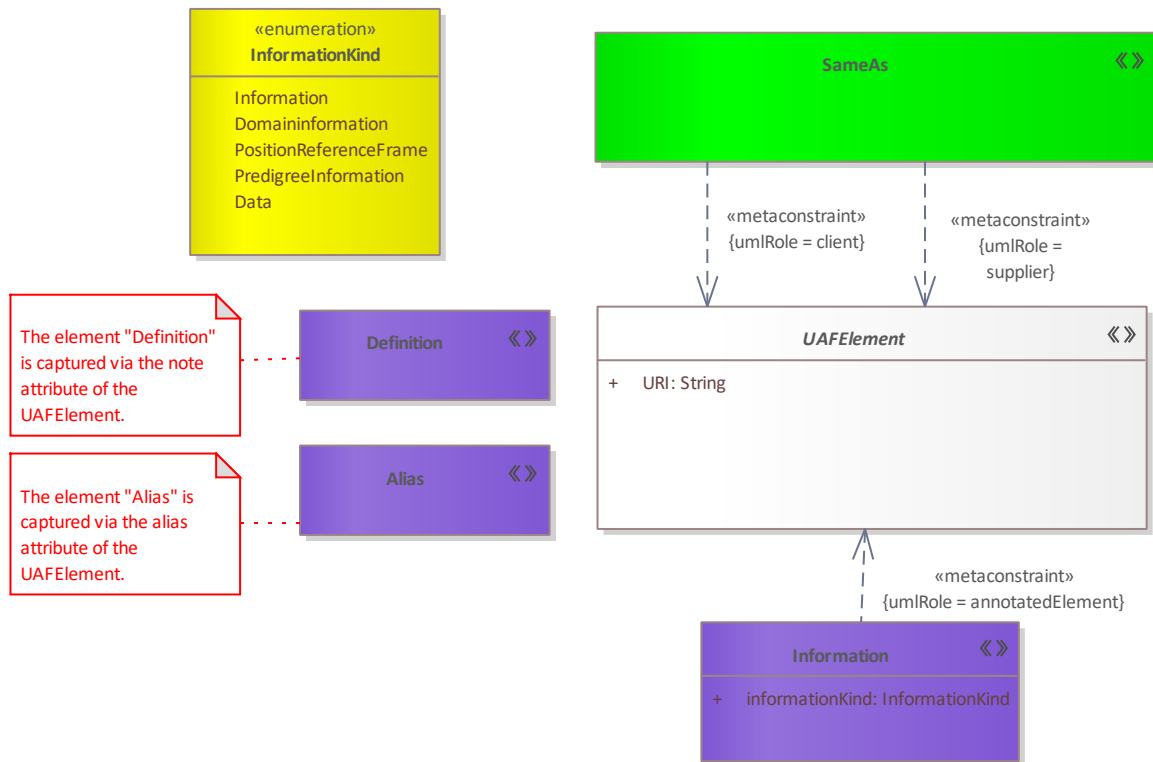


Figure 49: A7 - Architecture Compliance

Meta Model Elements

Name	Definition
Alias	A metamodel Artifact used to define an alternative name for an element.
Definition	A comment containing a description of an element in the architecture.
Information	A comment that describes the state of an item of interest in any medium or form -- and is communicated or received.
SameAs	A tuple that asserts that two elements refer to the same real-world thing.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

2.6.8A8 - Standards

Purpose

The A8 Viewpoint encompasses both technical and non-technical standards. The standards specified in the A8 view can be applied across the architecture to a variety of structural and behavioural elements. Standards are essential to the coherent running of businesses and to the delivery of reliable, interoperable systems.

Meta Model

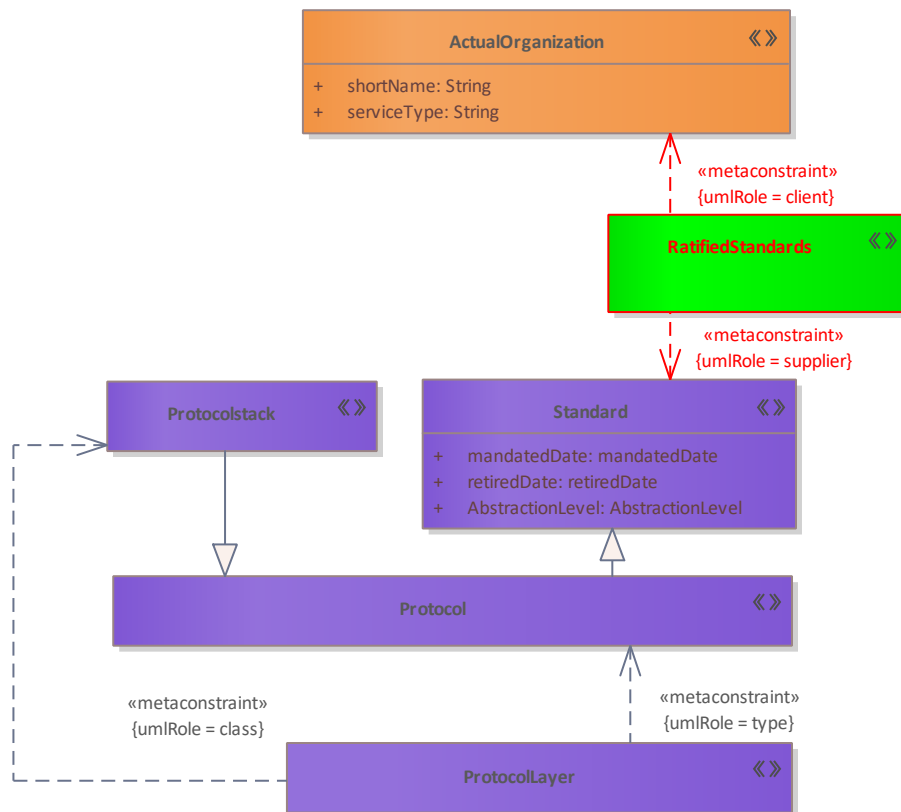


Figure 50: A8 - Standards

Meta Model Elements

Name	Definition
ActualOrganization	An actual formal or informal organizational unit, e.g. "Driving and Vehicle Licensing Agency", "UAF team Alpha".
Protocol	A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.
ProtocolLayer	Usage of a Protocol in the context of another Protocol. Creates a whole-part relationship.
Protocolstack	A sub type of Protocol that contains the ProtocolLayers, defining a complete stack.
RatifiedStandards	A relationship that expresses that an actual organization releases a standard.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.

2.6.9Ar - Architecture Roadmap

Purpose

The Ar Viewpoint shows the history of the architecture project as well as its future direction.

Meta Model

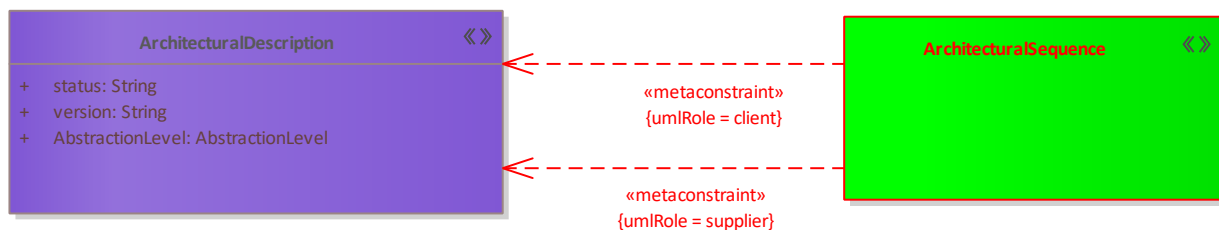


Figure 51: Ar - Architecture Roadmap

Meta Model Elements

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
ArchitecturalSequence	A relationship that specifies that one architectural description is the successor of another.

2.7 Requirement Viewpoints

The derivation of requirements is a continuous process in the creation of architecture. The aim is to derive demands on future systems out of the model and to document them in a comprehensible manner. The model-based collection of requirements particularly supports compliance with the criteria of completeness, uniqueness, traceability and consistency.

In order to be able to establish a connection between the contents of an architecture and the derived functional or non-functional requirements and to document this in the best possible way, the Requirement Row (R) is used as an extension of NAF v4.

2.7.1R2 - Requirement Catalogue

Purpose

The R2 represents a catalog of requirements in the architectural model. For this purpose, categories can be created in which the functional and non-functional requirements can be grouped.

Meta Model

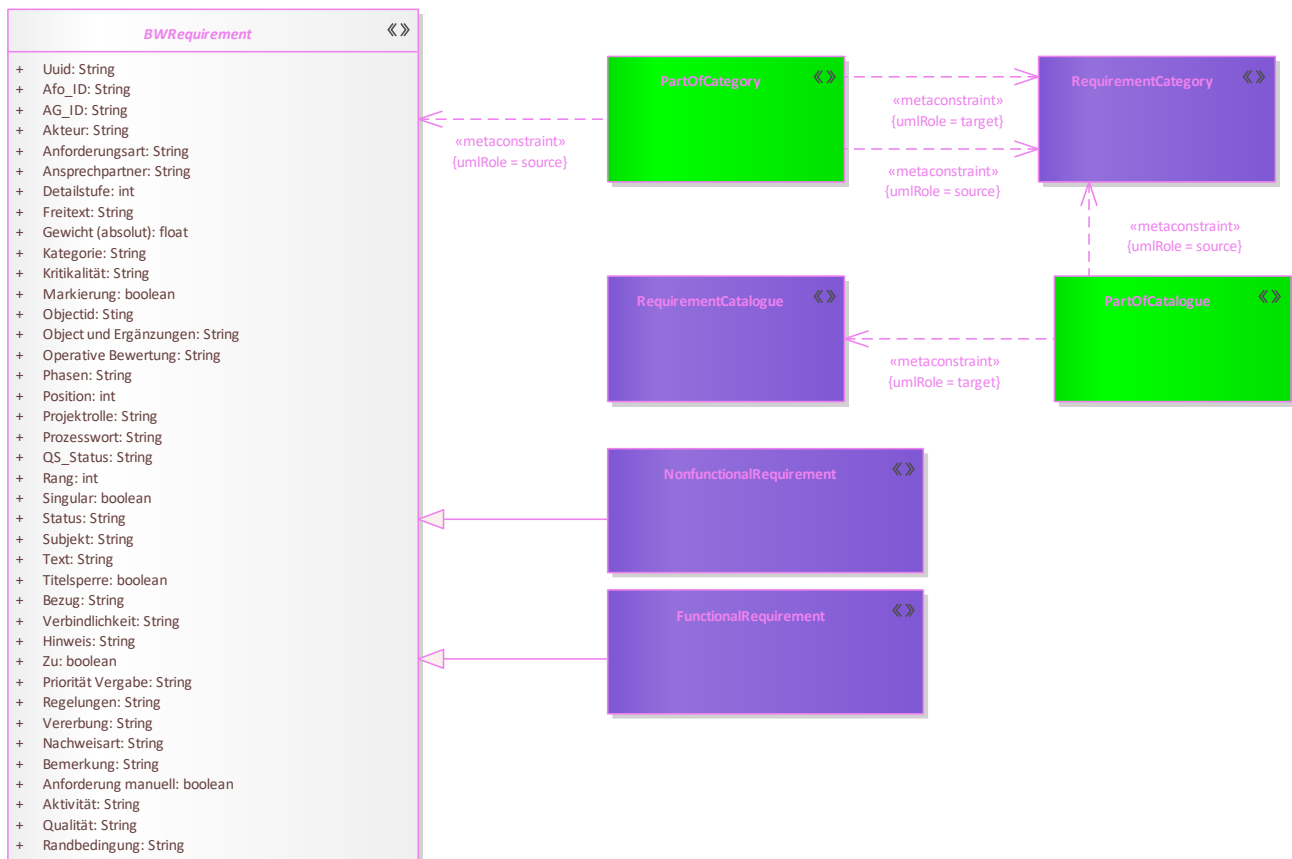


Figure 52: R2 - Requirement Catalogue

Meta Model Elements

Name	Definition
BWRequirement	Abstract base class for requirements.
FunctionalRequirement	The element represents a functional requirement (what should the system / software be able to do?).
NonfunctionalRequirement	The element represents a non-functional requirement (how should the system / software be able to do something?).
PartOfCatalogue	This relation states that a category (RequirementCategory) belongs to a requirements catalog (RequirementCatalogue).
PartOfCategory	This relation states that his functional or non-functional requirement belongs to a category (RequirementCategory) of the requirements catalog.
RequirementCatalogue	Element represents a catalog of requirements, which consists of different categories (RequirementCategory) of functional and non-functional requirements.

Name	Definition
RequirementCategory	Element represents a category of a catalog of requirements.

2.7.2R3 - Requirement Dependencies

Purpose

The R3 is used to show dependencies between different requirements.

Meta Model



Figure 53: R3 - Requirement Dependencies

Meta Model Elements

Name	Definition
BWRRequirement	Abstract base class for requirements.
ConflictsWith	Relation that represents a conflict between two requirements.
FunctionalRequirement	The element represents a functional requirement (what should the system / software be able to do?).
IsDuplicateOf	Relation that represents that two requirements convey the same content.
NonfunctionalRequirement	The element represents a non-functional requirement (how should the system / software be able to do something?).
Refines	Relation that represents a refinement of a requirement by another requirement.
Replaces	Relation that represents a replacement of a requirement with another requirement.
Requires	Relation that represents that a requirement assumes another requirement.
StemsFrom	Relationship that states that one requirement stems from another.

2.7.3R7 - Requirement Derivation

Purpose

The R7 assigns functional and non-functional requirements to the demanding architectural elements. In addition, information about the planned realization can be shown.

Meta Model

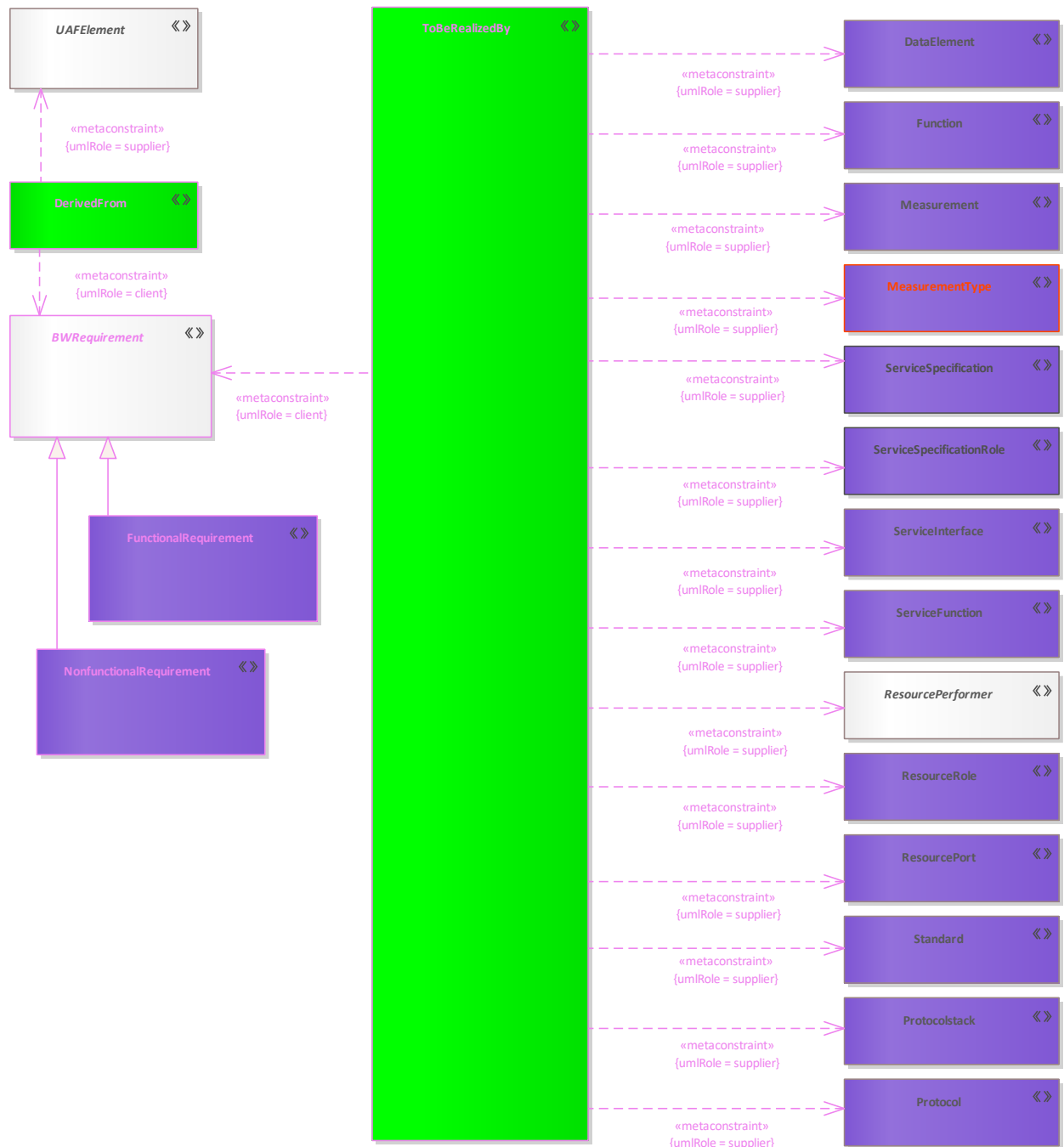


Figure 54: R7 - Requirement Derivation

Meta Model Elements

Name	Definition
BWRequirement	Abstract base class for requirements.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DerivedFrom	Relation that shows that a functional or non-functional requirement is based on a process, role and task carrier, information element or other element.
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.

Name	Definition
FunctionalRequirement	The element represents a functional requirement (what should the system / software be able to do?).
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
NonfunctionalRequirement	The element represents a non-functional requirement (how should the system / software be able to do something?).
Protocol	A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.
Protocolstack	A sub type of Protocol that contains the ProtocolLayers, defining a complete stack.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSpecification calls upon another ServiceSpecification in order to deliver its stated functionality.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

2.7.4R8 - Requirement Fulfilment

Purpose

The R8 is used to determine and map acceptance and evaluation criteria for the individual functional and non-functional requirements.

Meta Model

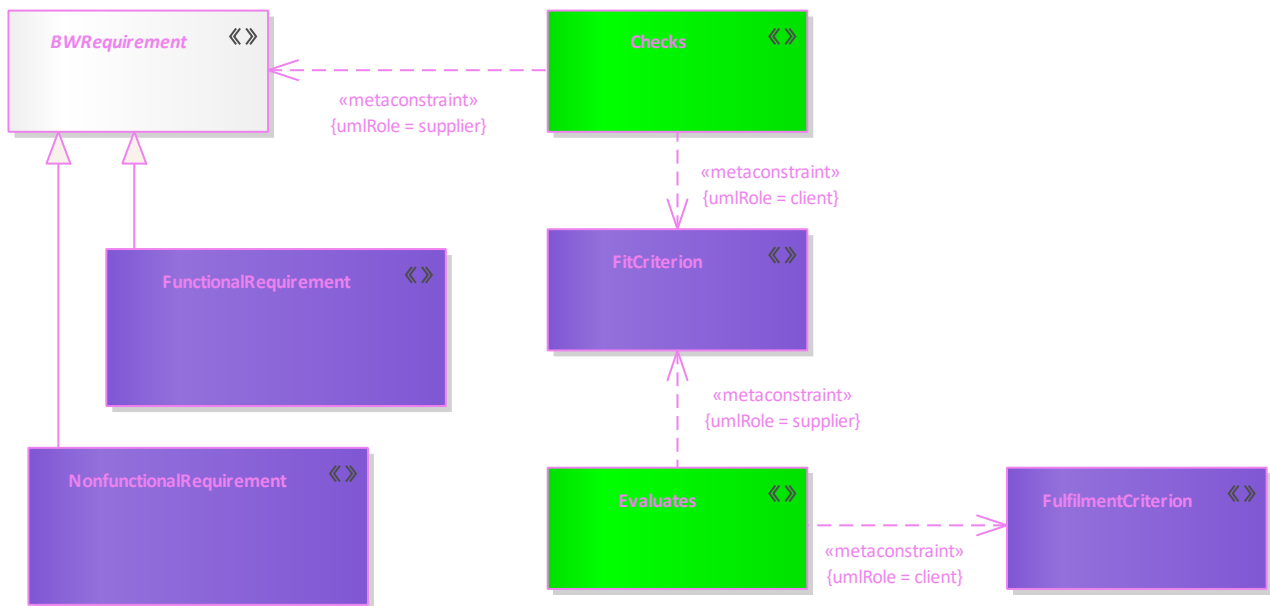


Figure 55: R8 - Requirement Fulfilment

Meta Model Elements

Name	Definition
BWRRequirement	Abstract base class for requirements.
Checks	Relation that shows that an acceptance criterion (FitCriterion) is valid for a functional or non-functional requirement.
Evaluates	This relation states that an evaluation criterion (FulfilmentCriterion) can be assigned to a specific acceptance criterion (FitCriterion).
FitCriterion	This element represents an acceptance criterion for a functional or non-functional requirement.
FulfilmentCriterion	This element represents a criterion for evaluating the degree of implementation of a functional or non-functional requirement.
FunctionalRequirement	The element represents a functional requirement (what should the system / software be able to do?).
NonfunctionalRequirement	The element represents a non-functional requirement (how should the system / software be able to do something?).

2.7.5Rr - Requirement Realization

Purpose

In the Rr, requirements are assigned to the realizing architectural elements.

Meta Model

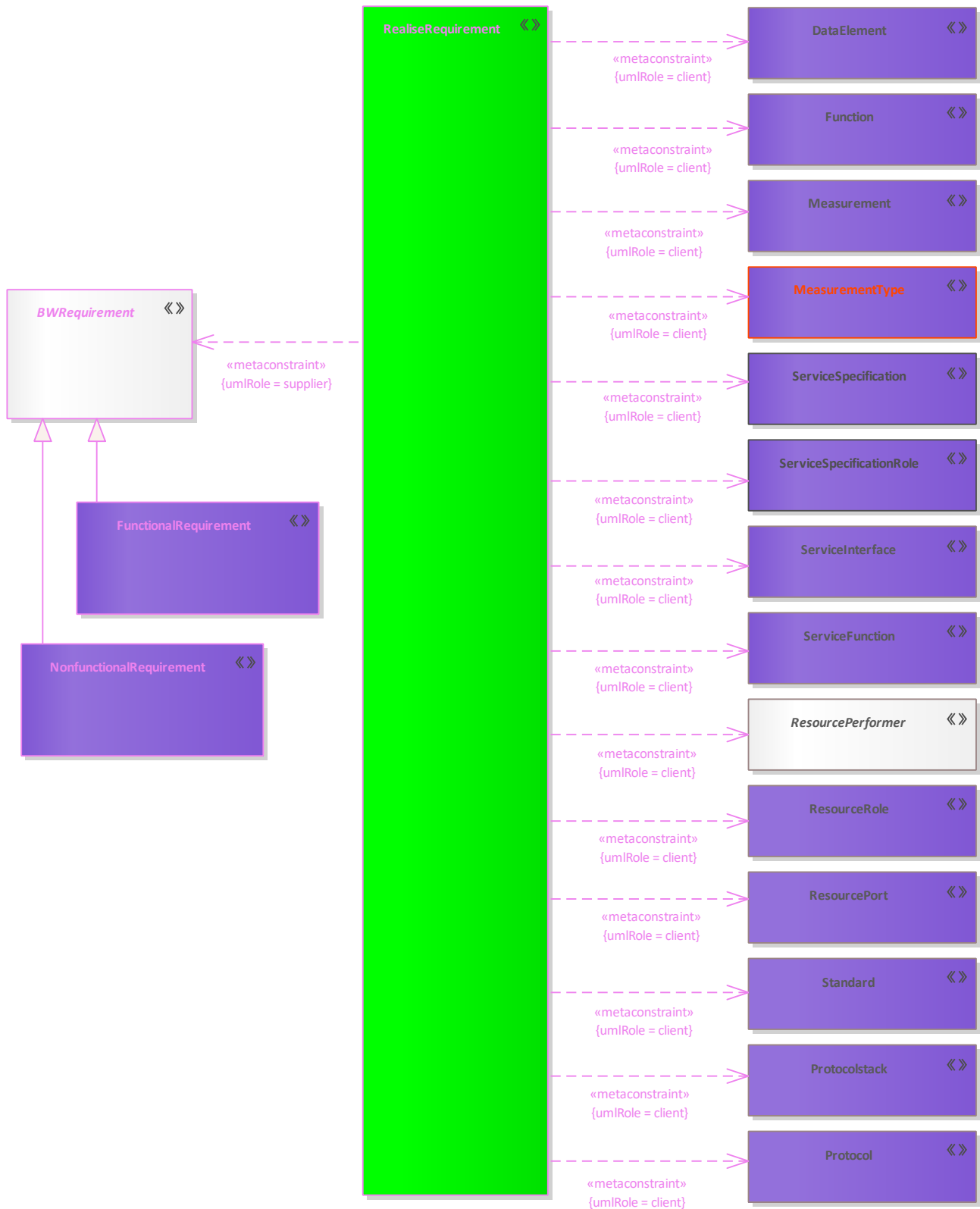


Figure 56: Rr - Requirement Realization

Meta Model Elements

Name	Definition
BWRequirement	Abstract base class for requirements.

Name	Definition
DataElement	A formalized representation of data that is managed by or exchanged between resources.
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
FunctionalRequirement	The element represents a functional requirement (what should the system / software be able to do?).
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
NonfunctionalRequirement	The element represents a non-functional requirement (how should the system / software be able to do something?).
Protocol	A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.
Protocolstack	A sub type of Protocol that contains the ProtocolLayers, defining a complete stack.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.

3 Definitions

3.1 AchievedEffect

Definition

A tuple that exists between an ActualState (e.g., observed/measured during testing) of an element that attempts to achieve a DesiredEffect and an Achiever.

Meta Model

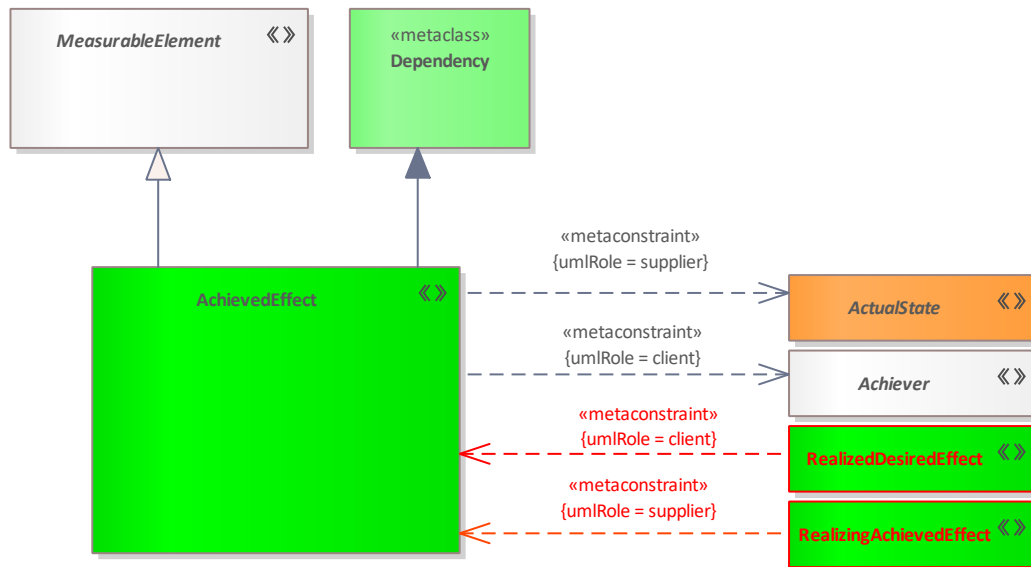


Figure 57: AchievedEffect

Elements in Diagram

Name	Definition
AchievedEffect	A tuple that exists between an ActualState (e.g., observed/measured during testing) of an element that attempts to achieve a DesiredEffect and an Achiever.
Achiever	An ActualResource, ActualProject or ActualEnterprisePhase that can deliver a DesiredEffect.
ActualState	Abstract element that applies temporal extent to a set of elements realized as Instance Specifications.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
RealizedDesiredEffect	Relationship that expresses which connector DesiredEffect the connector AchievedEffect realizes.
RealizingAchievedEffect	Relationship that expresses which connector AchievedEffect realizes the connector DesiredEffect.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [C5 - Effects](#)

3.2 Achiever

Definition

An ActualResource, ActualProject or ActualEnterprisePhase that can deliver a DesiredEffect.

Meta Model

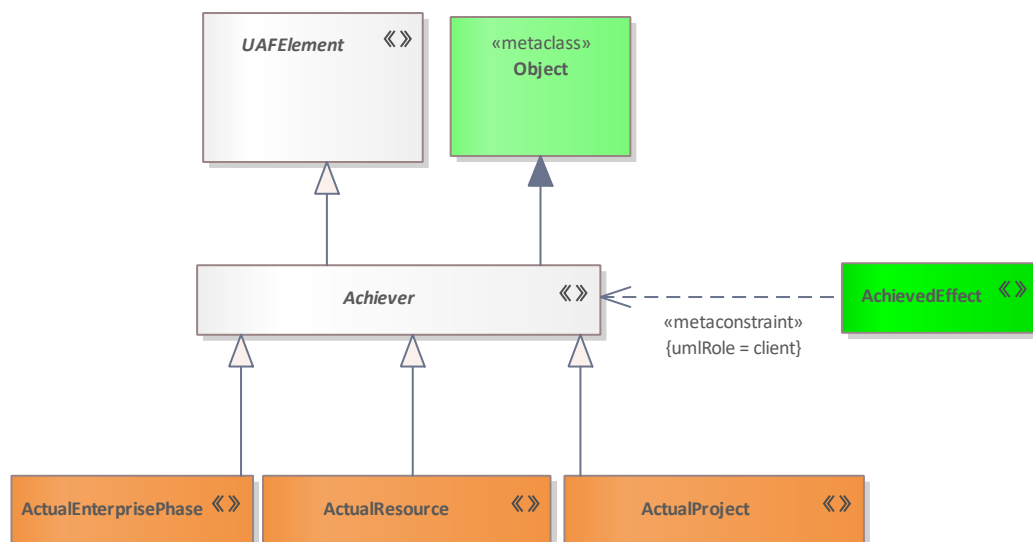


Figure 58: Achiever

Elements in Diagram

Name	Definition
AchievedEffect	A tuple that exists between an ActualState (e.g., observed/measured during testing) of an element that attempts to achieve a DesiredEffect and an Achiever.
Achiever	An ActualResource, ActualProject or ActualEnterprisePhase that can deliver a DesiredEffect.
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.3 ActivityPerformableUnderCondition

Definition

The ActualCondition under which an Activity is performed.

Meta Model

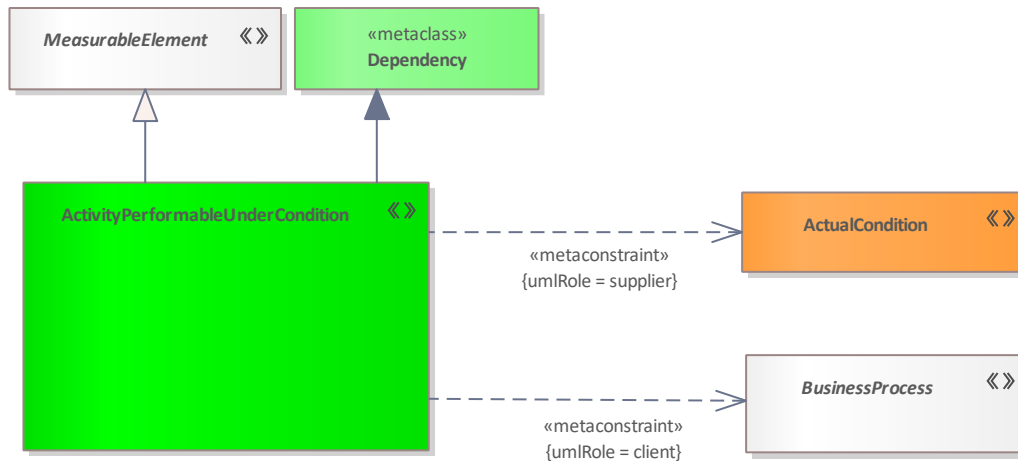


Figure 59: ActivityPerformableUnderCondition

Elements in Diagram

Name	Definition
ActivityPerformableUnderCondition	The ActualCondition under which an Activity is performed.
ActualCondition	An individual describing an actual situation with respect to circumstances under which an OperationalActivity, Function or ServiceFunction can be performed.
BusinessProcess	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L4 - Logical Activities](#)

3.4 ActivitySupportsService

Definition

Relation states that a process is necessary for the implementation of a service.

Meta Model

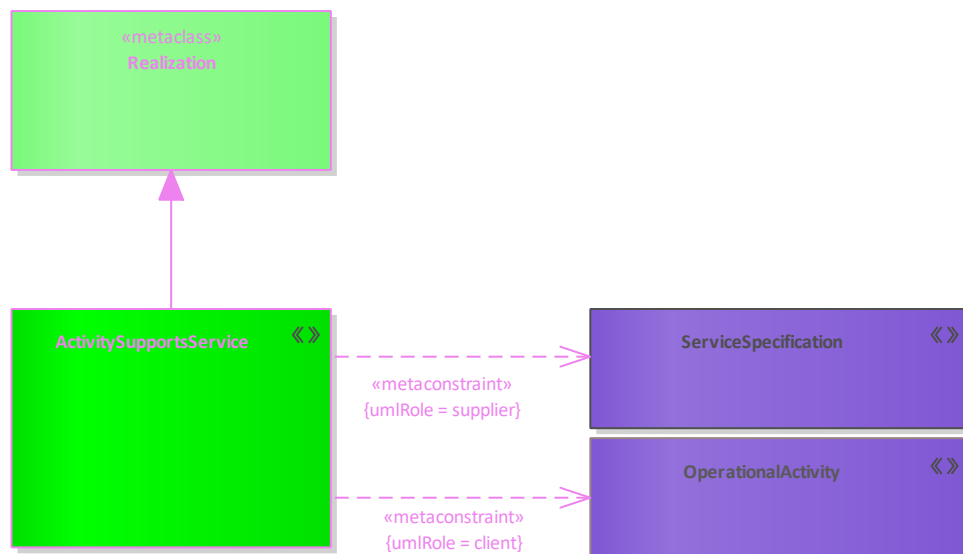


Figure 60: ActivitySupportsService

Elements in Diagram

Name	Definition
ActivitySupportsService	Relation states that a process is necessary for the implementation of a service.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Tagged Values

Relevant Viewpoints

- [L4 - Logical Activities](#)

3.5 ActsUpon

Definition

Asserts that something (subject) is acted upon by an OperationalActivity (activity).

Meta Model

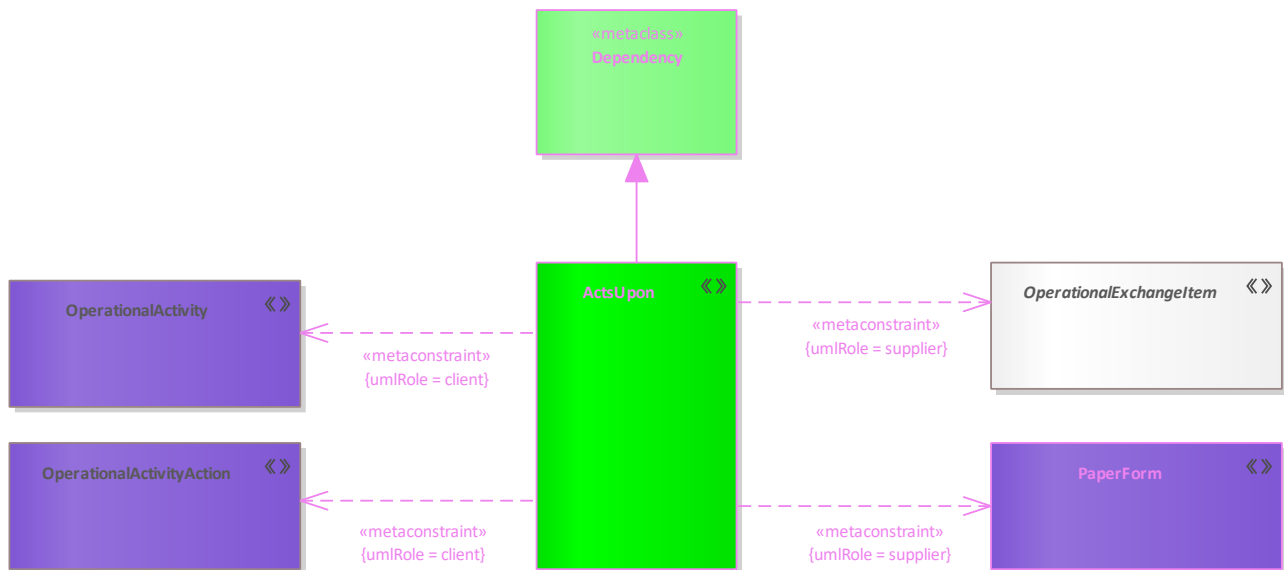


Figure 61: ActsUpon

Elements in Diagram

Name	Definition
ActsUpon	Asserts that something (subject) is acted upon by an OperationalActivity (activity).
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
PaperForm	Form is a digitized or digitizable document, for example a scanned document.

Tagged Values

Relevant Viewpoints

- [L4 - Logical Activities](#)

3.6 ActualCondition

Definition

An individual describing an actual situation with respect to circumstances under which an OperationalActivity, Function or ServiceFunction can be performed.

Meta Model

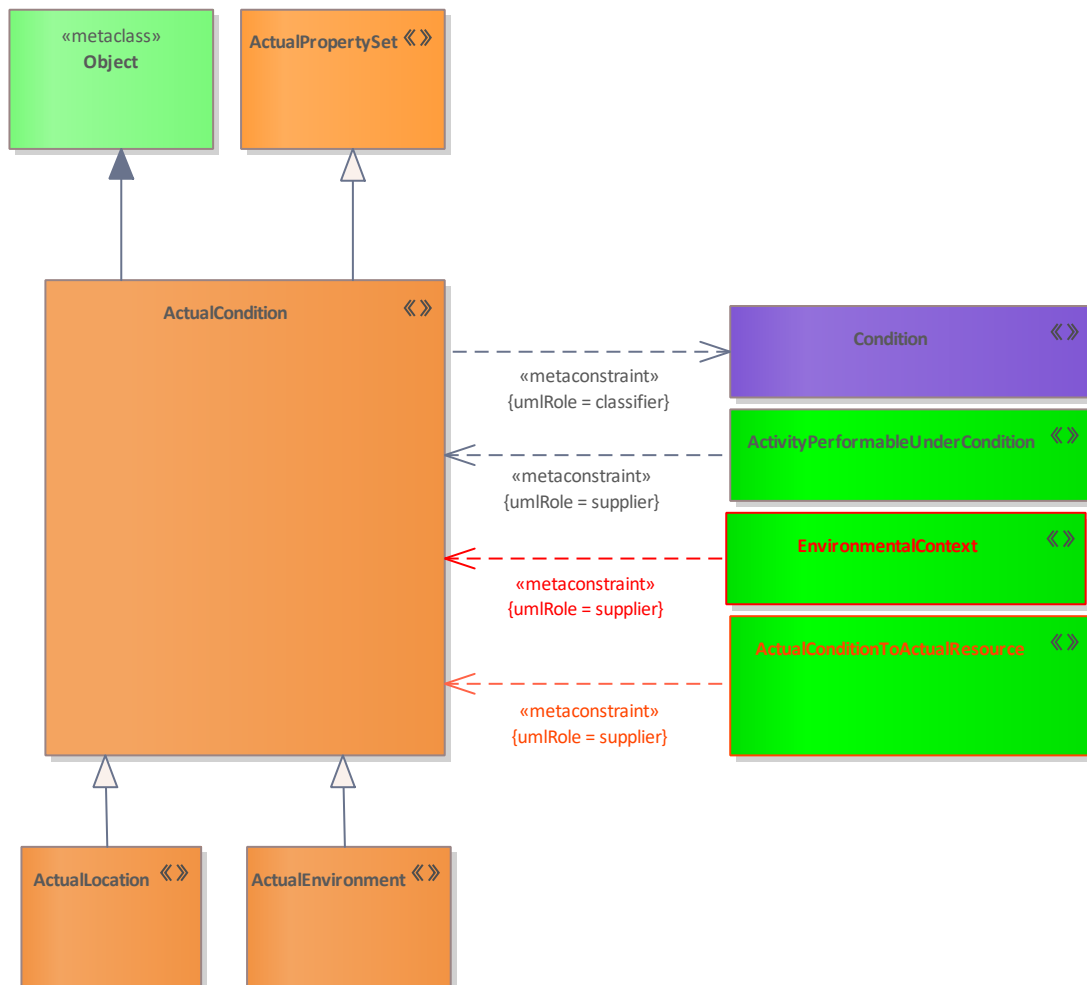


Figure 62: ActualCondition

Elements in Diagram

Name	Definition
ActivityPerformableUnderCondition	The ActualCondition under which an Activity is performed.
ActualCondition	An individual describing an actual situation with respect to circumstances under which an OperationalActivity, Function or ServiceFunction can be performed.
ActualConditionToActualResource	A relationship that expresses that a actual resource is an actual situation.
ActualEnvironment	The ActualState that describes the circumstances of an Environment.
ActualLocation	The ActualState that describes a physical location, for example using text to provide an address, Geo-coordinates, etc.
ActualPropertySet	A set or collection of Actual properties.
Condition	A type that defines the Location, Environment and/or GeoPoliticalExtent.
EnvironmentalContext	Relationship that indicates under which condition an measurement counts.

Tagged Values

Tag Name	Valid Values
endDate	endDate
startDate	startDate
URI	String

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S8 - Service Policy](#)

3.7 ActualConditionToActualResource

Definition

A relationship that expresses that a actual resource is an actual situation.

Meta Model

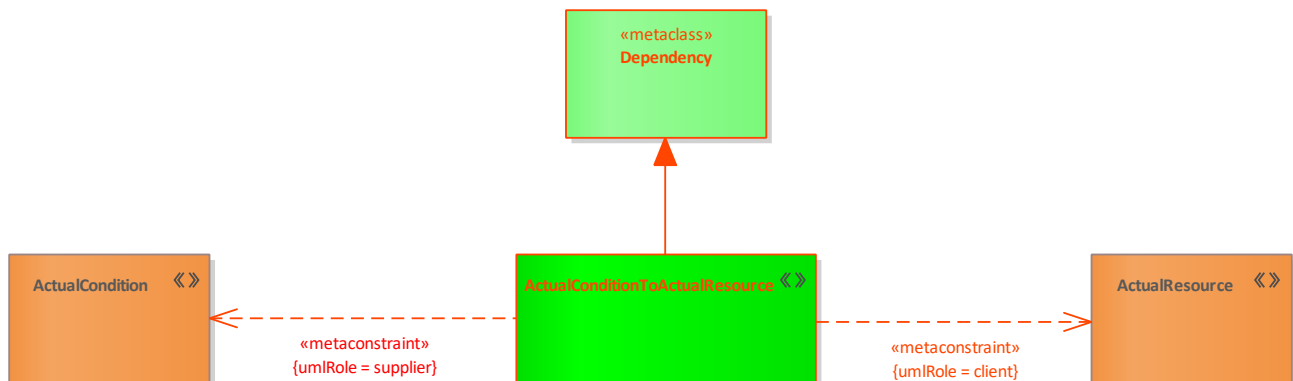


Figure 63: ActualConditionToActualResource

Elements in Diagram

Name	Definition
ActualCondition	An individual describing an actual situation with respect to circumstances under which an OperationalActivity, Function or ServiceFunction can be performed.
ActualConditionToActualResource	A relationship that expresses that a actual resource is an actual situation.
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.

Tagged Values

Relevant Viewpoints

3.8 ActualEnduringTask

Definition

An actual undertaking recognized by an enterprise as being essential to achieving its goals - i.e. a strategic specification of what the enterprise does.

Meta Model

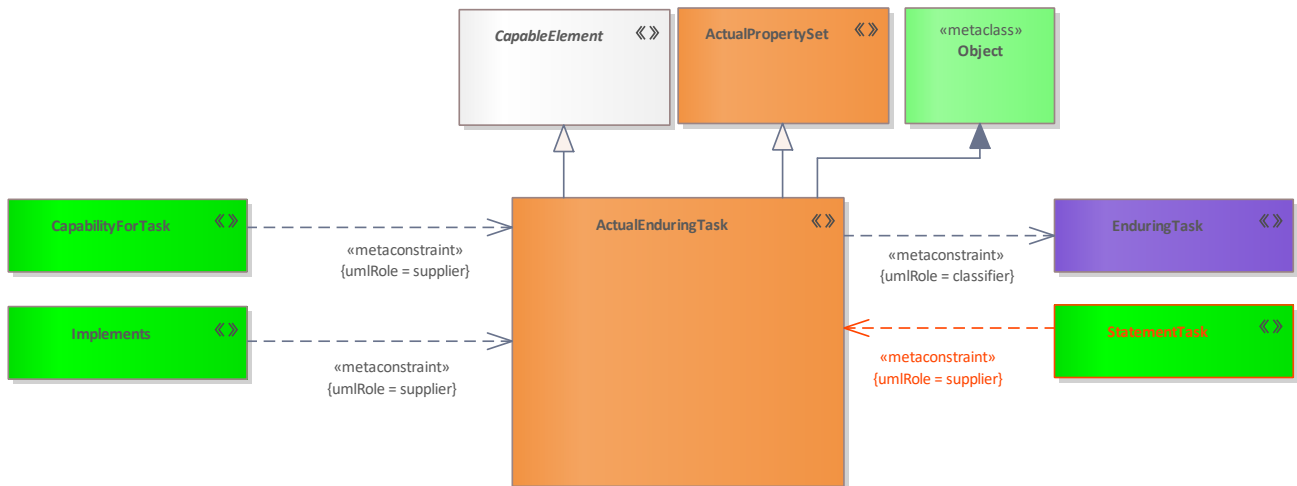


Figure 64: ActualEnduringTask

Elements in Diagram

Name	Definition
ActualEnduringTask	An actual undertaking recognized by an enterprise as being essential to achieving its goals - i.e. a strategic specification of what the enterprise does.
ActualPropertySet	A set or collection of Actual properties.
CapabilityForTask	A tuple that asserts that a Capability is required in order for an Enterprise to conduct a phase of an EnduringTask.
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
EnduringTask	A type of template behavior recognized by an enterprise as being essential to achieving its goals - i.e. a template for a strategic specification of what the enterprise does.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
StatementTask	A relationship that expresses that an actual enterprise phase fulfills a actual enduring task.

Tagged Values

Tag Name	Valid Values
URI	String
endDate	endDate
startDate	startDate

Relevant Viewpoints

- [C2 - Enterprise Vision](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)

3.9 ActualEnterprisePhase

Definition

The ActualState that describes the phase of an Enterprise endeavor.

Meta Model

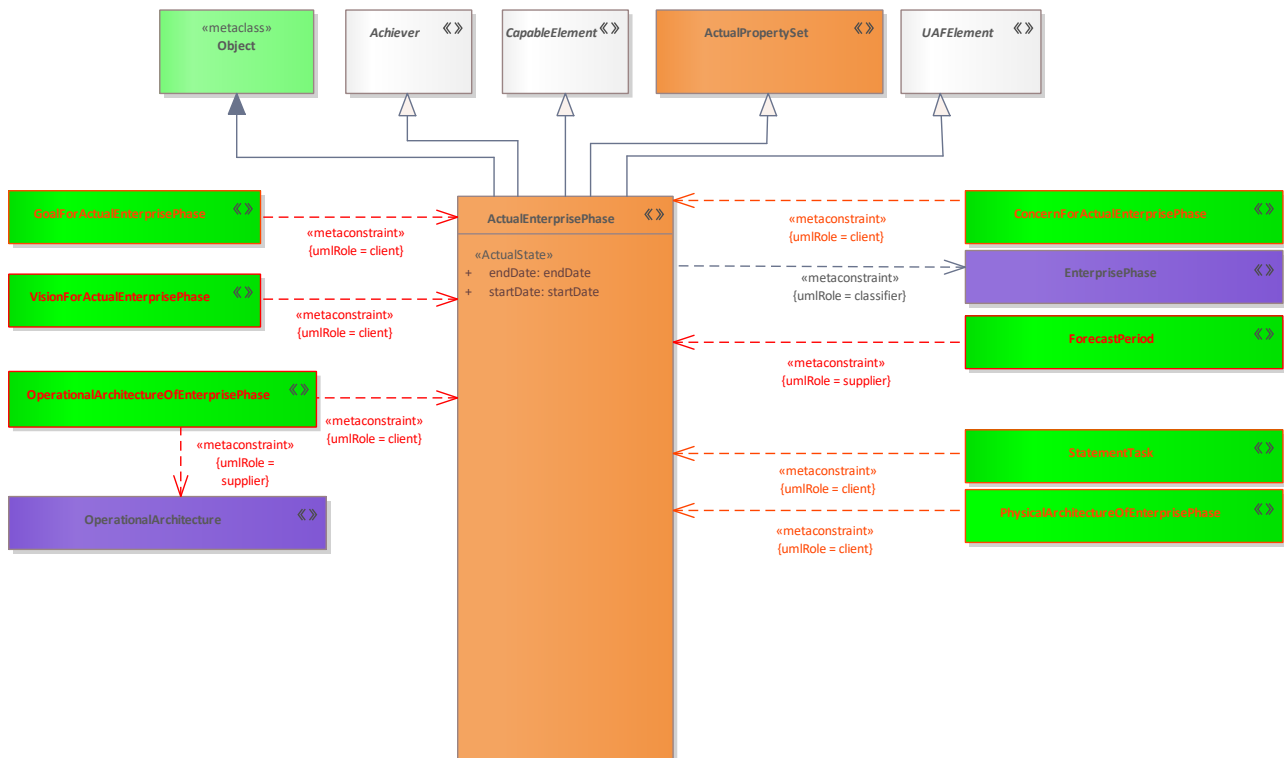


Figure 65: ActualEnterprisePhase

Elements in Diagram

Name	Definition
Achiever	An ActualResource, ActualProject or ActualEnterprisePhase that can deliver a DesiredEffect.
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
ActualPropertySet	A set or collection of Actual properties.
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
ConcernForActualEnterprisePhase	A relationship that expresses which concerns are covered by an actual enterprise phase.
EnterprisePhase	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.
ForecastPeriod	Planning phase for which the forecast is valid.
GoalForActualEnterprisePhase	A relationship that expresses which actual enterprisephase implements an enterprisegoal.
OperationalArchitecture	A type used to denote a model of the Architecture, described from the Operational perspective.
OperationalArchitectureOfEnterprisePhase	Relationship that says that in a actual enterprisephase an operational architecture is valid.
PhysicalArchitectureOfEnterprisePhase	A relationship that expresses that an actual enterprise phase has resource architectures.
StatementTask	A relationship that expresses that an actual enterprise phase fulfills a actual enduring task.
UAElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.
VisionForActualEnterprisePhase	A relationship that expresses which actual enterprisephase implements an enterprisevision.

Tagged Values

Tag Name	Valid Values
endDate	endDate
startDate	startDate
URI	String

Relevant Viewpoints

- [A2 - Architecture Products](#)
- [C2 - Enterprise Vision](#)
- [C5 - Effects](#)
- [P1- Resource Types](#)

3.10 ActualEnvironment

Definition

The ActualState that describes the circumstances of an Environment.

Meta Model

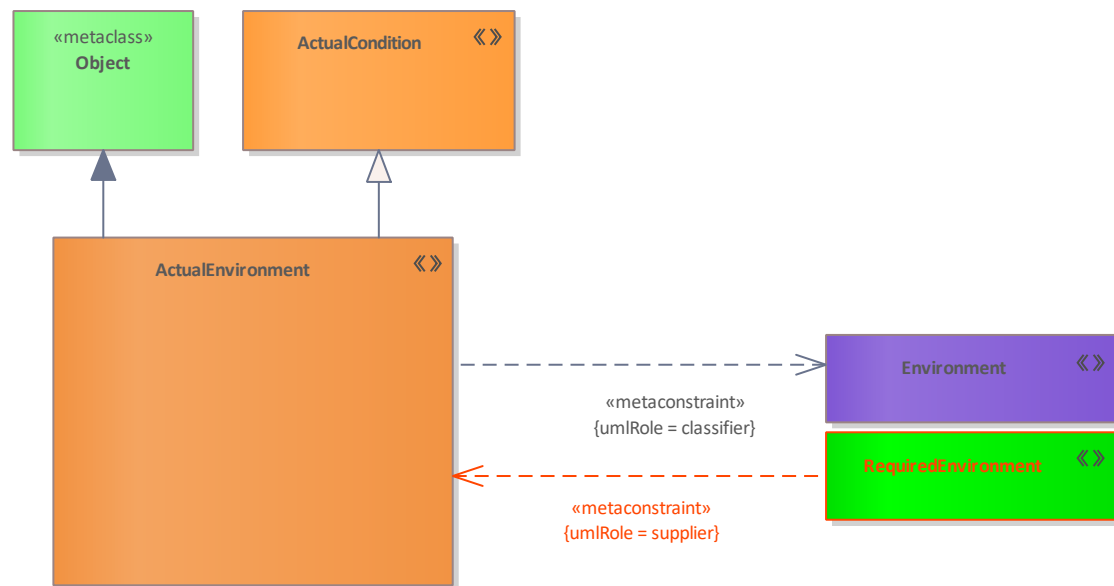


Figure 66: ActualEnvironment

Elements in Diagram

Name	Definition
ActualCondition	An individual describing an actual situation with respect to circumstances under which an OperationalActivity, Function or ServiceFunction can be performed.
ActualEnvironment	The ActualState that describes the circumstances of an Environment.
Environment	A definition of the environmental factors in which something exists or functions. The definition of an Environment element can be further defined using EnvironmentKind.
RequiredEnvironment	A relationship that expresses that a location holder operates under specific environmental conditions.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
endDate	endDate
startDate	startDate
URI	String

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C7 - Performance Parameters](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [S1 - Service Taxonomy](#)

- [S2 - Service Structure](#)
- [S8 - Service Policy](#)

3.11 ActualLocation

Definition

The ActualState that describes a physical location, for example using text to provide an address, Geo-coordinates, etc.

Meta Model

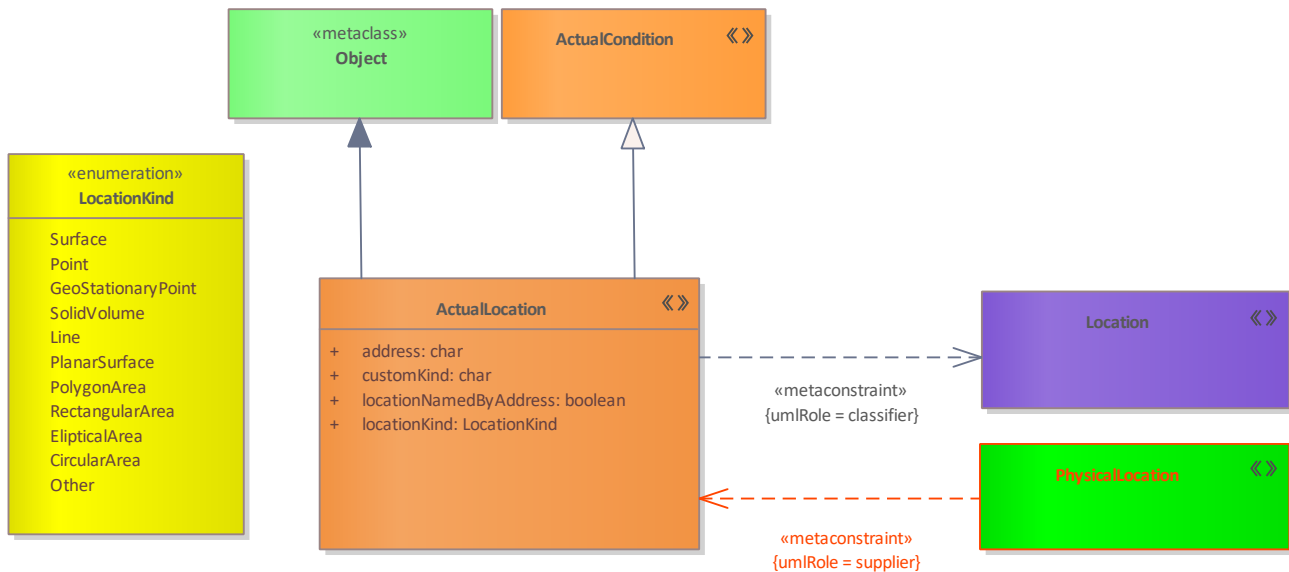


Figure 67: ActualLocation

Elements in Diagram

Name	Definition
ActualCondition	An individual describing an actual situation with respect to circumstances under which an OperationalActivity, Function or ServiceFunction can be performed.
ActualLocation	The ActualState that describes a physical location, for example using text to provide an address, Geo-coordinates, etc.
Location	A specification of the generic area in which a LocationHolder is required to be located.
PhysicalLocation	A relationship that expresses that a location holder operates in an actual location.

Tagged Values

Tag Name	Valid Values
address	char
customKind	char
locationNamedByAddress	boolean
locationKind	Surface, Point, GeoStationaryPoint, SolidVolume, Line, PlanarSurface, PolygonArea, RectangularArea, EllipticalArea, CircularArea, Other
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
endDate	endDate
startDate	startDate
URI	String

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C7 - Performance Parameters](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)

- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S8 - Service Policy](#)

3.12 ActualMeasurement

Definition

An actual value that is applied to a Measurement.

Meta Model

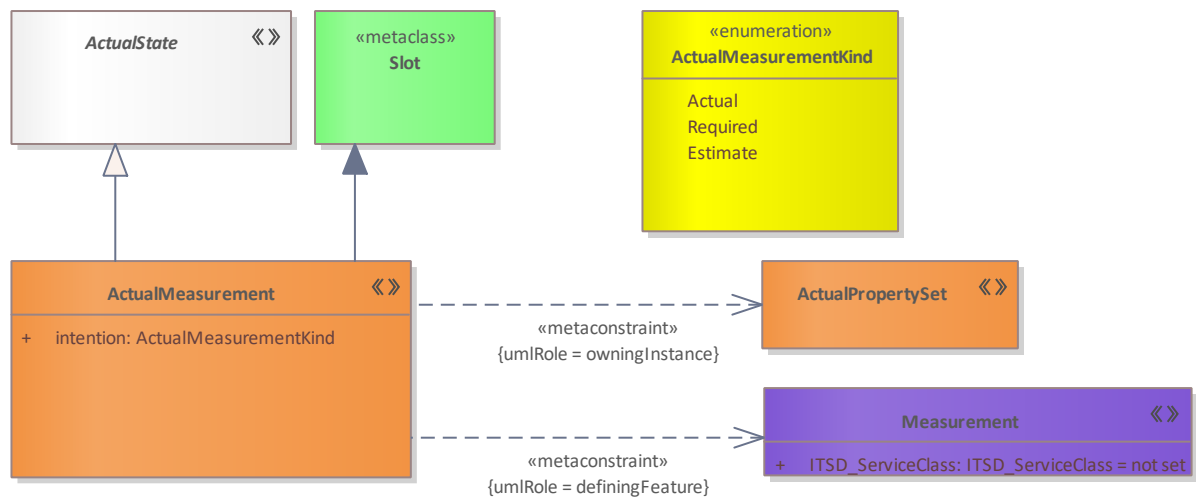


Figure 68: ActualMeasurement

Elements in Diagram

Name	Definition
ActualMeasurement	An actual value that is applied to a Measurement.
ActualPropertySet	A set or collection of Actual properties.
ActualState	Abstract element that applies temporal extent to a set of elements realized as Instance Specifications.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.

Tagged Values

Tag Name	Valid Values
intention	Actual, Required, Estimate
endDate	endDate
startDate	startDate
URI	String

Relevant Viewpoints

3.13 ActualMeasurementSet

Definition

A set of ActualMeasurements.

Meta Model

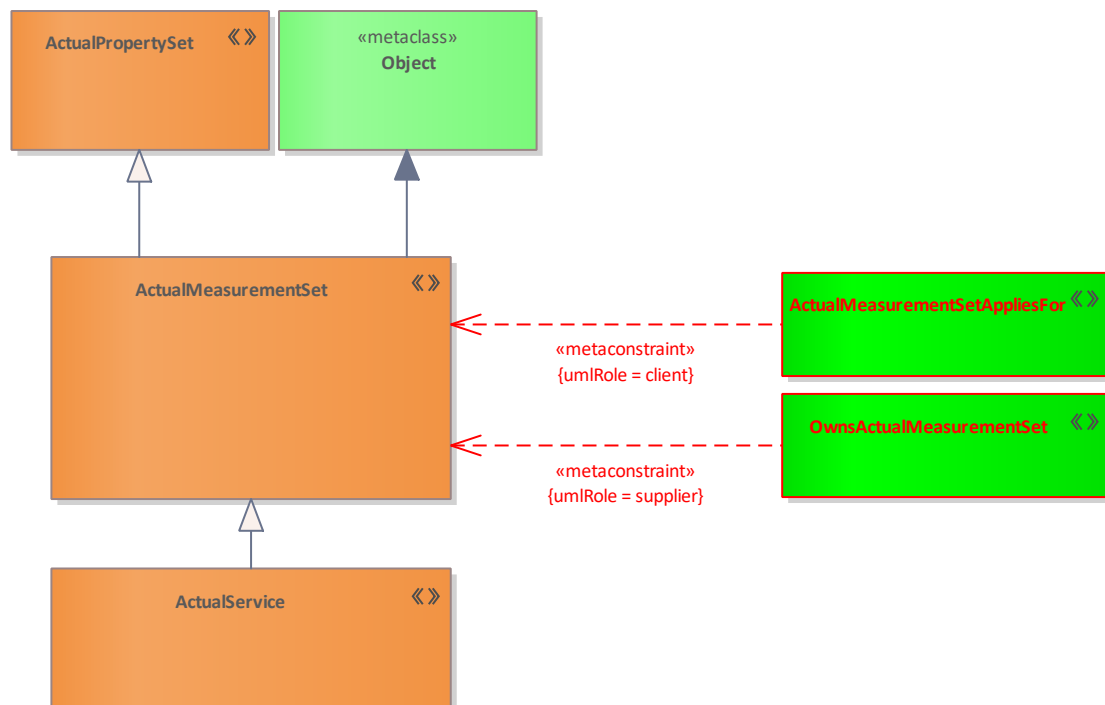


Figure 69: ActualMeasurementSet

Elements in Diagram

Name	Definition
ActualMeasurementSet	A set of ActualMeasurements.
ActualMeasurementSetAppliesFor	A relationship that expresses which actual measurement applies for an element.
ActualPropertySet	A set or collection of Actual properties.
ActualService	An individual ServiceSpecification.
OwnsActualMeasurementSet	A relationship that expresses which actual measurement set an element owns.

Tagged Values

Tag Name	Valid Values
endDate	endDate
startDate	startDate
URI	String

Relevant Viewpoints

- [C5 - Effects](#)

3.14 ActualMeasurementSetAppliesFor

Definition

A relationship that expresses which actual measurement applies for an element.

Meta Model

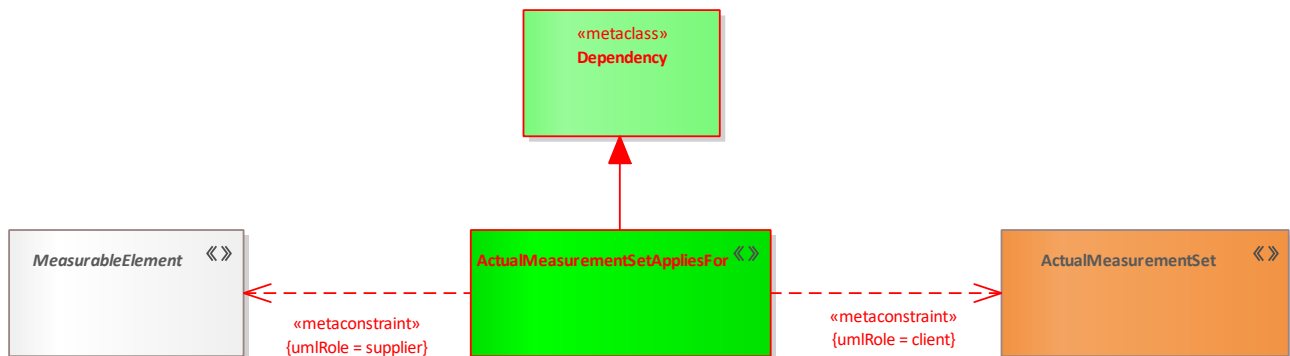


Figure 70: ActualMeasurementSetAppliesFor

Elements in Diagram

Name	Definition
ActualMeasurementSet	A set of ActualMeasurements.
ActualMeasurementSetAppliesFor	A relationship that expresses which actual measurement applies for an element.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Relevant Viewpoints

3.15 Actual Organization

Definition

An actual formal or informal organizational unit, e.g. "Driving and Vehicle Licensing Agency", "UAF team Alpha".

Meta Model

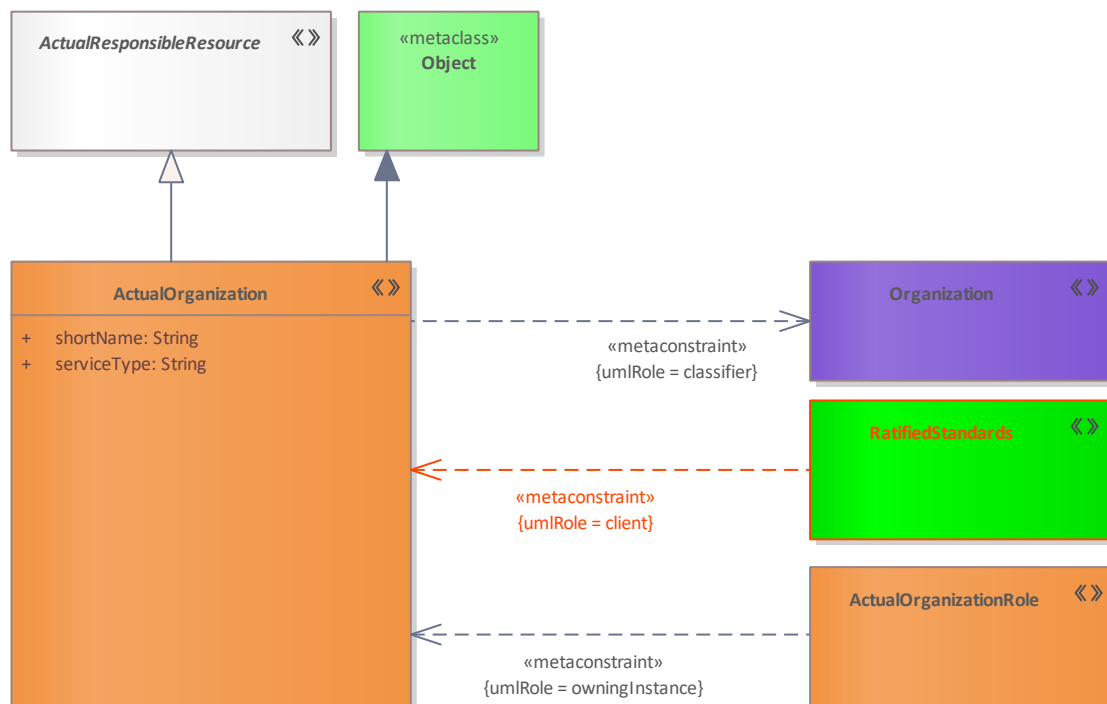


Figure 71: ActualOrganization

Elements in Diagram

Name	Definition
ActualOrganization	An actual formal or informal organizational unit, e.g. "Driving and Vehicle Licensing Agency", "UAF team Alpha".
ActualOrganizationRole	An ActualOrganizationalResource that is applied to a ResourceRole.
ActualResponsibleResource	An abstract type grouping responsible OrganizationalResources.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
RatifiedStandards	A relationship that expresses that an actual organization releases a standard.

Tagged Values

Tag Name	Valid Values
shortName	String
serviceType	String
URI	String
endDate	endDate
startDate	startDate

Relevant Viewpoints

- [A2 - Architecture Products](#)
- [A8 - Standards](#)
- [C5 - Effects](#)

3.16 ActualOrganizationalResource

Definition

Abstract element for an ActualOrganization, ActualPerson or ActualPost.

Meta Model

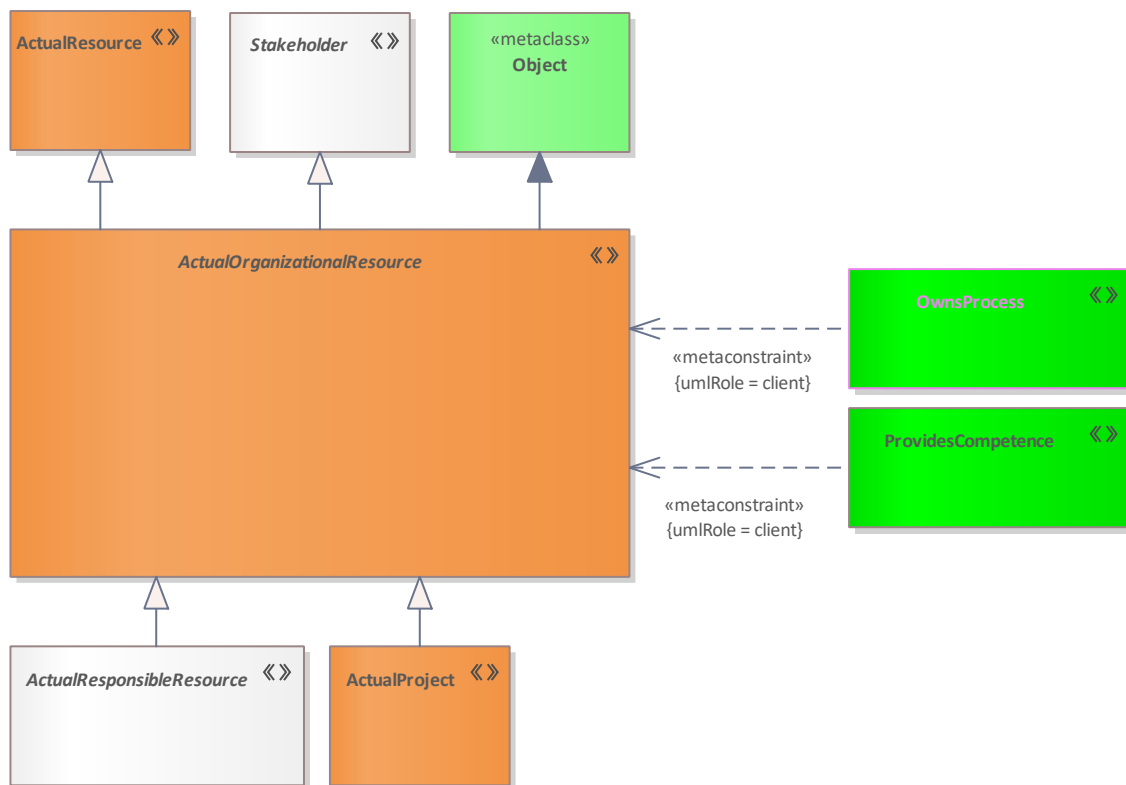


Figure 72: ActualOrganizationalResource

Elements in Diagram

Name	Definition
ActualOrganizationalResource	Abstract element for an ActualOrganization, ActualPerson or ActualPost.
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
ActualResponsibleResource	An abstract type grouping responsible OrganizationalResources.
OwnsProcess	A dependency relationship denoting that an ActualOrganizationResource owns an OperationalActivity.
ProvidesCompetence	A tuple that asserts that an ActualOrganizationalResource provides a specific set of Competencies.
Stakeholder	individual, team, organization, or classes thereof, having an interest in an EnterprisePhase [ISO/IEC/IEEE 42010:2011].

Tagged Values

Tag Name	Valid Values
URI	String
endDate	endDate
startDate	startDate

Relevant Viewpoints

3.17 ActualOrganizationRole

Definition

An ActualOrganizationalResource that is applied to a ResourceRole.

Meta Model

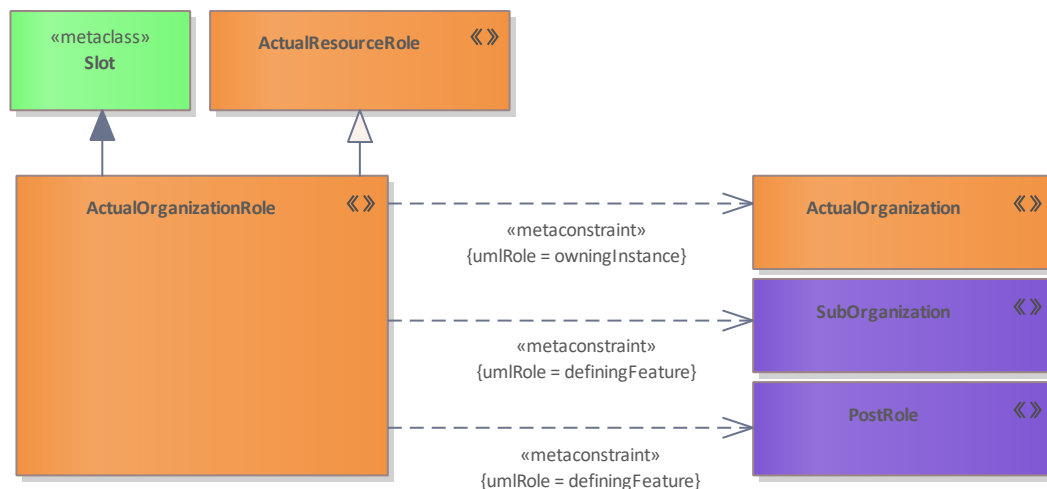


Figure 73: ActualOrganizationRole

Elements in Diagram

Name	Definition
ActualOrganization	An actual formal or informal organizational unit, e.g. "Driving and Vehicle Licensing Agency", "UAF team Alpha".
ActualOrganizationRole	An ActualOrganizationalResource that is applied to a ResourceRole.
ActualResourceRole	An instance of a ResourcePerformer.
PostRole	A usage of a post in the context of another OrganizationalResource. Creates a whole-part relationship.
SubOrganization	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.18 ActualPerson

Definition

An individual human being.

Meta Model

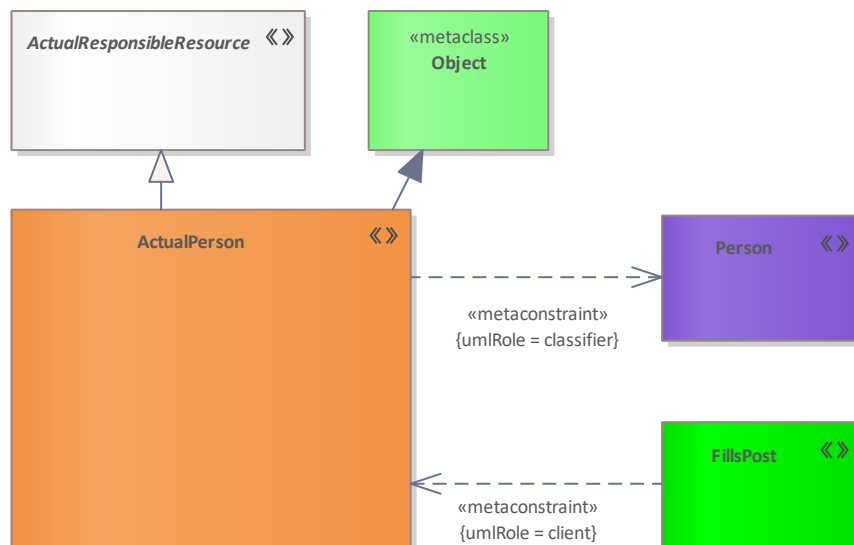


Figure 74: ActualPerson

Elements in Diagram

Name	Definition
ActualPerson	An individual human being.
ActualResponsibleResource	An abstract type grouping responsible OrganizationalResources.
FillsPost	A tuple that asserts that an ActualPerson fills an ActualPost.
Person	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).

Tagged Values

Tag Name	Valid Values
URI	String
endDate	endDate
startDate	startDate

Relevant Viewpoints

- [A2 - Architecture Products](#)
- [C5 - Effects](#)
- [P8 - Resource Constraints](#)

3.19 ActualPost

Definition

An actual, specific post, an instance of a Post "type" - e.g., "President of the United States of America." where the Post would be president.

Meta Model

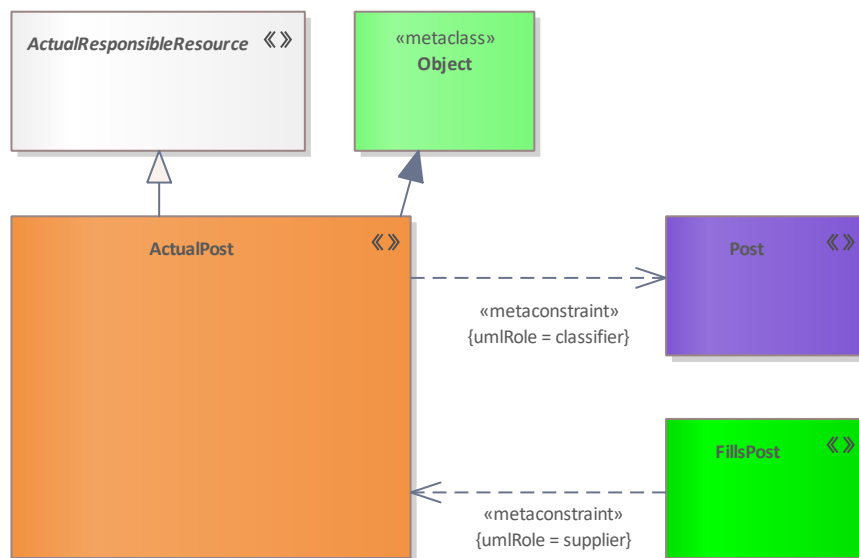


Figure 75: ActualPost

Elements in Diagram

Name	Definition
ActualPost	An actual, specific post, an instance of a Post "type" - e.g., "President of the United States of America." where the Post would be president.
ActualResponsibleResource	An abstract type grouping responsible OrganizationalResources.
FillsPost	A tuple that asserts that an ActualPerson fills an ActualPost.
Post	A type of job title or position that a person can fill (e.g. Lawyer, Solution Architect, Machine Operator or Chief Executive Officer).

Tagged Values

Tag Name	Valid Values
URI	String
endDate	endDate
startDate	startDate

Relevant Viewpoints

- [A2 - Architecture Products](#)
- [C5 - Effects](#)
- [P8 - Resource Constraints](#)

3.20 ActualProject

Definition

A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.

Meta Model

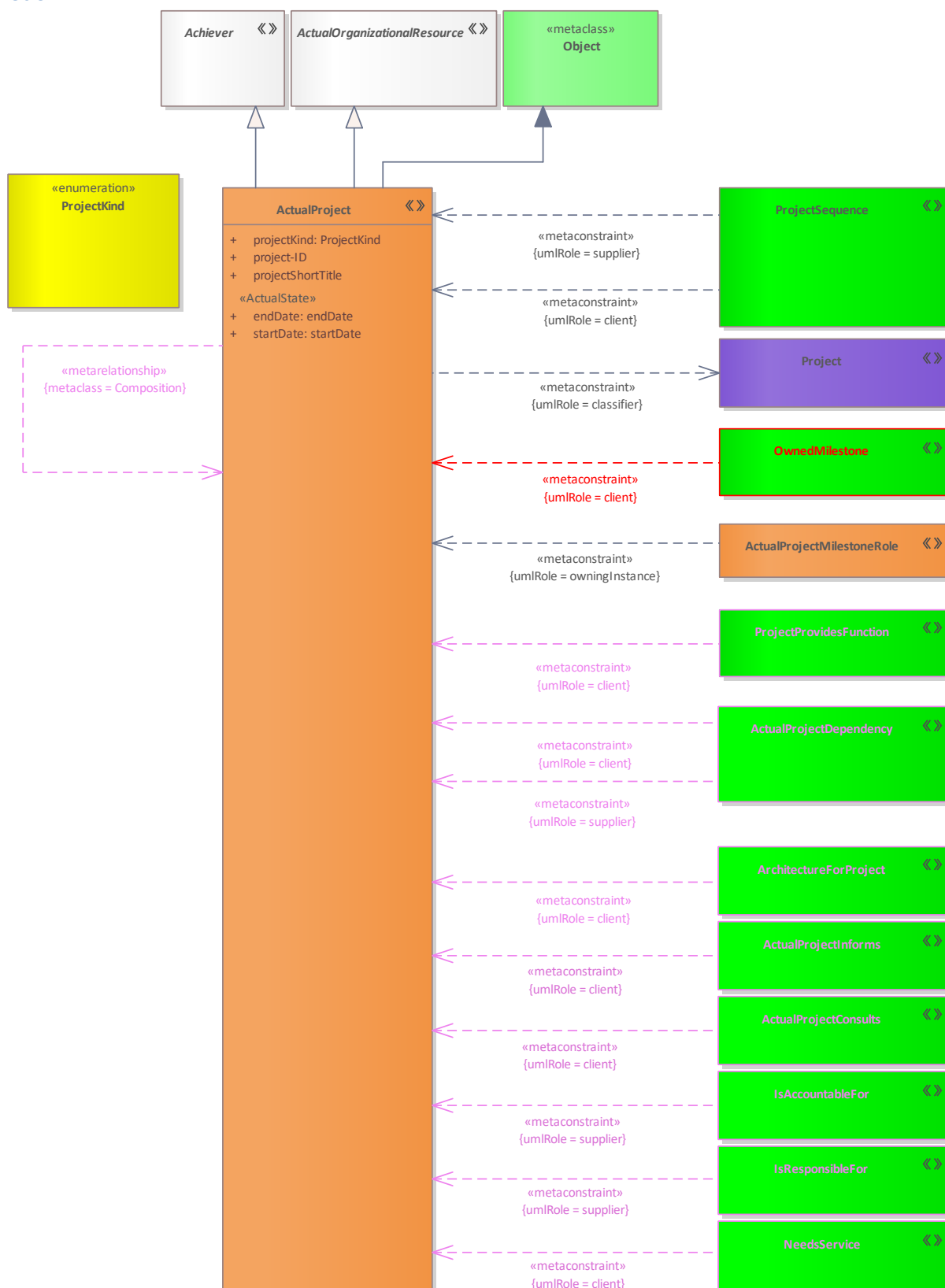


Figure 76: ActualProject

Elements in Diagram

Name	Definition
Achiever	An ActualResource, ActualProject or ActualEnterprisePhase that can deliver a DesiredEffect.
ActualOrganizationalResource	Abstract element for an ActualOrganization, ActualPerson or ActualPost.
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
ActualProjectConsults	A relation that expresses that a project consults an OrganizationalResource.
ActualProjectDependency	Relationship that is a dependency of a actualproject on a actualproject.
ActualProjectInforms	A relation that expresses that a project informs an OrganizationalResource.
ActualProjectMilestoneRole	An ActualProjectMilestone that is applied to a ProjectMilestoneRole.
ArchitectureForProject	A relationship that expresses that a architectural description belongs to a actual project.
IsAccountableFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project in the context of an approval.
IsResponsibleFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project.
NeedsService	A relation that expresses that a project needs a service
OwnedMilestone	Relationship that expresses that actual project has a actual milestone.
Project	A type that describes types of time-limited endeavours that are required to meet one or more Capability needs.
ProjectProvidesFunction	Relation stats that a project realizes a function.
ProjectSequence	A tuple between two ActualProjects that denotes one ActualProject cannot start before the previous ActualProject is finished.

Tagged Values

Tag Name	Valid Values
endDate	endDate
startDate	startDate
projectKind	Programme, Portfolio, PersonnelDevelopment
project-ID	
projectShortTitle	
URI	String

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [P2 - Resource Structure](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.21 ActualProjectConsults

Definition

A relation that expresses that a project consults an OrganizationalResource.

Meta Model

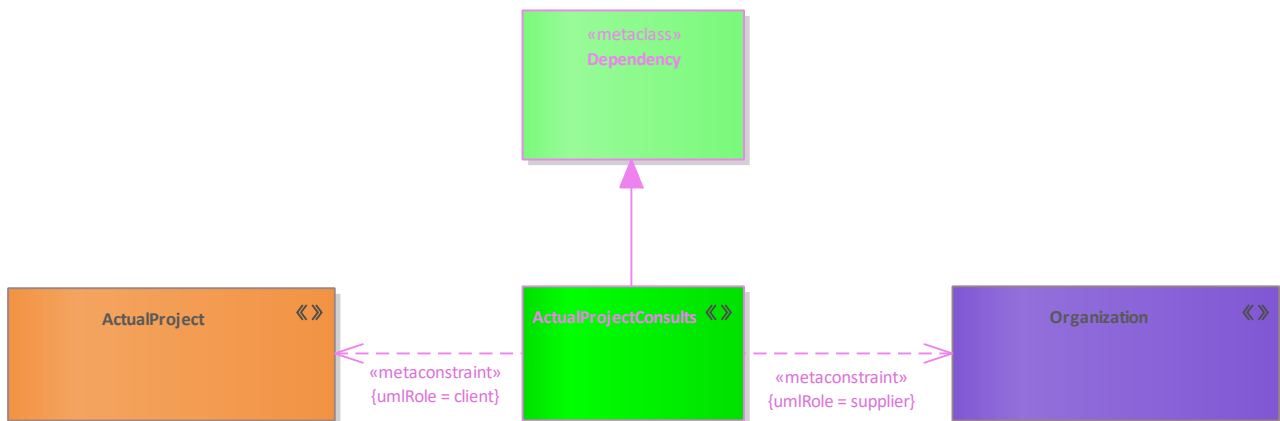


Figure 77: ActualProjectConsults

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
ActualProjectConsults	A relation that expresses that a project consults an OrganizationalResource.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.

Tagged Values

Relevant Viewpoints

- [Lr - Lines of Development](#)
- [P2 - Resource Structure](#)

3.22 ActualProjectDependency

Definition

Relationship that is a dependency of a actualproject on a actualproject.

Meta Model

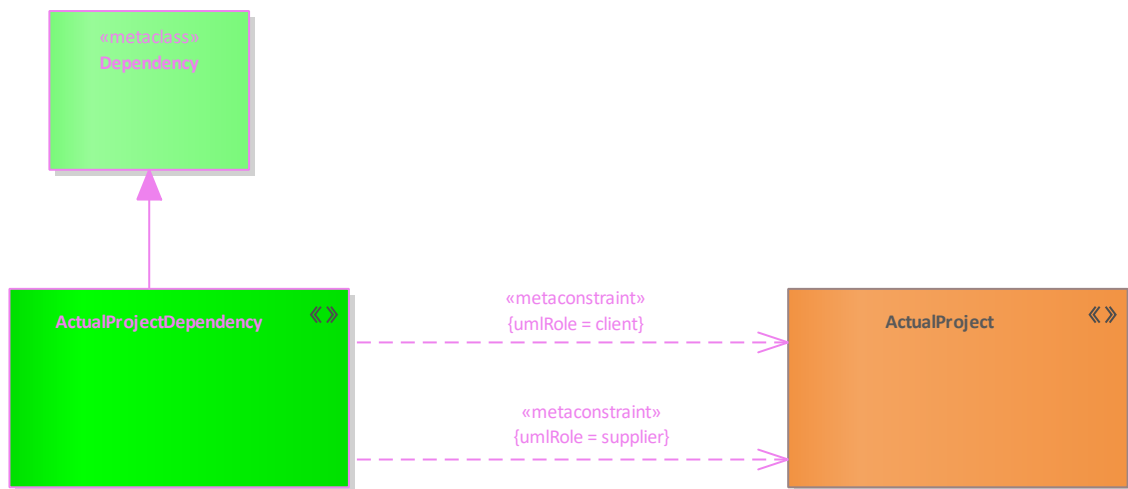


Figure 78: ActualProjectDependency

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
ActualProjectDependency	Relationship that is a dependency of a actualproject on a actualproject.

Tagged Values

Relevant Viewpoints

- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.23 ActualProjectInforms

Definition

A relation that expresses that a project informs an OrganizationalResource.

Meta Model

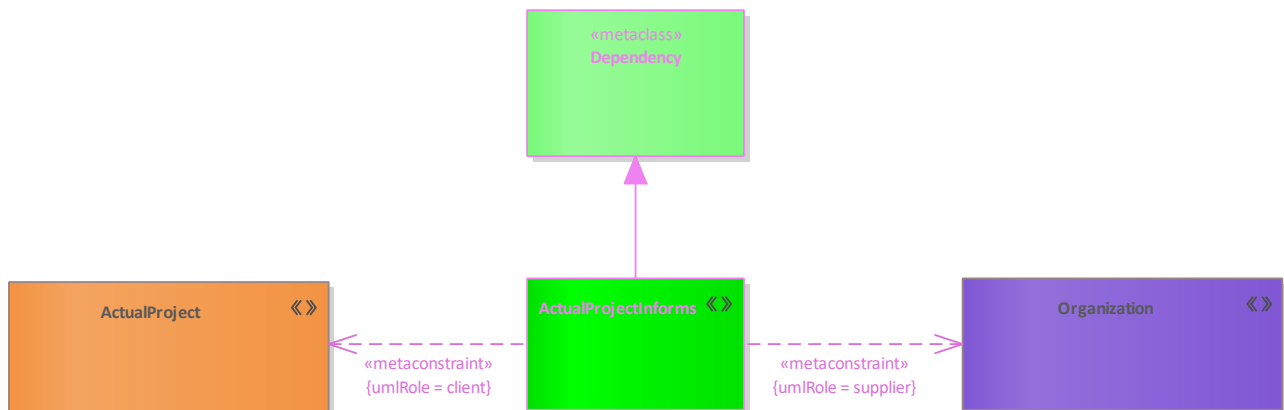


Figure 79: ActualProjectInforms

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
ActualProjectInforms	A relation that expresses that a project informs an OrganizationalResource.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.

Tagged Values

Relevant Viewpoints

- [Lr - Lines of Development](#)
- [P2 - Resource Structure](#)

3.24 ActualProjectMilestone

Definition

An event with a start date in a ActualProject from which progress is measured.

Meta Model

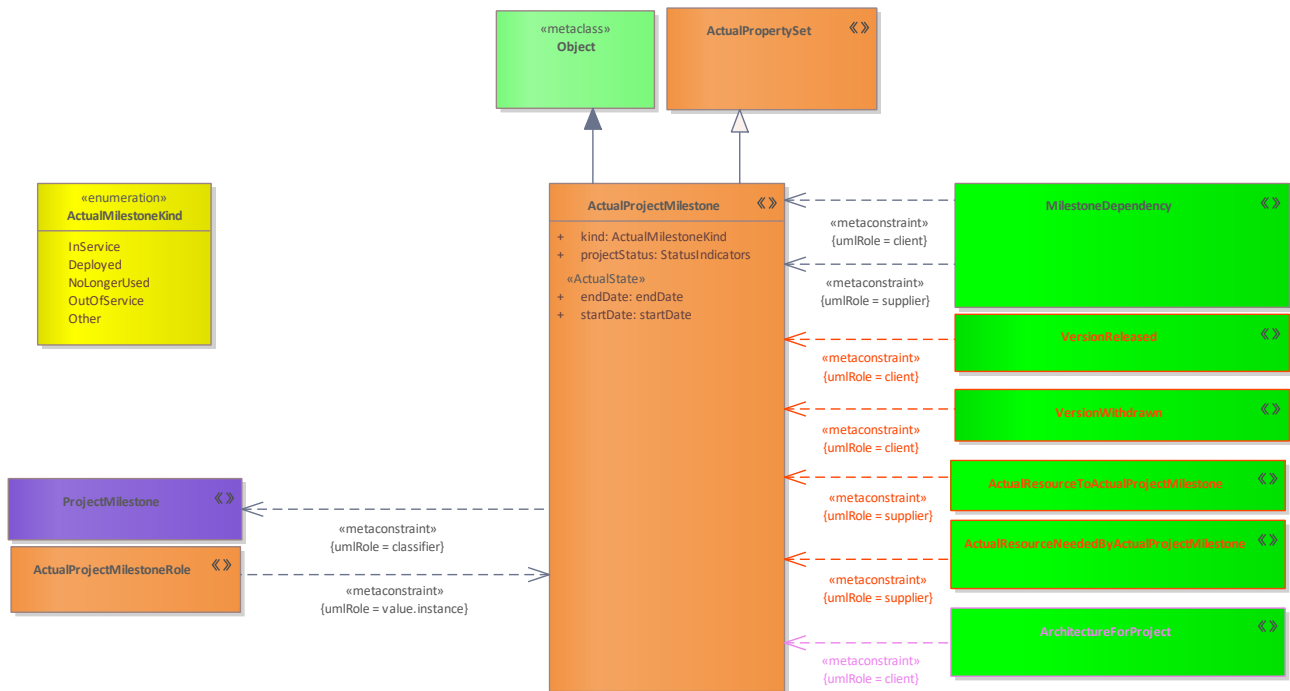


Figure 80: ActualProjectMilestone

Elements in Diagram

Name	Definition
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
ActualProjectMilestoneRole	An ActualProjectMilestone that is applied to a ProjectMilestoneRole.
ActualPropertySet	A set or collection of Actual properties.
ActualResourceNeededByActualProjectMilestone	A relationship that expresses that an actual resource is needed by actual project milestones.
ActualResourceToActualProjectMilestone	A relationship that expresses that an actual resource is mapped to actual project milestones.
ArchitectureForProject	A relationship that expresses that a architectural description belongs to a actual project.
MilestoneDependency	A tuple between two ActualProjectMilestones that denotes one ActualProjectMilestone follows from another.
ProjectMilestone	A type of event in a Project by which progress is measured.
VersionReleased	A relationship that expresses that an actual project milestone releases an versioned element.
VersionWithdrawn	A relationship that expresses that an actual project milestone withdraws an versioned element.

Tagged Values

Tag Name	Valid Values
endDate	endDate
startDate	startDate
kind	InService, Deployed, NoLongerUsed, OutOfService, Other
projectStatus	StatusIndicators

URI	String
-----	--------

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [C5 - Effects](#)
- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.25 ActualProjectMilestoneRole

Definition

An ActualProjectMilestone that is applied to a ProjectMilestoneRole.

Meta Model

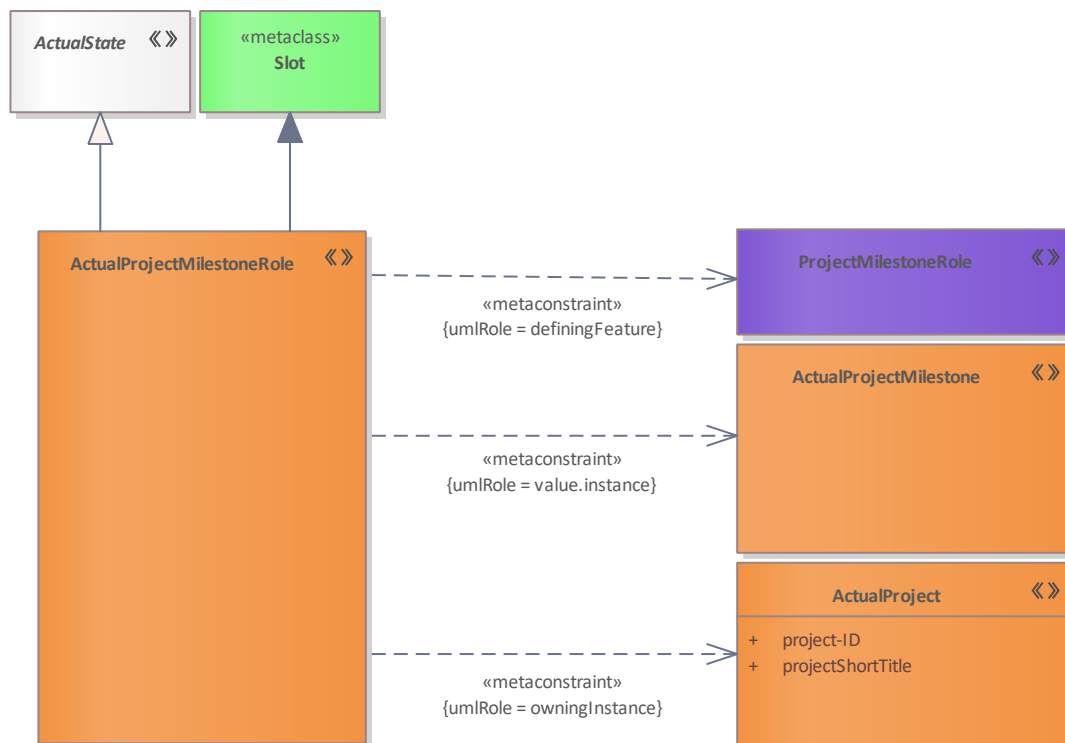


Figure 81: ActualProjectMilestoneRole

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
ActualProjectMilestoneRole	An ActualProjectMilestone that is applied to a ProjectMilestoneRole.
ActualState	Abstract element that applies temporal extent to a set of elements realized as Instance Specifications.
ProjectMilestoneRole	The role played by a ProjectMilestone in the context of a Project.

Tagged Values

Tag Name	Valid Values
endDate	endDate
startDate	startDate
URI	String

Relevant Viewpoints

3.26 ActualPropertySet

Definition

A set or collection of Actual properties.

Meta Model

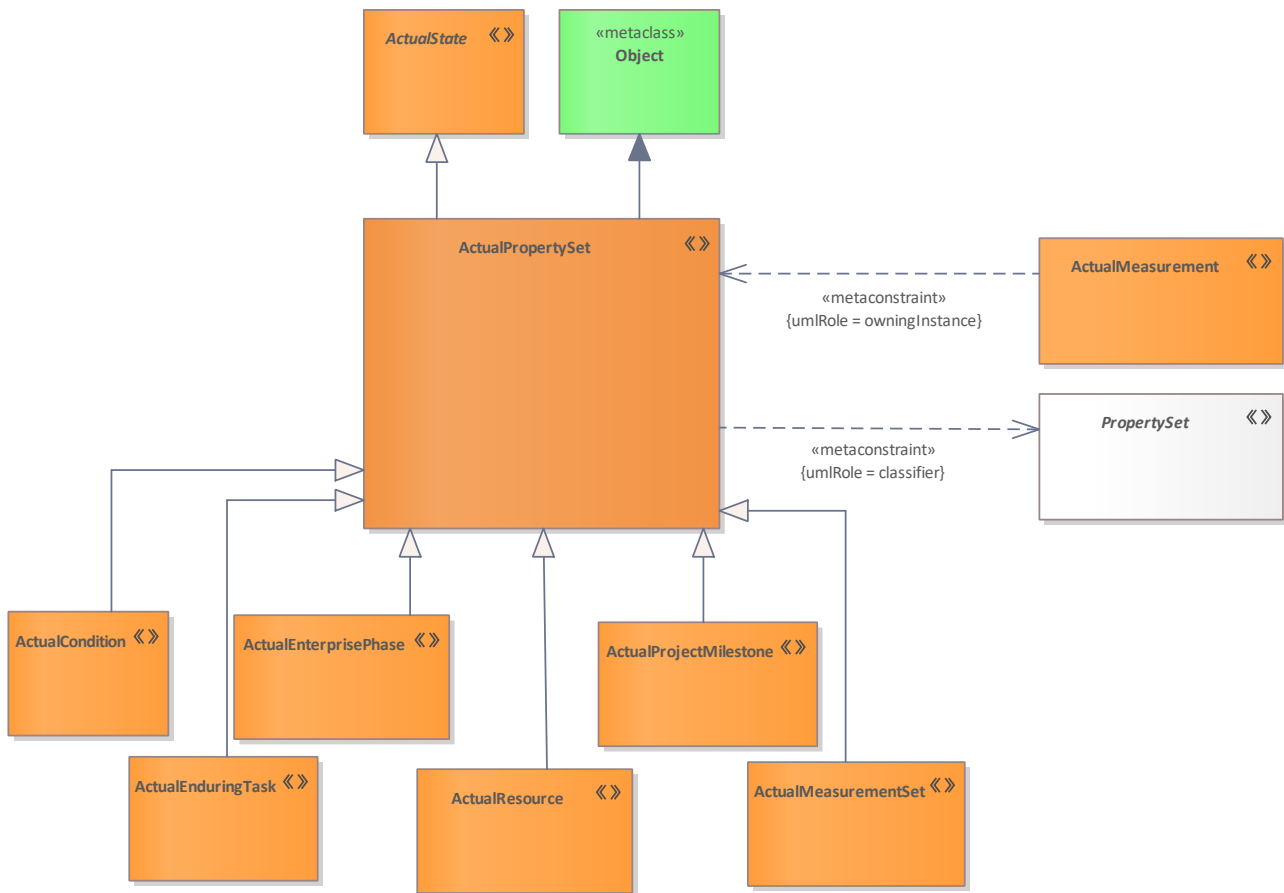


Figure 82: ActualPropertySet

Elements in Diagram

Name	Definition
ActualCondition	An individual describing an actual situation with respect to circumstances under which an OperationalActivity, Function or ServiceFunction can be performed.
ActualEnduringTask	An actual undertaking recognized by an enterprise as being essential to achieving its goals - i.e. a strategic specification of what the enterprise does.
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
ActualMeasurement	An actual value that is applied to a Measurement.
ActualMeasurementSet	A set of ActualMeasurements.
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
ActualPropertySet	A set or collection of Actual properties.
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
ActualState	Abstract element that applies temporal extent to a set of elements realized as Instance Specifications.
PropertySet	An abstract type grouping architectural elements that can own Measurements.

Tagged Values

Tag Name	Valid Values
endDate	endDate
startDate	startDate
URI	String

Relevant Viewpoints

- [C5 - Effects](#)

3.27 ActualResource

Definition

Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.

Meta Model

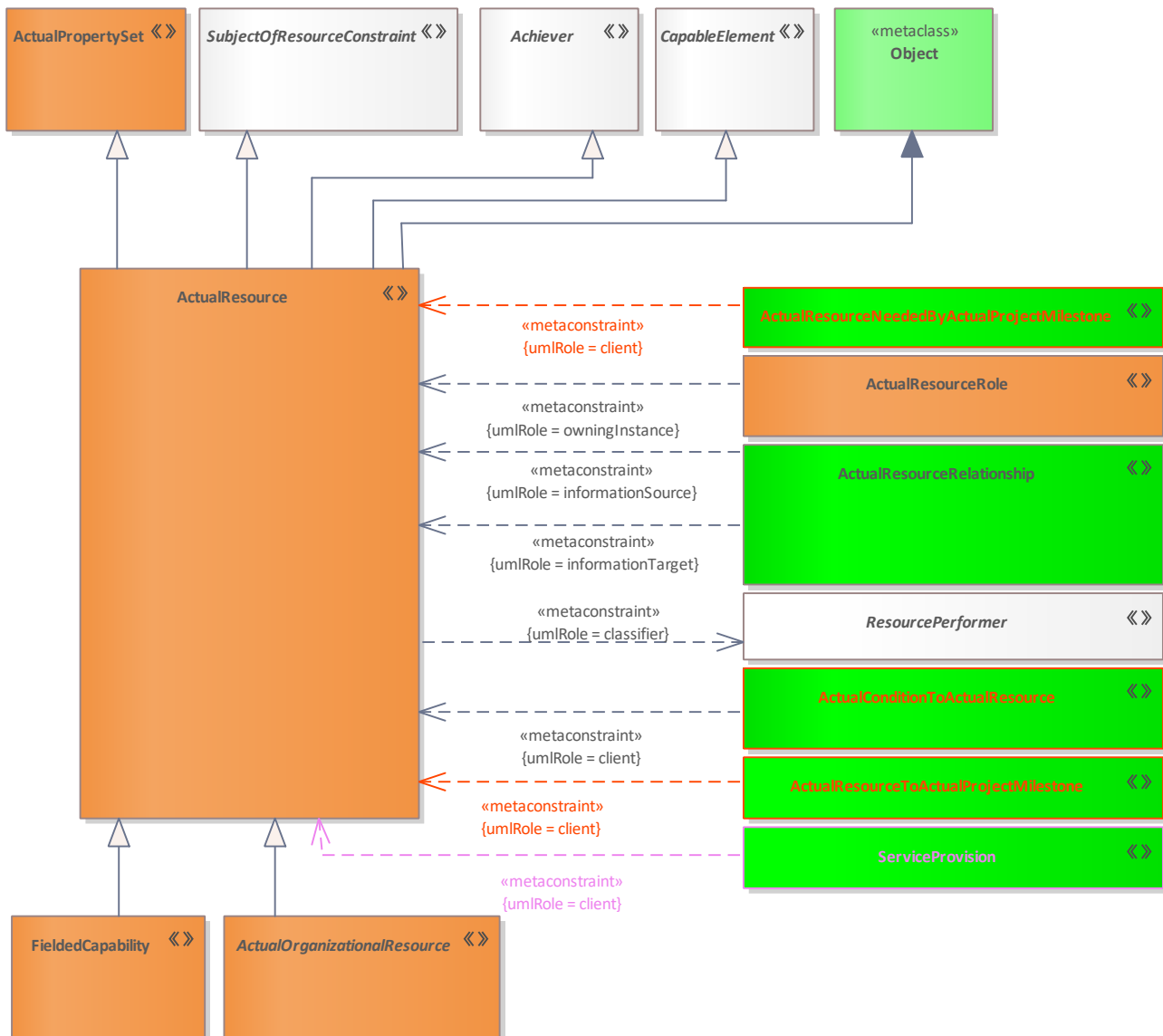


Figure 83: ActualResource

Elements in Diagram

Name	Definition
Achiever	An ActualResource, ActualProject or ActualEnterprisePhase that can deliver a DesiredEffect.
ActualConditionToActualResource	A relationship that expresses that a actual resource is an actual situation.
ActualOrganizationalResource	Abstract element for an ActualOrganization, ActualPerson or ActualPost.
ActualPropertySet	A set or collection of Actual properties.
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
ActualResourceNeededByActualProjectMilestone	A relationship that expresses that an actual resource is needed by actual project milestones.

Name	Definition
ActualResourceRelationship	An actual resource flow existing between ActualResources (i.e. flow of data, people, materiel, or energy).
ActualResourceRole	An instance of a ResourcePerformer.
ActualResourceToActualProjectMilestone	A relationship that expresses that an actual resource is mapped to actual project milestones.
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
FieldedCapability	An individual, fully-realized capability.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceProvision	An assertion that a Resource delivers a Service to a specified ServiceLevel.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.

Tagged Values

Tag Name	Valid Values
URI	String
endDate	endDate
startDate	startDate

Relevant Viewpoints

- [C5 - Effects](#)
- [P1- Resource Types](#)

3.28 ActualResourceNeededByActualProjectMilestone

Definition

A relationship that expresses that an actual resource is needed by actual project milestones.

Meta Model

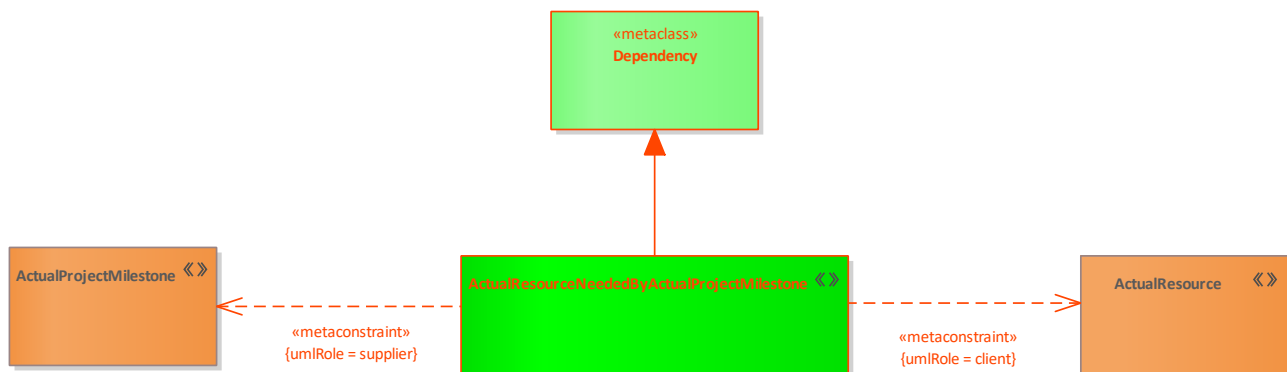


Figure 84: ActualResourceNeededByActualProjectMilestone

Elements in Diagram

Name	Definition
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
ActualResourceNeededByActualProjectMilestone	A relationship that expresses that an actual resource is needed by actual project milestones.

Tagged Values

Relevant Viewpoints

- [Cr - Capability Roadmap](#)

3.29 ActualResourceRelationship

Definition

An actual resource flow existing between ActualResources (i.e. flow of data, people, materiel, or energy).

Meta Model

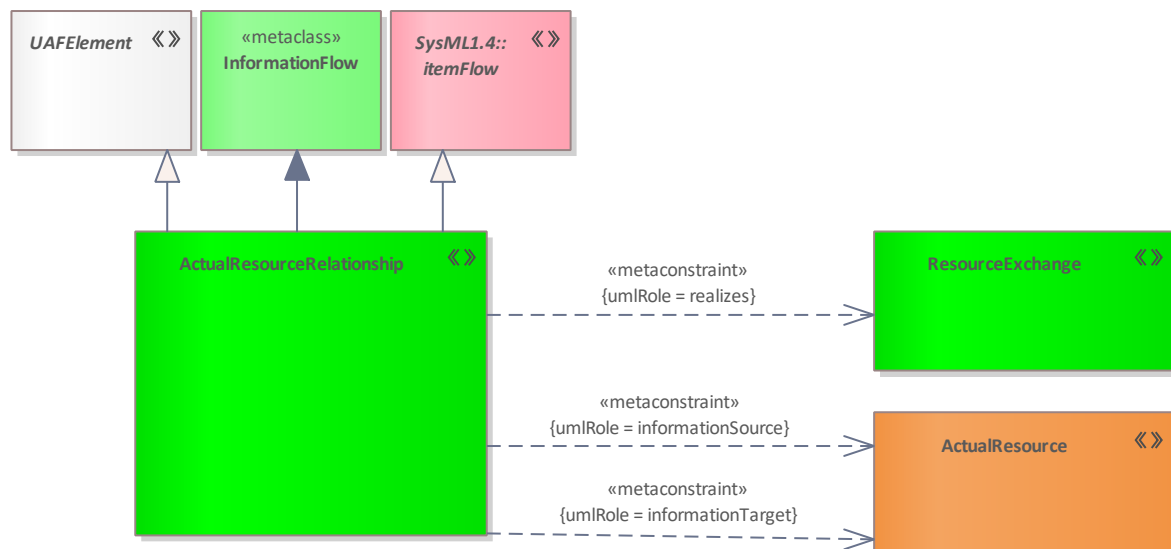


Figure 85: ActualResourceRelationship

Elements in Diagram

Name	Definition
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
ActualResourceRelationship	An actual resource flow existing between ActualResources (i.e. flow of data, people, materiel, or energy).
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [Lr - Lines of Development](#)

3.30 ActualResourceRole

Definition

An instance of a ResourcePerformer.

Meta Model

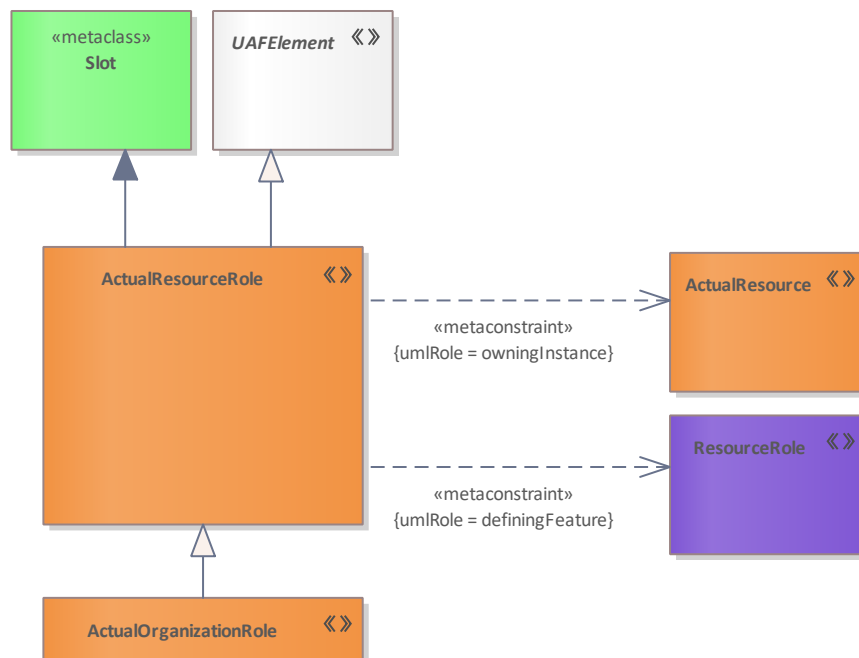


Figure 86: ActualResourceRole

Elements in Diagram

Name	Definition
ActualOrganizationRole	An ActualOrganizationalResource that is applied to a ResourceRole.
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
ActualResourceRole	An instance of a ResourcePerformer.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
UAElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.31 ActualResourceToActualProjectMilestone

Definition

A relationship that expresses that an actual resource is mapped to actual project milestones.

Meta Model

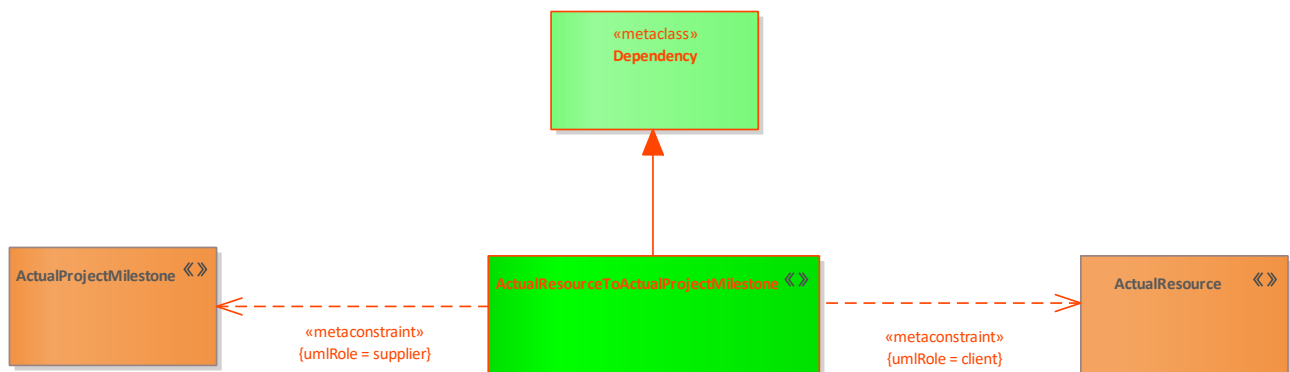


Figure 87: ActualResourceToActualProjectMilestone

Elements in Diagram

Name	Definition
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
ActualResourceToActualProject Milestone	A relationship that expresses that an actual resource is mapped to actual project milestones.

Tagged Values

Relevant Viewpoints

- [Cr - Capability Roadmap](#)

3.32 ActualResponsibleResource

Definition

An abstract type grouping responsible OrganizationalResources.

Meta Model

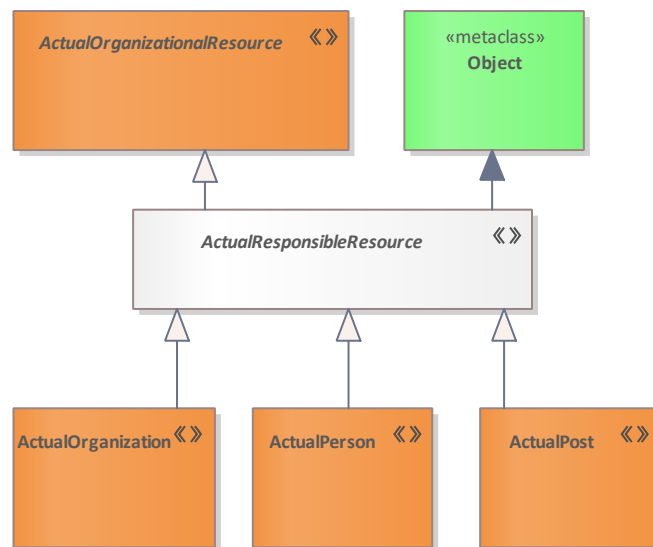


Figure 88: ActualResponsibleResource

Elements in Diagram

Name	Definition
ActualOrganization	An actual formal or informal organizational unit, e.g. "Driving and Vehicle Licensing Agency", "UAF team Alpha".
ActualOrganizationalResource	Abstract element for an ActualOrganization, ActualPerson or ActualPost.
ActualPerson	An individual human being.
ActualPost	An actual, specific post, an instance of a Post "type" - e.g., "President of the United States of America." where the Post would be president.
ActualResponsibleResource	An abstract type grouping responsible OrganizationalResources.

Tagged Values

Tag Name	Valid Values
URI	String
endDate	endDate
startDate	startDate

Relevant Viewpoints

3.33 ActualService

Definition

An individual ServiceSpecification.

Meta Model

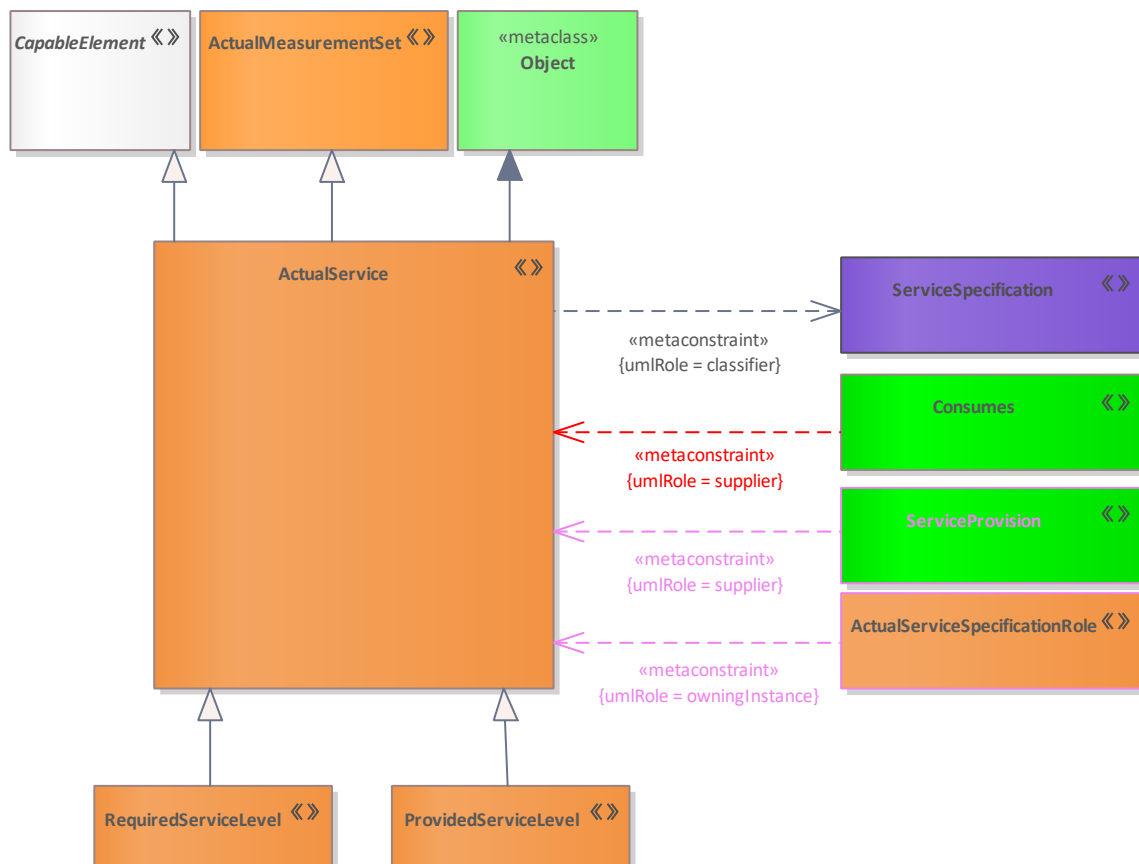


Figure 89: ActualService

Elements in Diagram

Name	Definition
ActualMeasurementSet	A set of ActualMeasurements.
ActualService	An individual ServiceSpecification.
ActualServiceSpecificationRole	An instance of a ServiceSpecification in context of a ServiceSpecification.
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
Consumes	A tuple that asserts that a service in someway contributes or assists in the execution of an OperationalActivity.
ProvidedServiceLevel	A sub type of ActualService that details a specific service level delivered by the provider.
RequiredServiceLevel	A sub type of ActualService that details a specific service level required of the provider.
ServiceProvision	An assertion that a Resource delivers a Service to a specified ServiceLevel.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Tagged Values

Tag Name	Valid Values
URI	String

endDate	endDate
startDate	startDate

Relevant Viewpoints

- [L4 - Logical Activities](#)
- [P1- Resource Types](#)
- [Sr - Service Roadmap](#)

3.34 ActualServiceSpecificationRole

Definition

An instance of a ServiceSpecification in context of a ServiceSpecification.

Meta Model

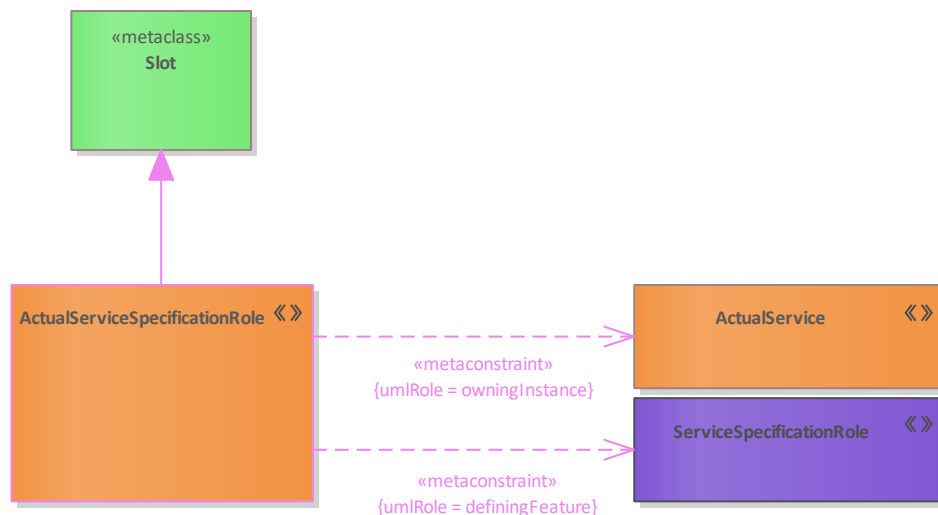


Figure 90: ActualServiceSpecificationRole

Elements in Diagram

Name	Definition
ActualService	An individual ServiceSpecification.
ActualServiceSpecificationRole	An instance of a ServiceSpecification in context of a ServiceSpecification.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

Tagged Values

Relevant Viewpoints

3.35 ActualState

Definition

Abstract element that applies temporal extent to a set of elements realized as Instance Specifications.

Meta Model

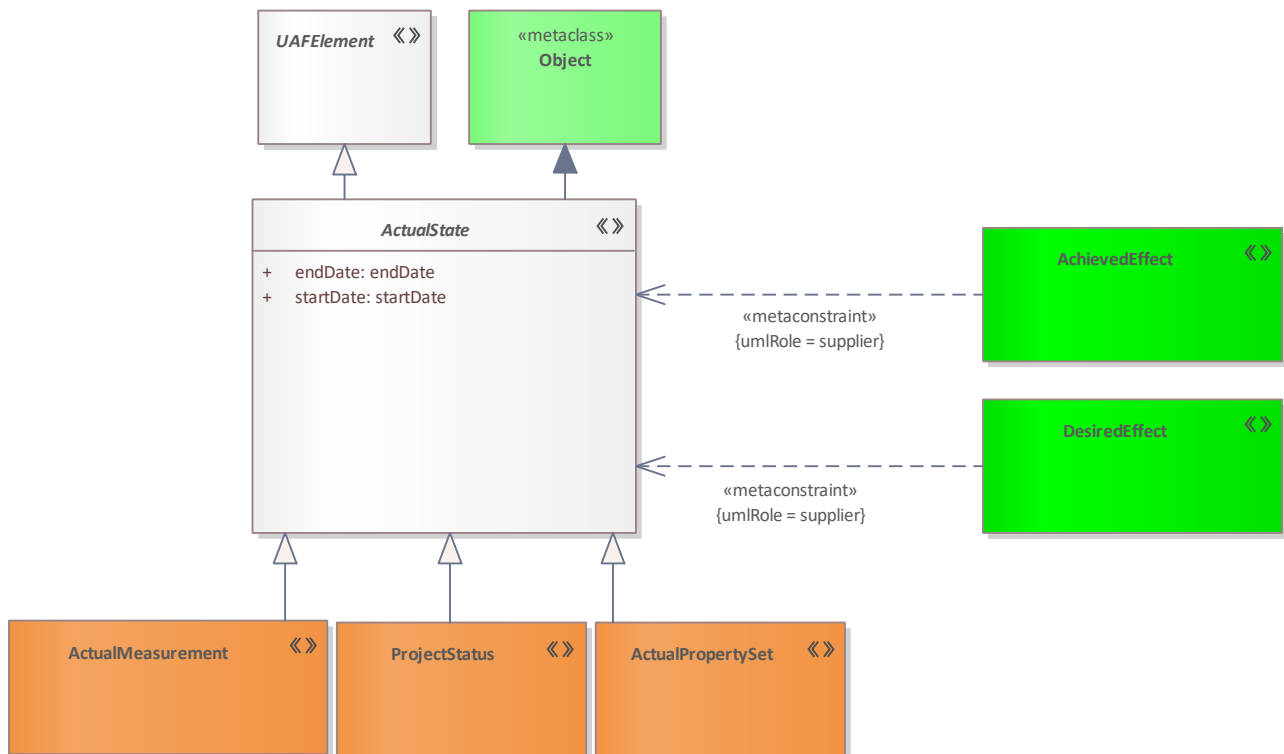


Figure 91: ActualState

Elements in Diagram

Name	Definition
AchievedEffect	A tuple that exists between an ActualState (e.g., observed/measured during testing) of an element that attempts to achieve a DesiredEffect and an Achiever.
ActualMeasurement	An actual value that is applied to a Measurement.
ActualPropertySet	A set or collection of Actual properties.
ActualState	Abstract element that applies temporal extent to a set of elements realized as Instance Specifications.
DesiredEffect	A tuple relating the Desirer (a Capability or OrganizationalResource) to an ActualState.
ProjectStatus	The status (i.e. level of progress) of a ProjectTheme for an ActualProject at the time of the ActualProjectMilestone.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
endDate	endDate
startDate	startDate
URI	String

Relevant Viewpoints

3.36 AffectedActivity

Definition

A relationship that expresses which resource is affected by a operational activity.

Meta Model

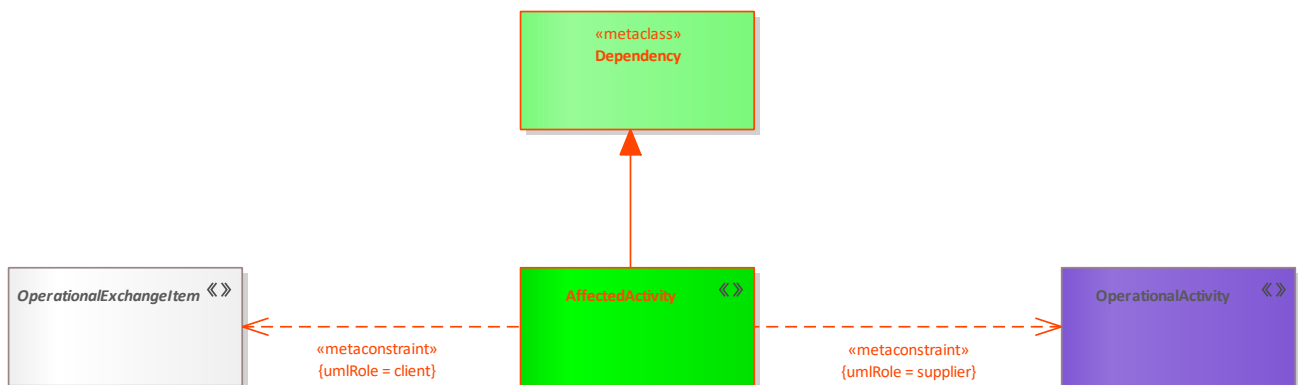


Figure 92: AffectedActivity

Elements in Diagram

Name	Definition
AffectedActivity	A relationship that expresses which resource is affected by a operational activity.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.

Tagged Values

Relevant Viewpoints

- [L4 - Logical Activities](#)

3.37 AffectedFunctions

Definition

A relationship that expresses which function is affected by a resource.

Meta Model

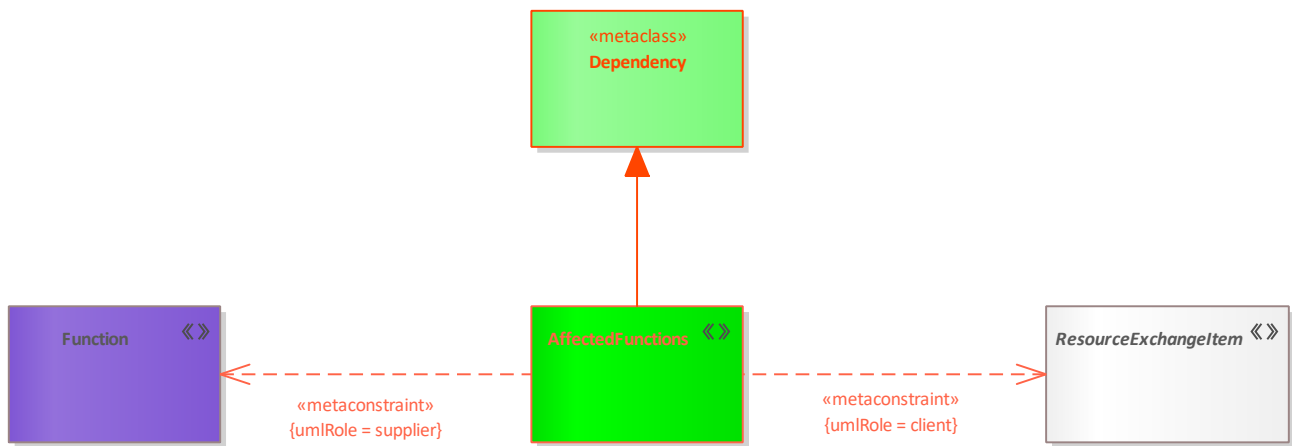


Figure 93: AffectedFunctions

Elements in Diagram

Name	Definition
AffectedFunctions	A relationship that expresses which function is affected by a resource.
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.

Tagged Values

Relevant Viewpoints

- [P4 - Resource Functions](#)

3.38 AffectedResource

Definition

A relationship that expresses which operational activity is affected by a resource.

Meta Model

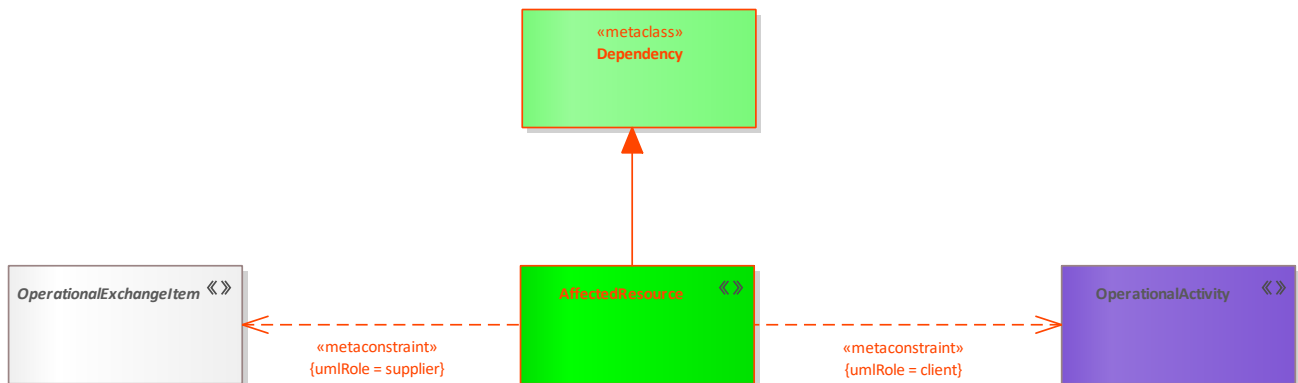


Figure 94: AffectedResource

Elements in Diagram

Name	Definition
AffectedResource	A relationship that expresses which operational activity is affected by a resource.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.

Tagged Values

Relevant Viewpoints

- [L4 - Logical Activities](#)

3.39 Alias

Definition

A metamodel Artifact used to define an alternative name for an element.

Meta Model

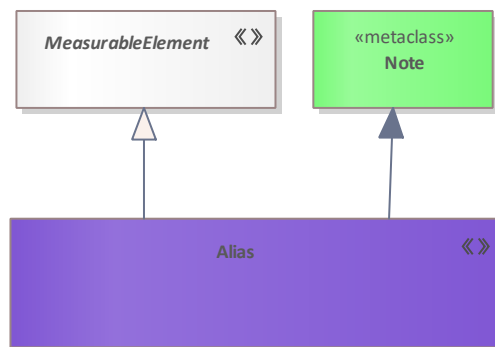


Figure 95: Alias

Elements in Diagram

Name	Definition
Alias	A metamodel Artifact used to define an alternative name for an element.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.40 AlignsWithGoal

Definition

Relation that shows that a functional or non-functional requirement is based on a process, role and task carrier, information element or other element.

Meta Model

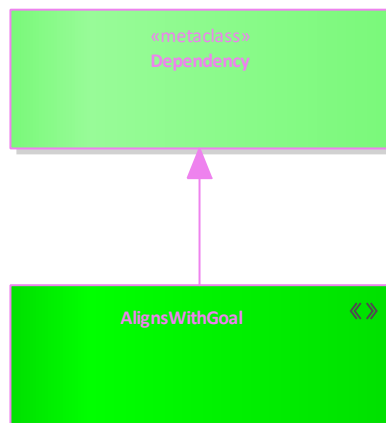


Figure 96: AlignsWithGoal

Elements in Diagram

Name	Definition
AlignsWithGoal	Relation that shows that a functional or non-functional requirement is based on a process, role and task carrier, information element or other element.

Tagged Values

Relevant Viewpoints

3.41 ArbitraryConnector

Definition

Represents a visual indication of a connection used in high level operational concept diagrams.

Meta Model

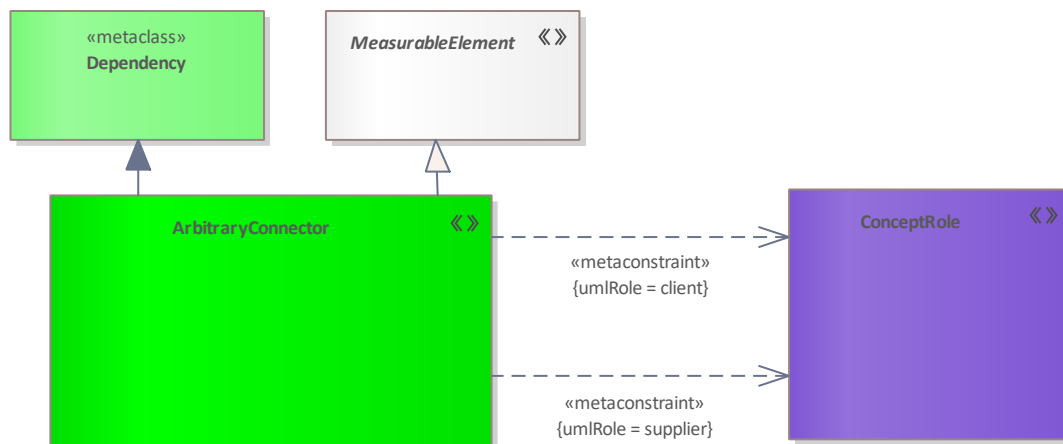


Figure 97: ArbitraryConnector

Elements in Diagram

Name	Definition
ArbitraryConnector	Represents a visual indication of a connection used in high level operational concept diagrams.
ConceptRole	Usage of a ConceptItem in the context of a HighLevelOperationalConcept.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L2-L3 - Logical Concept Viewpoint](#)

3.42 ArchitecturalDescription

Definition

An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.

Meta Model

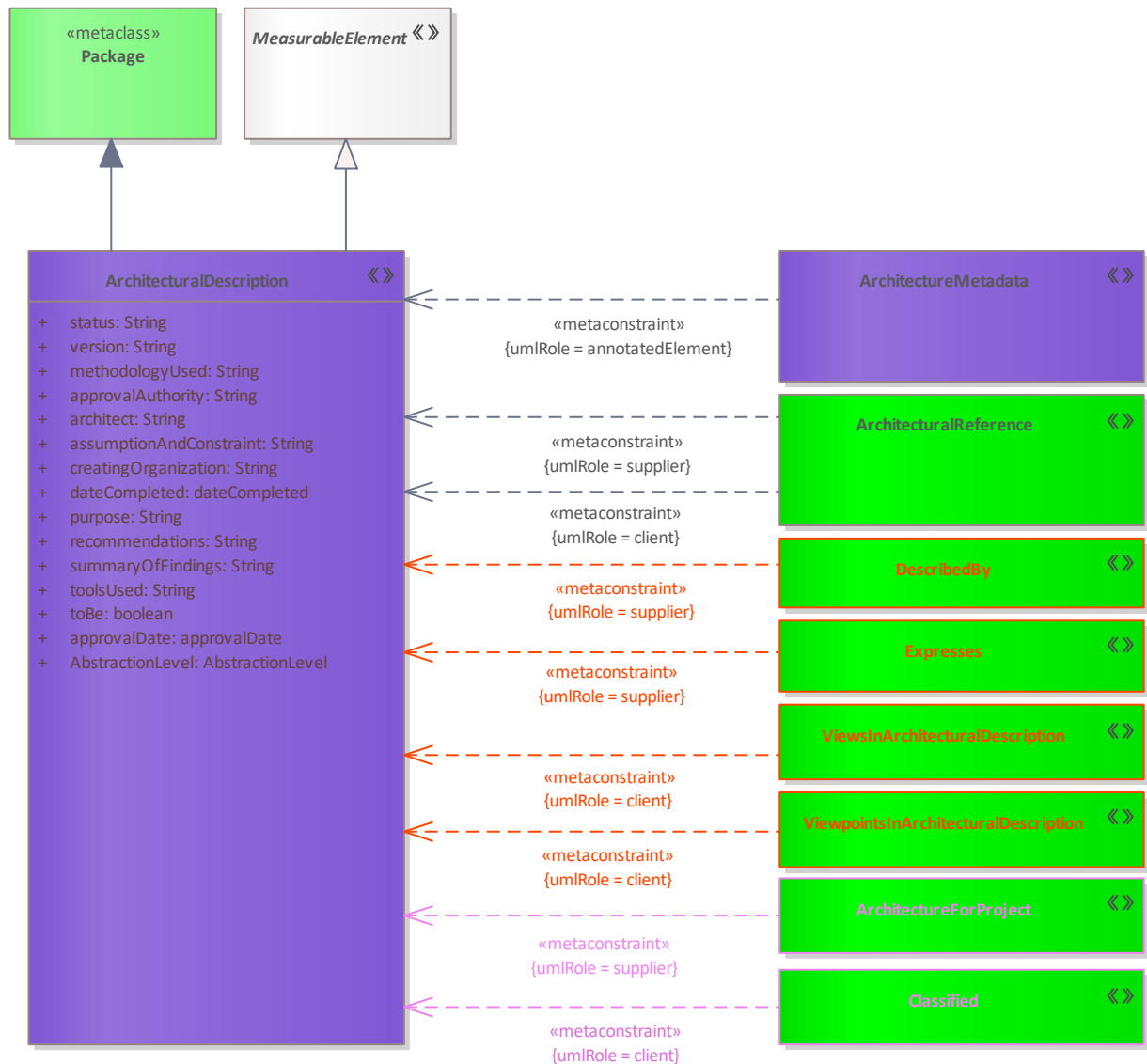


Figure 98: ArchitecturalDescription

Elements in Diagram

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
ArchitecturalReference	A tuple that specifies that one architectural description refers to another.
ArchitectureForProject	A relationship that expresses that a architectural description belongs to a actual project.

Name	Definition
ArchitectureMetadata	Information associated with an ArchitecturalDescription, that supplements the standard set of tags used to summarize the Architecture. It states things like what methodology was used, notation, etc.
Classified	Relationship that indicates which classification an element has.
DescribedBy	A relationship that expresses that an architectural description describes an architecture.
Expresses	A relationship that expresses that an architectural description includes the following architectures.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ViewpointsInArchitecturalDescription	A relationship that expresses that an architectural description includes the following viewpoints.
ViewsInArchitecturalDescription	A relationship that expresses that an architectural description includes the following views.

Tagged Values

Tag Name	Valid Values
status	String
version	String
methodologyUsed	String
approvalAuthority	String
architect	String
assumptionAndConstraint	String
creatingOrganization	String
dateCompleted	dateCompleted
purpose	String
recommendations	String
summaryOfFindings	String
toolsUsed	String
toBe	boolean
approvalDate	approvalDate
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [A3 - Architecture Correspondence](#)
- [A6 - Architecture Versions](#)
- [Ar - Architecture Roadmap](#)
- [Lr - Lines of Development](#)

3.43 ArchitecturalReference

Definition

A tuple that specifies that one architectural description refers to another.

Meta Model

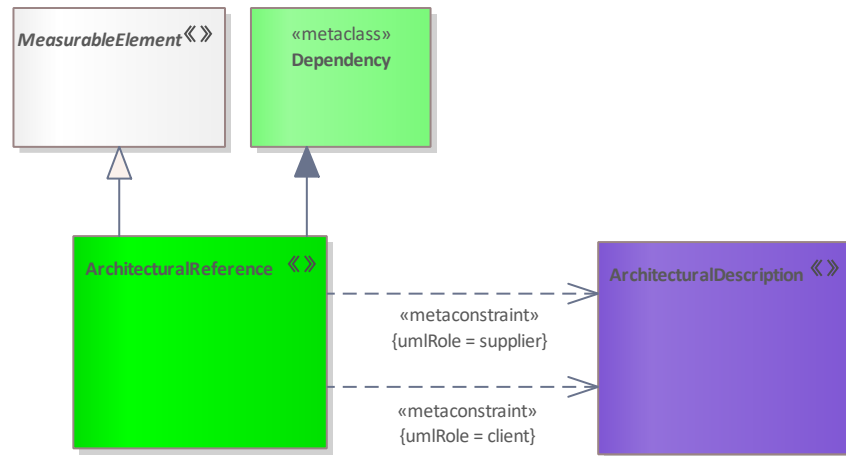


Figure 99: ArchitecturalReference

Elements in Diagram

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
ArchitecturalReference	A tuple that specifies that one architectural description refers to another.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [A3 - Architecture Correspondence](#)

3.44 ArchitecturalSequence

Definition

A relationship that specifies that one architectural description is the successor of another.

Meta Model

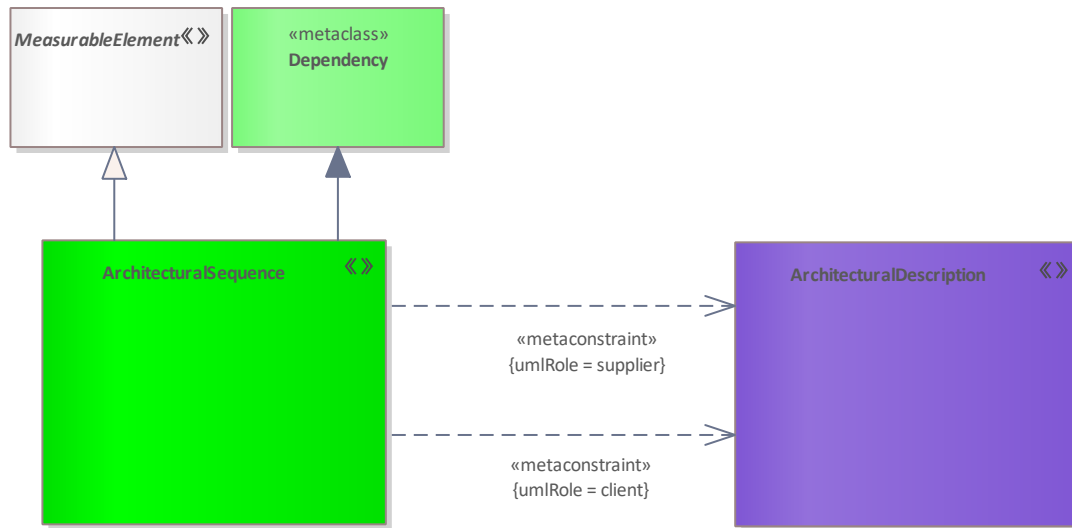


Figure 100: ArchitecturalSequence

Elements in Diagram

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
ArchitecturalSequence	A relationship that specifies that one architectural description is the successor of another.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [A6 - Architecture Versions](#)
- [Ar - Architecture Roadmap](#)

3.45 Architecture

Definition

An abstract type that represents a generic architecture. Subtypes are OperationalArchitecture and ResourceArchitecture.

Meta Model

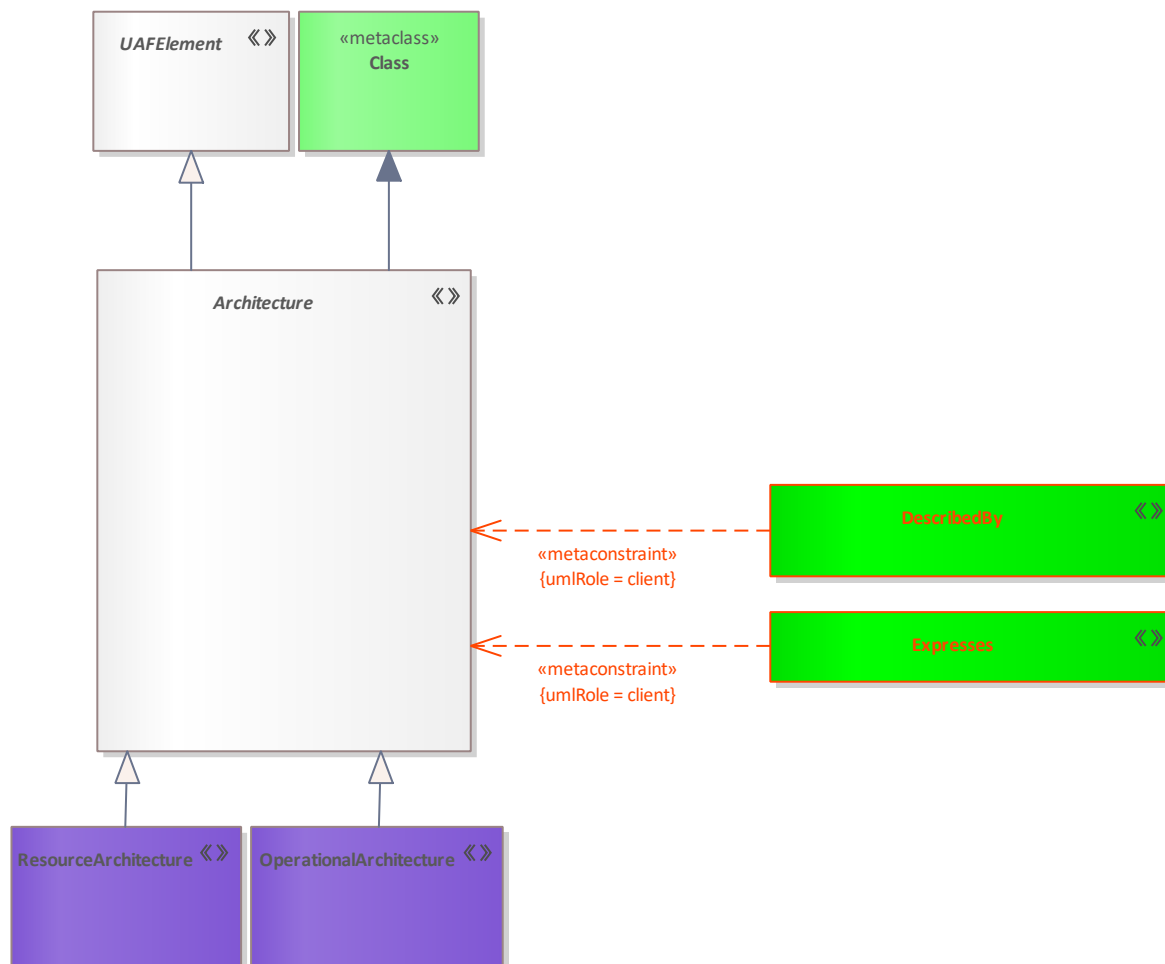


Figure 101: Architecture

Elements in Diagram

Name	Definition
Architecture	An abstract type that represents a generic architecture. Subtypes are OperationalArchitecture and ResourceArchitecture.
DescribedBy	A relationship that expresses that an architectural description describes an architecture.
Expresses	A relationship that expresses that an architectural description includes the following architectures.
OperationalArchitecture	A type used to denote a model of the Architecture, described from the Operational perspective.
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R

URI	String
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Relevant Viewpoints

3.46 ArchitectureForProject

Definition

A relationship that expresses that a architectural description belongs to a actual project.

Meta Model

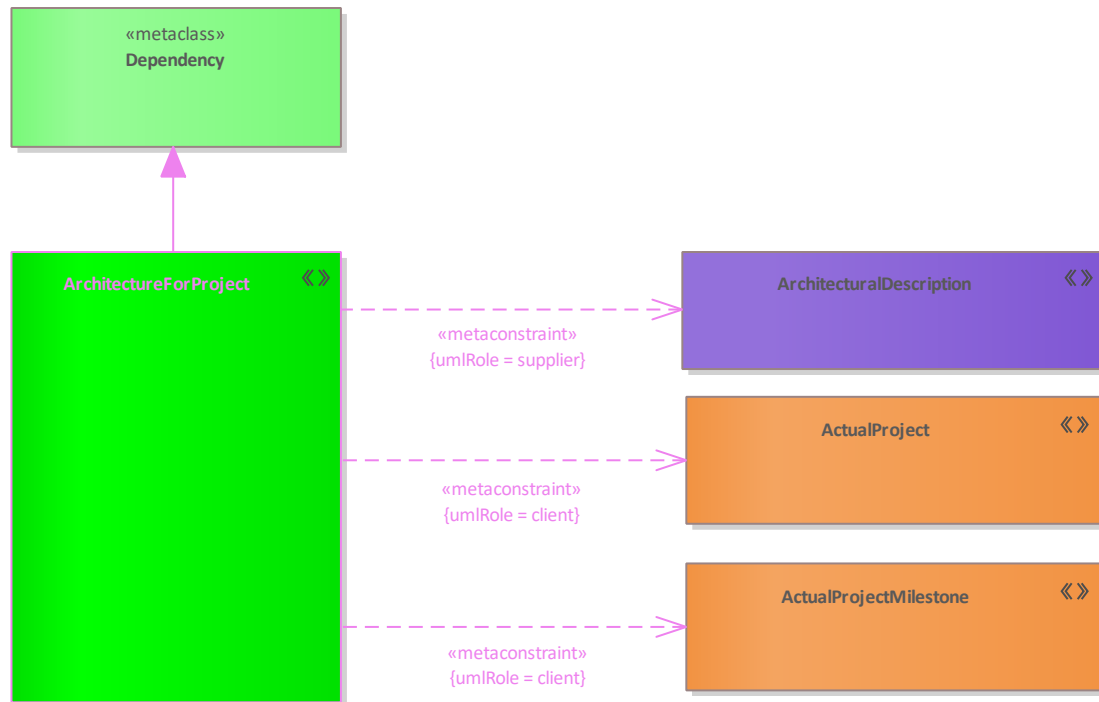


Figure 102: ArchitectureForProject

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
ArchitectureForProject	A relationship that expresses that a architectural description belongs to a actual project.

Tagged Values

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [Lr - Lines of Development](#)

3.47 ArchitectureMetadata

Definition

Information associated with an ArchitecturalDescription, that supplements the standard set of tags used to summarize the Architecture. It states things like what methodology was used, notation, etc.

Meta Model

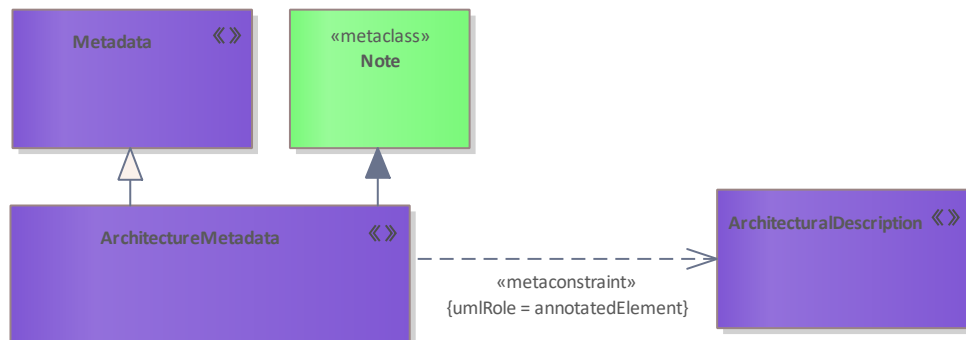


Figure 103: ArchitectureMetadata

Elements in Diagram

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
ArchitectureMetadata	Information associated with an ArchitecturalDescription, that supplements the standard set of tags used to summarize the Architecture. It states things like what methodology was used, notation, etc.
Metadata	A comment that can be applied to any element in the architecture. The attributes associated with this element details the relationship between the element and its related dublinCoreElement, metaDataScheme, category and name. This allows the element to be referenced using the Semantic Web.

Tagged Values

Tag Name	Valid Values
dublinCoreElement	String
metaDataScheme	String
name	String
category	String
URI	String

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)

3.48Asset

Definition

Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.

Meta Model

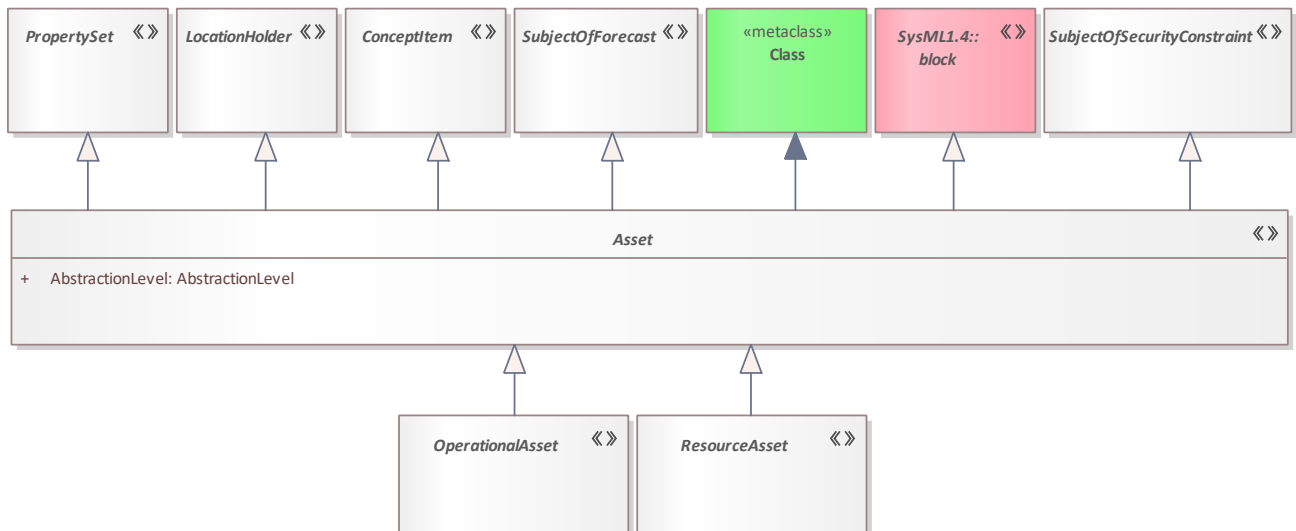


Figure 104: Asset

Elements in Diagram

Name	Definition
Asset	Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.
ConceptItem	Abstract, an item which may feature in a HighLevelOperationalConcept.
LocationHolder	Abstract type, used to group elements that are allowed to be associated with a Location.
OperationalAsset	An abstract element used to group the elements of OperationalAgent and InformationElement allowing them to own InformationRoles.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
ResourceAsset	An abstract element used to group the elements of ResourcePerformer and DataElement allowing them to own DataRoles
SubjectOfForecast	An abstract type grouping elements that can be the subject of a Forecast.
SubjectOfSecurityConstraint	An abstract grouping of elements that can be the subject of a SecurityConstraint. Element is not used in the current version of the framework and reserved for future developments.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.49 AssetRole

Definition

AssetRole as applied to Security views, an abstract element that indicates the type of elements that can be considered as a subject for security analysis in the particular context (currently no security viewpoints in the framework).

Meta Model

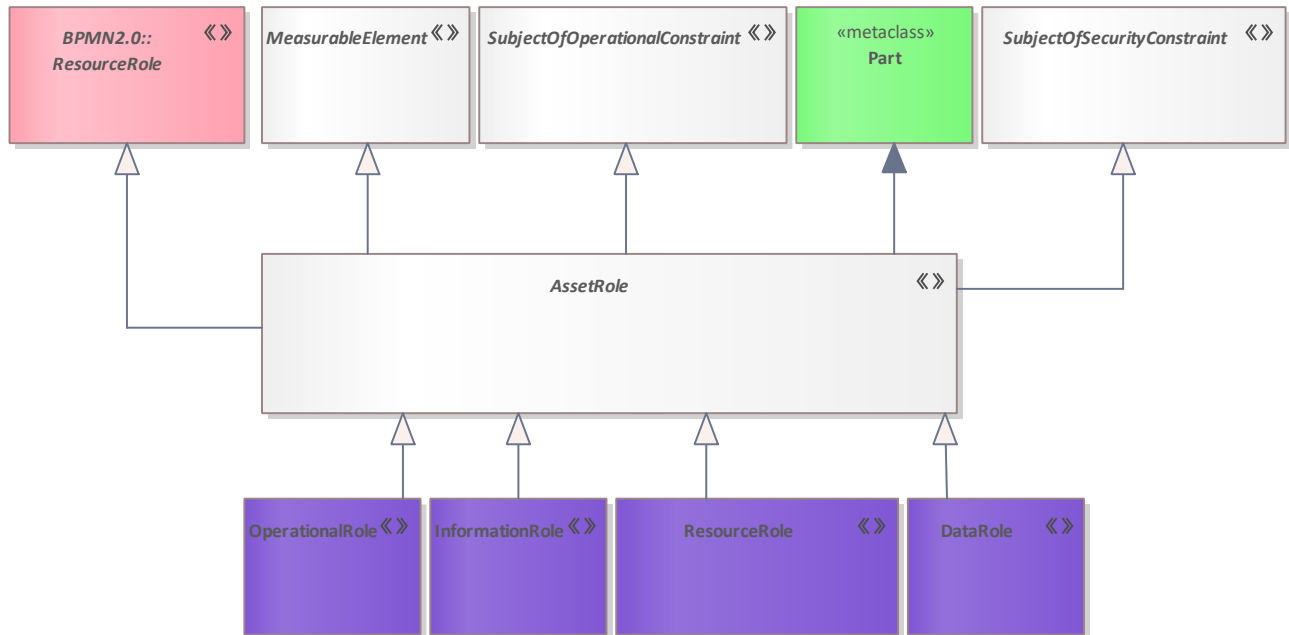


Figure 105: AssetRole

Elements in Diagram

Name	Definition
AssetRole	AssetRole as applied to Security views, an abstract element that indicates the type of elements that can be considered as a subject for security analysis in the particular context (currently no security viewpoints in the framework).
DataRole	A usage of DataElement that exists in the context of an ResourceAsset. It also allows the representation of the whole-part aggregation of DataElements.
InformationRole	A usage of InformationElement that exists in the context of an OperationalAsset. It also allows the representation of the whole-part aggregation of InformationElements.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.
SubjectOfSecurityConstraint	An abstract grouping of elements that can be the subject of a SecurityConstraint. Element is not used in the current version of the framework and reserved for future developments.

Tagged Values

Tag Name	Valid Values
----------	--------------

URI	String
-----	--------

Relevant Viewpoints

3.50 BoundaryCondition

Definition

A relationship that expresses which environment is relevant to an resource exchange.

Meta Model

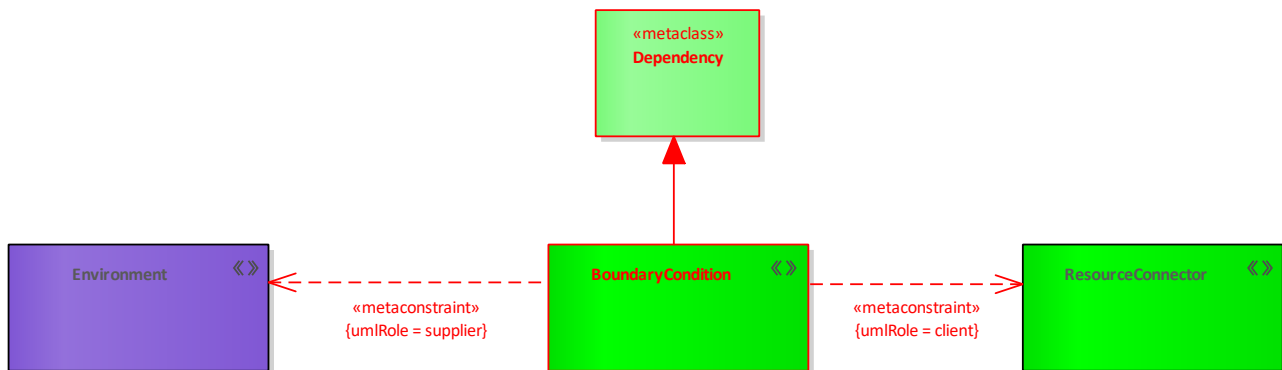


Figure 106: BoundaryCondition

Elements in Diagram

Name	Definition
BoundaryCondition	A relationship that expresses which environment is relevant to an resource exchange.
Environment	A definition of the environmental factors in which something exists or functions. The definition of an Environment element can be further defined using EnvironmentKind.
ResourceConnector	A channel for exchange between two ResourceRoles.

Tagged Values

Relevant Viewpoints

- [P3 - Resource Connectivity](#)

3.51 BusinessProcess

Definition

An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.

Meta Model

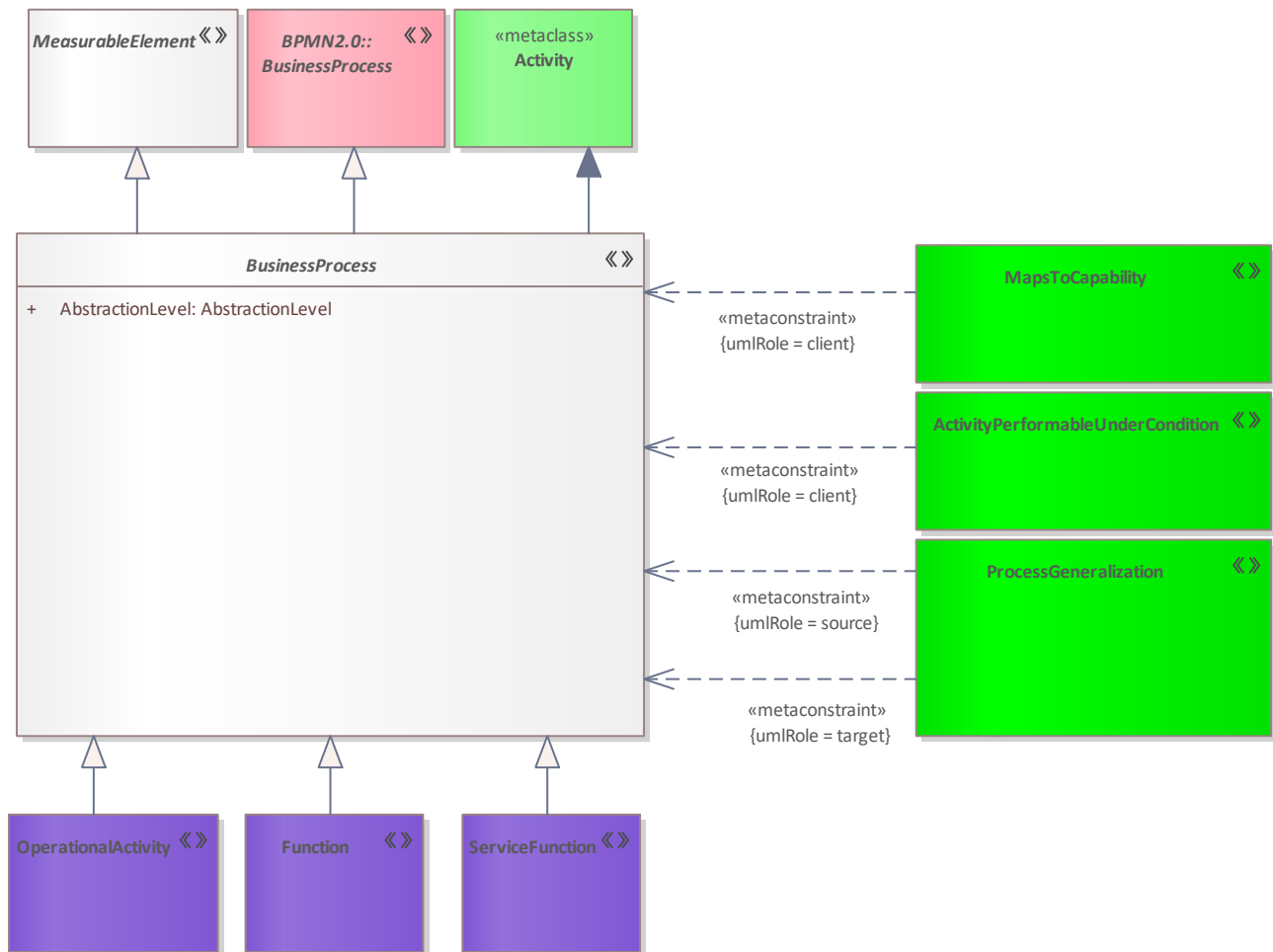


Figure 107: BusinessProcess

Elements in Diagram

Name	Definition
ActivityPerformableUnderCondition	The ActualCondition under which an Activity is performed.
BusinessProcess	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
MapsToCapability	A tuple denoting that an Activity contributes to providing a Capability.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
ProcessGeneralization	A ProcessGeneralization is a taxonomic relationship between a more general Process and a more specific Process.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.52BWRequirement

Definition

Abstract base class for requirements.

Meta Model

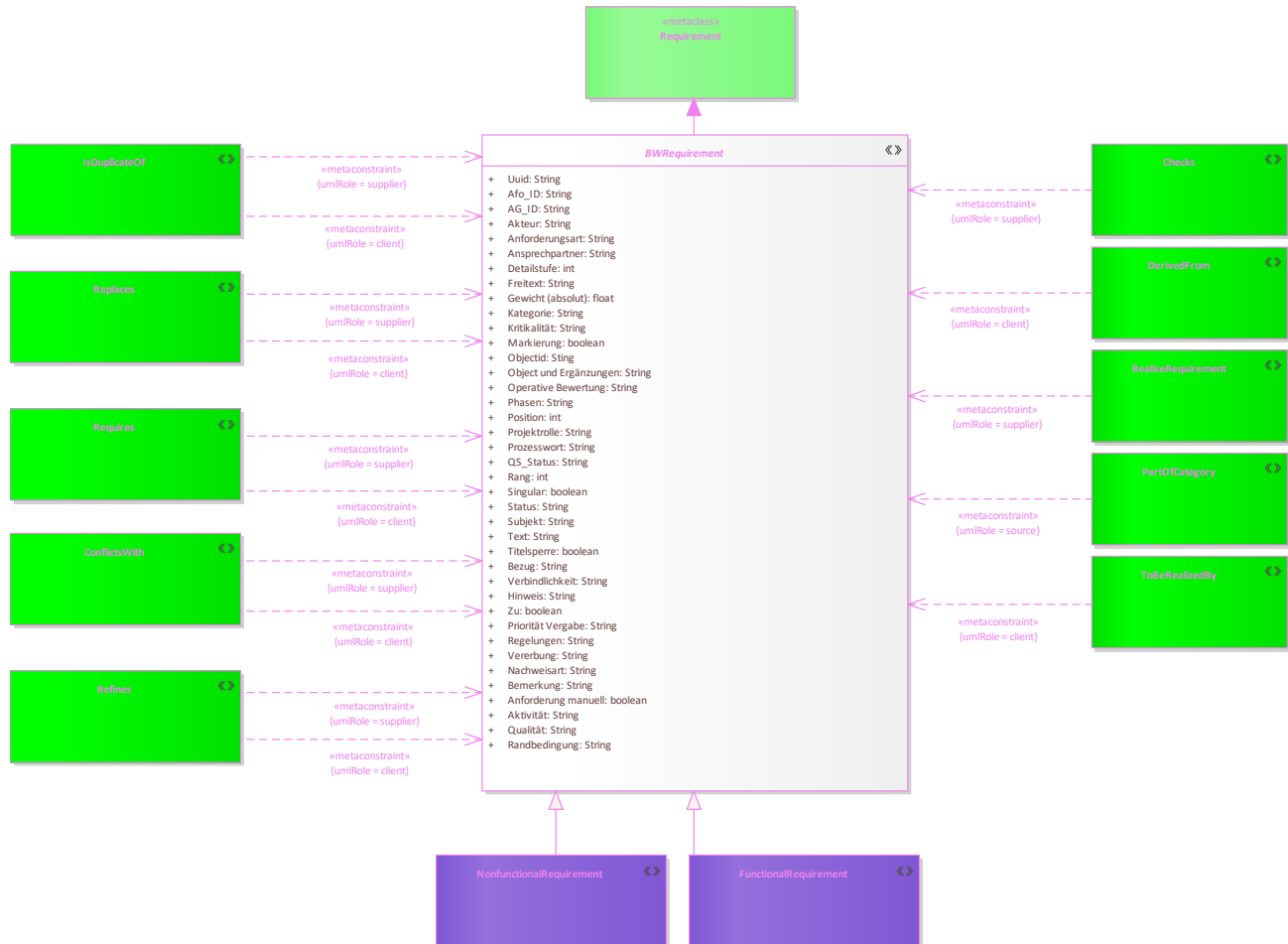


Figure 108: BWRequirement

Elements in Diagram

Name	Definition
BWRequirement	Abstract base class for requirements.
Checks	Relation that shows that an acceptance criterion (FitCriterion) is valid for a functional or non-functional requirement.
ConflictsWith	Relation that represents a conflict between two requirements.
DerivedFrom	Relation that shows that a functional or non-functional requirement is based on a process, role and task carrier, information element or other element.
FunctionalRequirement	The element represents a functional requirement (what should the system / software be able to do?).
IsDuplicateOf	Relation that represents that two requirements convey the same content.
NonfunctionalRequirement	The element represents a non-functional requirement (how should the system / software be able to do something?).
PartOfCategory	This relation states that his functional or non-functional requirement belongs to a category (RequirementCategory) of the requirements catalog.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.

Name	Definition
Refines	Relation that represents a refinement of a requirement by another requirement.
Replaces	Relation that represents a replacement of a requirement with another requirement.
Requires	Relation that represents that a requirement assumes another requirement.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
Uuid	String
Afo_ID	String
AG_ID	String
Akteur	String
Anforderungsart	String
Ansprechpartner	String
Detailstufe	int
Freitext	String
Gewicht (absolut)	float
Kategorie	String
Kritikalität	String
Markierung	boolean
Objectid	String
Object und Ergänzungen	String
Operative Bewertung	String
Phasen	String
Position	int
Projektrolle	String
Prozesswort	String
QS_Status	String
Rang	int
Singular	boolean
Status	String
Subjekt	String
Text	String
Titelsperre	boolean
Bezug	String
Verbindlichkeit	String
Hinweis	String
Zu	boolean
Priorität Vergabe	String
Regelungen	String
Vererbung	String
Nachweisart	String
Bemerkung	String
Anforderung manuell	boolean
Aktivität	String
Qualität	String
Randbedingung	String

Relevant Viewpoints

3.53 Capability

Definition

A high level specification of the enterprise's ability to execute a specified course of action.

Meta Model

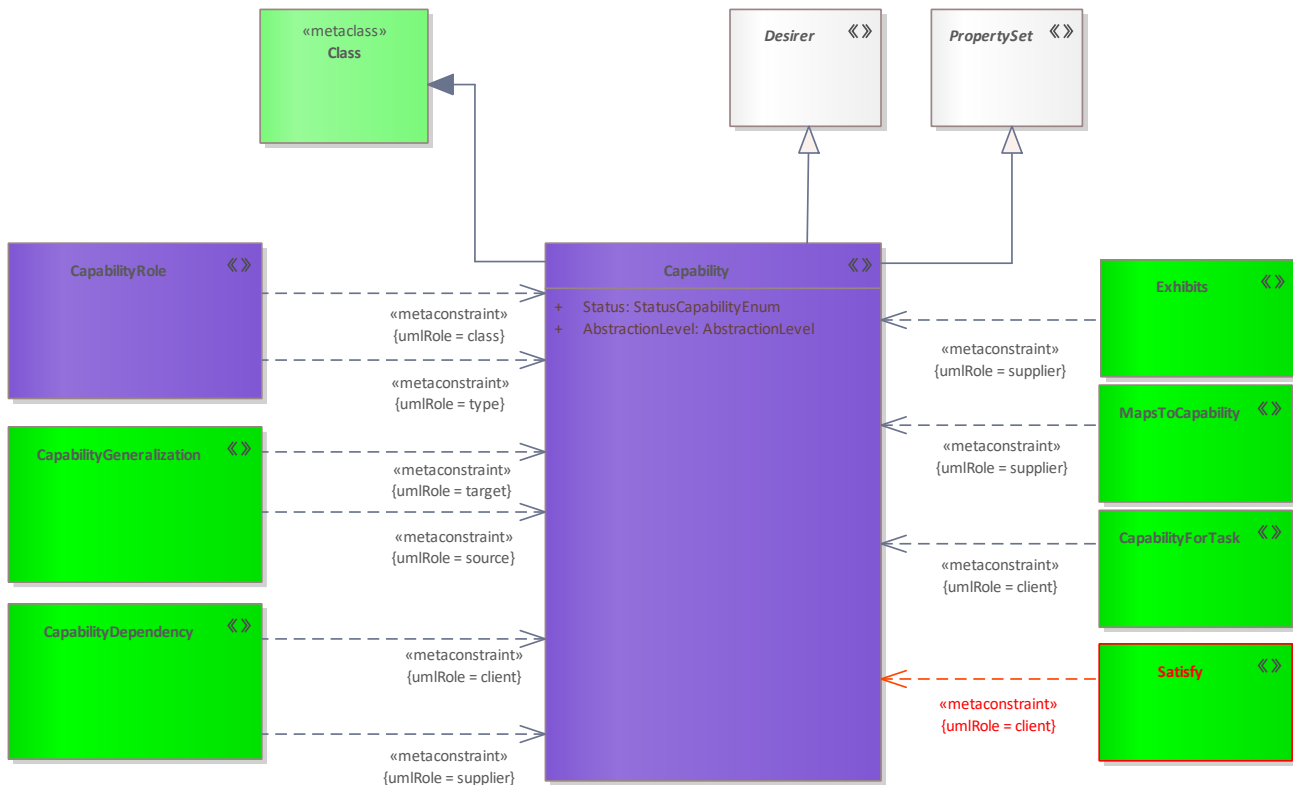


Figure 109: Capability

Elements in Diagram

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityDependency	A tuple that asserts that one Capability is dependent from another.
CapabilityForTask	A tuple that asserts that a Capability is required in order for an Enterprise to conduct a phase of an EnduringTask.
CapabilityGeneralization	A CapabilityGeneralization is a taxonomic relationship between a more general Capability and a more specific Capability.
CapabilityRole	A high level specification of the enterprise's ability to execute a specified course of action.
Desirer	Abstract type used to group architecture elements that might desire a particular effect.
Exhibits	A tuple that exists between a CapableElement and a Capability that it meets under specific environmental conditions.
MapsToCapability	A tuple denoting that an Activity contributes to providing a Capability.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
Satisfy	This relation states that an constraint affects an element.

Tagged Values

Tag Name	Valid Values
Status	Schwarz, Rot, Orange, Gelb, Grün, not set
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R

URI	String
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Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C1-S1 - Capability to Service Mapping](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [Cr - Capability Roadmap](#)

3.54 CapabilityConfiguration

Definition

A composite structure representing the physical and human resources (and their interactions) in an enterprise, assembled to meet a capability).

Meta Model

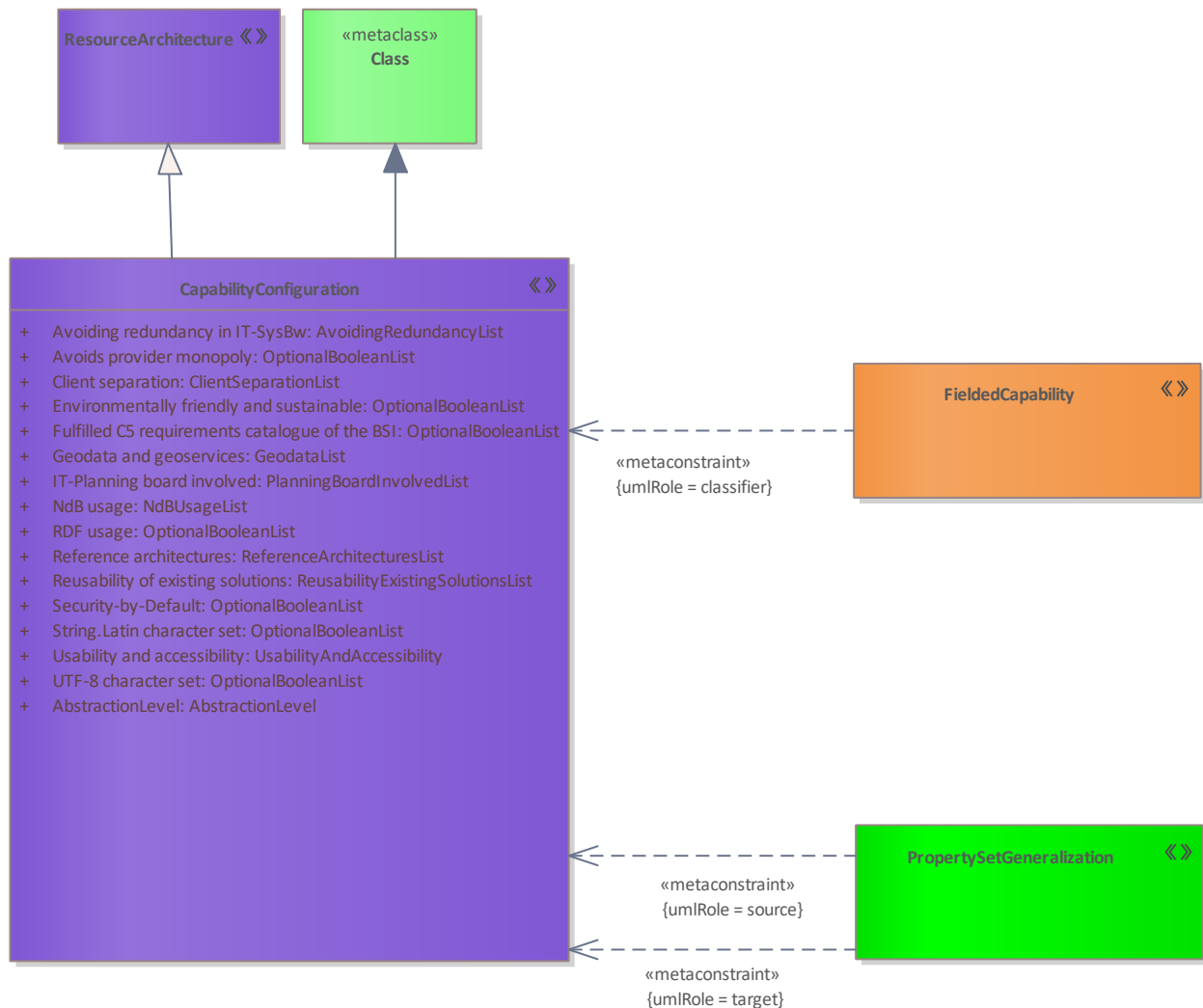


Figure 110: CapabilityConfiguration

Elements in Diagram

Name	Definition
CapabilityConfiguration	A composite structure representing the physical and human resources (and their interactions) in an enterprise, assembled to meet a capability).
FieldedCapability	An individual, fully-realized capability.
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.

Tagged Values

Tag Name	Valid Values
Avoiding redundancy in IT-SysBw	gegeben, nicht gegeben (bewusst), nicht gegeben (Harmonisierung geplant), keine Relevanz, not set
Avoids provider monopoly	Ja, Nein, keine Relevanz, not set
Client separation	Rechte- und Rollenmanagement, dedizierte virtuelle Server, dedizierte Plattenpartitionen, dedizierte virtuelle

	LANs, unterschiedliche Verschlüsselung in den Datenbereichen, physische Trennung, keine, keine Relevanz, not set
Environmentally friendly and sustainable	Ja, Nein, keine Relevanz, not set
Fulfilled C5 requirements catalogue of the BSI	Ja, Nein, keine Relevanz, not set
Geodata and geoservices	Standard-konform, nicht Standard-konform, keine Relevanz, not set
IT-Planning board involved	Ja (Einbindung erfolgt), Nein (Einbindung nicht erfolgt), nicht erforderlich, keine Relevanz, not set
NdB usage	Ja (entsprechend vorgesehener Art und Weise), Ja (mit Abweichungen), Nein, keine Relevanz, not set
RDF usage	Ja, Nein, keine Relevanz, not set
Reference architectures	berücksichtigt, nicht berücksichtigt, teilweise berücksichtigt, keine verfügbar, keine Relevanz, not set
Reusability of existing solutions	Ja, teilweise Wiederverwendung, keine Wiederverwendung, keine Lösungen vorhanden, keine Relevanz, not set
Security-by-Default	Ja, Nein, keine Relevanz, not set
String.Latin character set	Ja, Nein, keine Relevanz, not set
Usability and accessibility	Ja, Nein, nur benutzerfreundlich, nur barrierefrei, keine Relevanz, not set
UTF-8 character set	Ja, Nein, keine Relevanz, not set
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
materialPlanningNumber	
URI	String

Relevant Viewpoints

- [C5 - Effects](#)
- [Cr - Capability Roadmap](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)

3.55 CapabilityDependency

Definition

A tuple that asserts that one Capability is dependent from another.

Meta Model

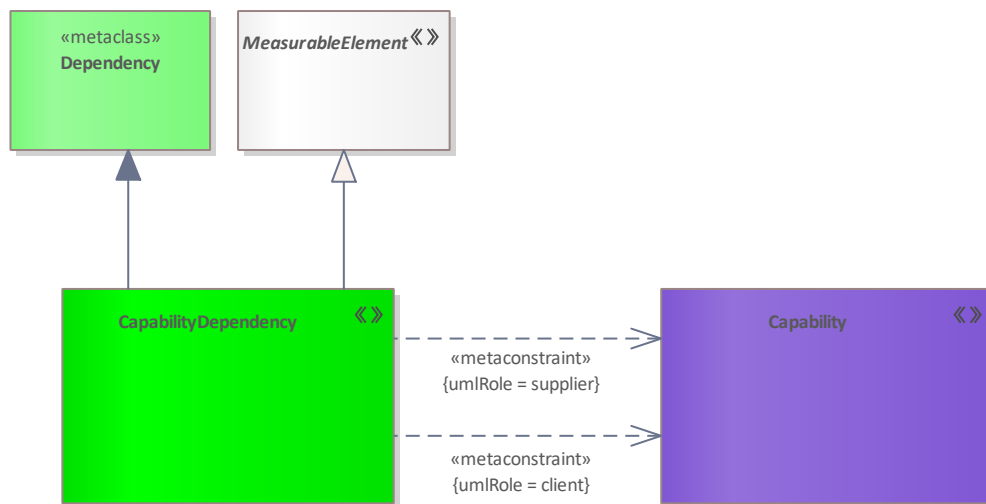


Figure 111: CapabilityDependency

Elements in Diagram

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityDependency	A tuple that asserts that one Capability is dependent from another.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [C3 - Capability Dependencies](#)

3.56 CapabilityForTask

Definition

A tuple that asserts that a Capability is required in order for an Enterprise to conduct a phase of an EnduringTask.

Meta Model

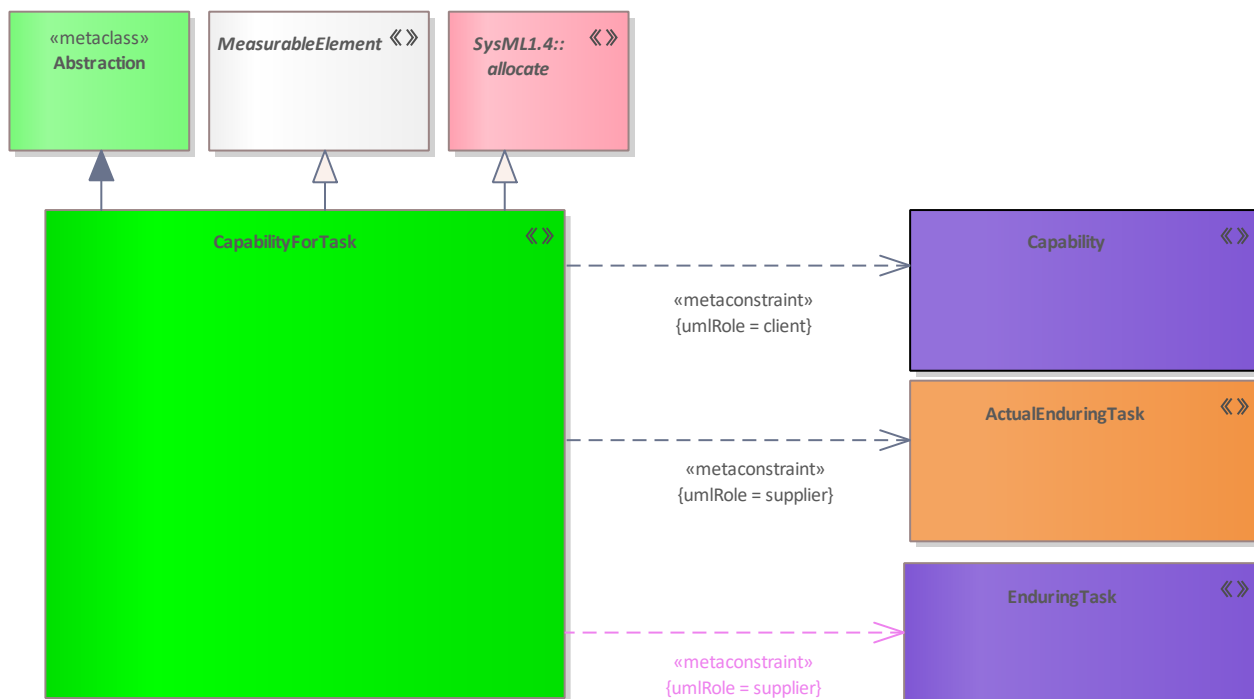


Figure 112: CapabilityForTask

Elements in Diagram

Name	Definition
ActualEnduringTask	An actual undertaking recognized by an enterprise as being essential to achieving its goals - i.e. a strategic specification of what the enterprise does.
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityForTask	A tuple that asserts that a Capability is required in order for an Enterprise to conduct a phase of an EnduringTask.
EnduringTask	A type of template behavior recognized by an enterprise as being essential to achieving its goals - i.e. a template for a strategic specification of what the enterprise does.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [C2 - Enterprise Vision](#)
- [C4 - Standard Processes](#)

3.57 CapabilityGeneralization

Definition

A CapabilityGeneralization is a taxonomic relationship between a more general Capability and a more specific Capability.

Meta Model

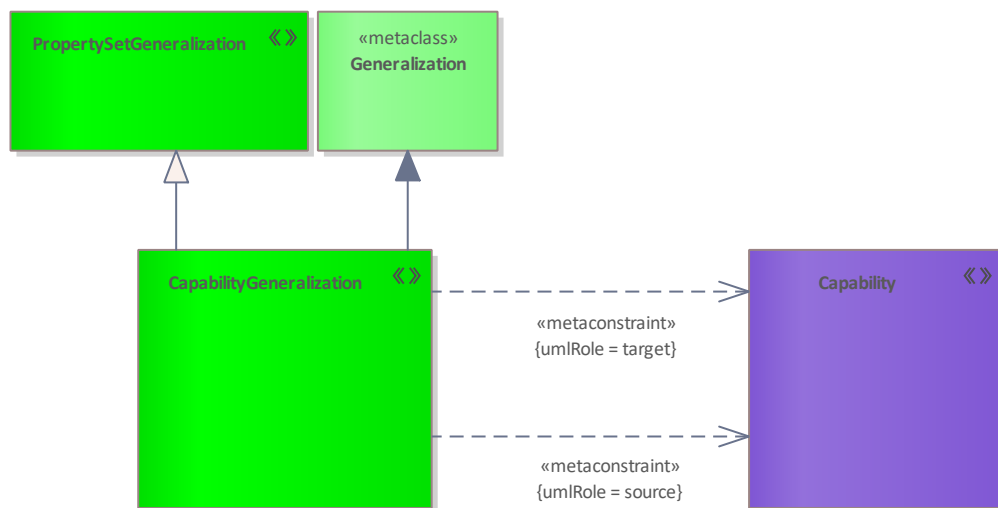


Figure 113: CapabilityGeneralization

Elements in Diagram

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityGeneralization	A CapabilityGeneralization is a taxonomic relationship between a more general Capability and a more specific Capability.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)

3.58 CapabilityRole

Definition

A high level specification of the enterprise's ability to execute a specified course of action.

Meta Model

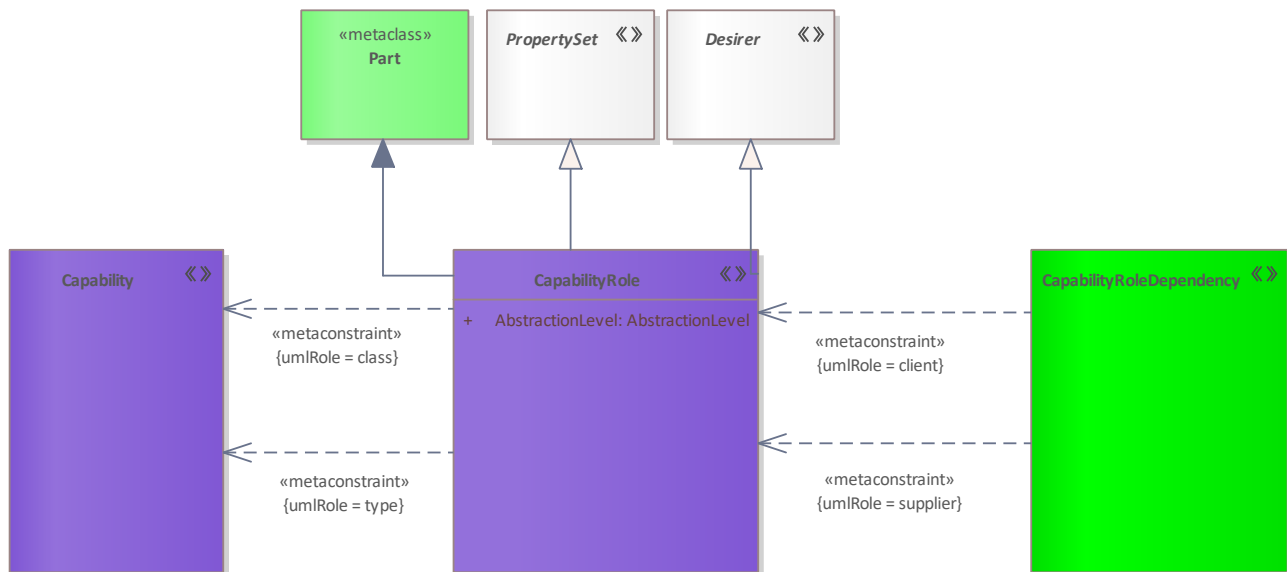


Figure 114: CapabilityRole

Elements in Diagram

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityRole	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityRoleDependency	A tuple that asserts that one CapabilityRole is dependent from another.
Desirer	Abstract type used to group architecture elements that might desire a particular effect.
PropertySet	An abstract type grouping architectural elements that can own Measurements.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [C3 - Capability Dependencies](#)

3.59 CapabilityRoleDependency

Definition

A tuple that asserts that one CapabilityRole is dependent from another.

Meta Model

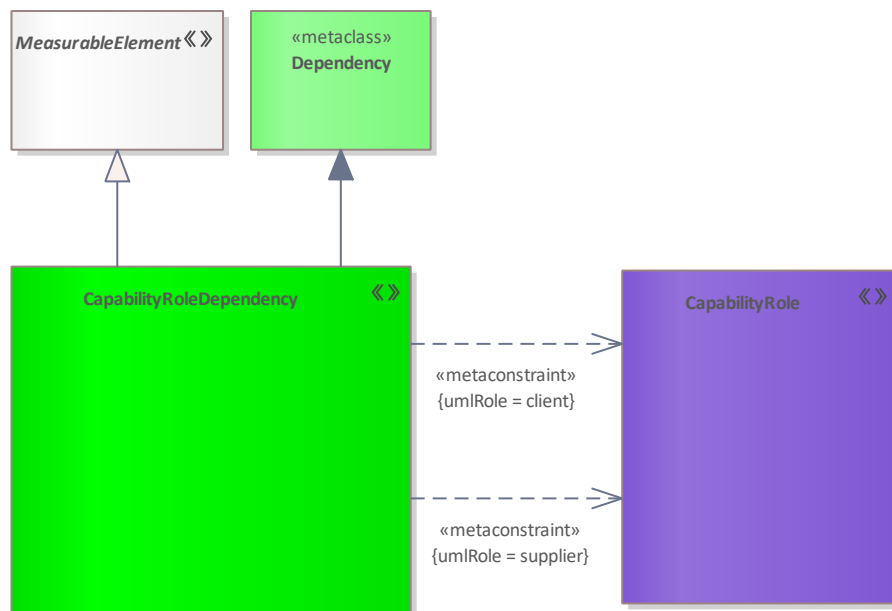


Figure 115: CapabilityRoleDependency

Elements in Diagram

Name	Definition
CapabilityRole	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityRoleDependency	A tuple that asserts that one CapabilityRole is dependent from another.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [C3 - Capability Dependencies](#)

3.60 CapableElement

Definition

An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).

Meta Model

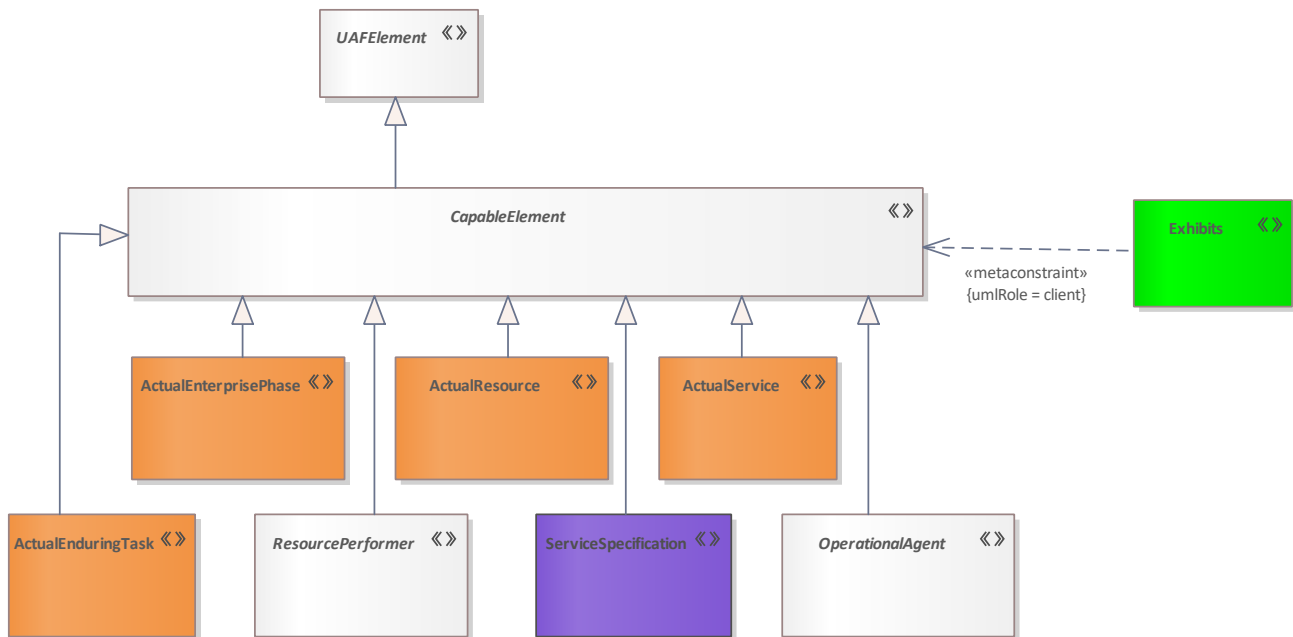


Figure 116: CapableElement

Elements in Diagram

Name	Definition
ActualEnduringTask	An actual undertaking recognized by an enterprise as being essential to achieving its goals - i.e. a strategic specification of what the enterprise does.
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
ActualService	An individual ServiceSpecification.
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
Exhibits	A tuple that exists between a CapableElement and a Capability that it meets under specific environmental conditions.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.61 Checks

Definition

Relation that shows that an acceptance criterion (FitCriterion) is valid for a functional or non-functional requirement.

Meta Model

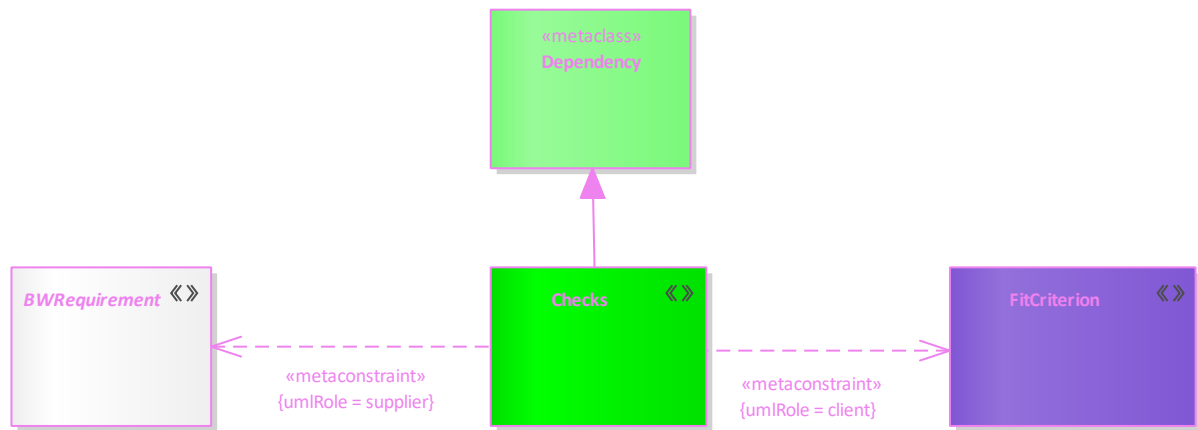


Figure 117: Checks

Elements in Diagram

Name	Definition
BWRRequirement	Abstract base class for requirements.
Checks	Relation that shows that an acceptance criterion (FitCriterion) is valid for a functional or non-functional requirement.
FitCriterion	This element represents an acceptance criterion for a functional or non-functional requirement.

Tagged Values

Relevant Viewpoints

- [R8 - Requirement Fulfilment](#)

3.62 Classification

Definition

Classification according to STANAG 1059.

Meta Model

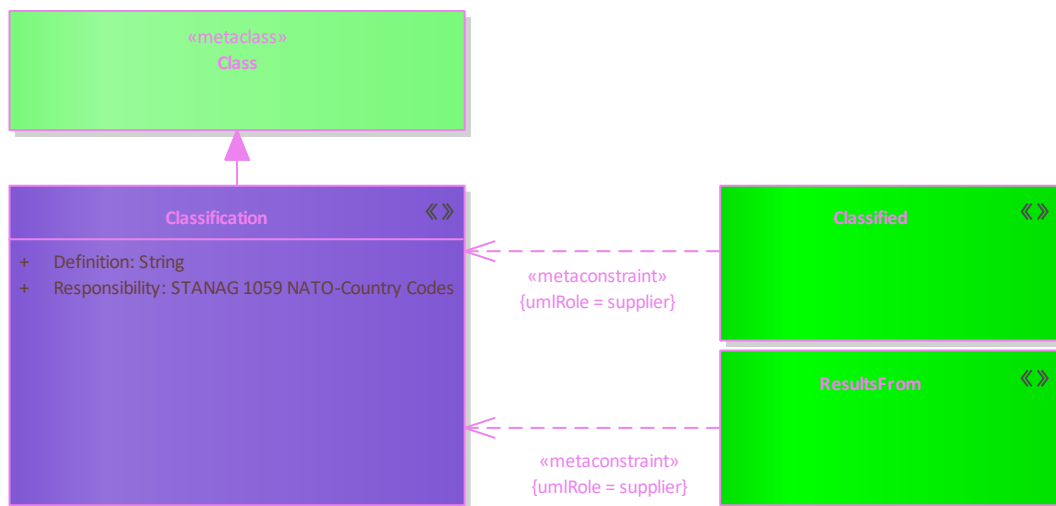


Figure 118: Classification

Elements in Diagram

Name	Definition
Classification	Classification according to STANAG 1059.
Classified	Relationship that indicates which classification an element has.
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.

Tagged Values

Tag Name	Valid Values
Definition	String
Responsibility	STANAG 1059 NATO-Country Codes

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [C1 - Capability Taxonomy](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)

- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R7 - Requirement Derivation](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)

3.63Classified

Definition

Relationship that indicates which classification an element has.

Meta Model

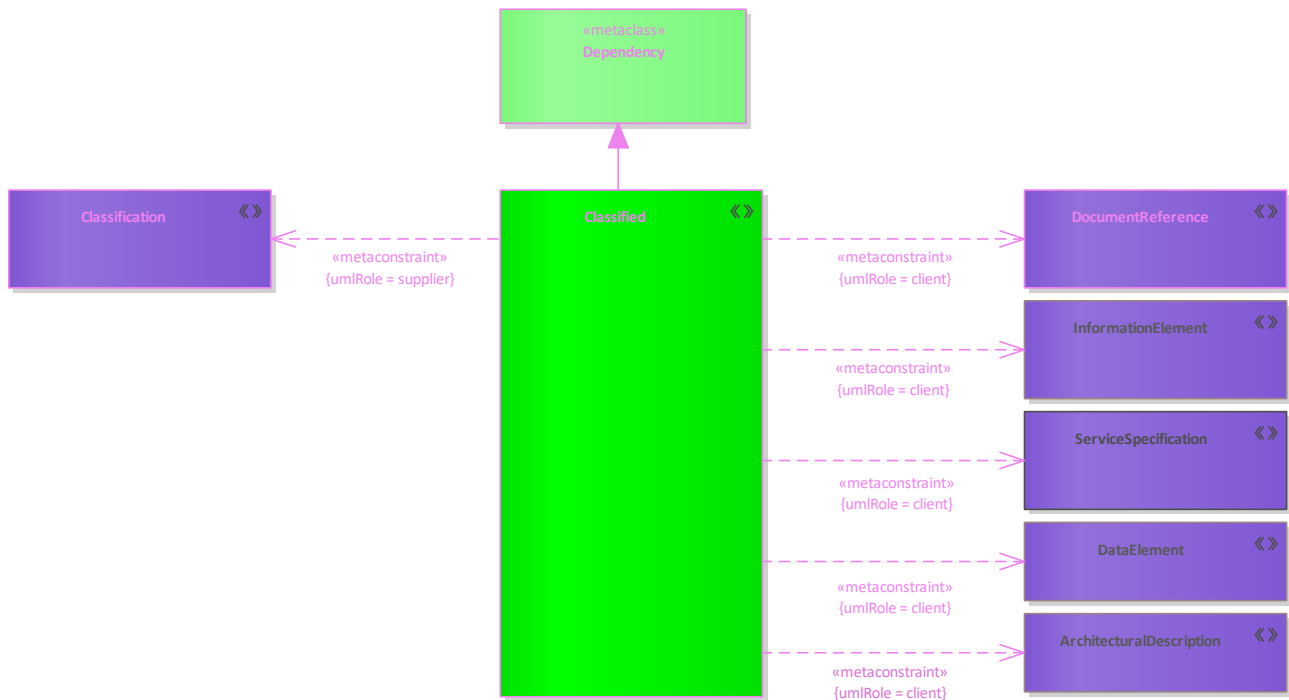


Figure 119: Classified

Elements in Diagram

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
Classification	Classification according to STANAG 1059.
Classified	Relationship that indicates which classification an element has.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DocumentReference	The element describes a regulation, instruction or a general document.
InformationElement	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable to perform (see IsCapableToPerform).
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Tagged Values

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [C1 - Capability Taxonomy](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)

- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R7 - Requirement Derivation](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)

3.64 Command

Definition

A type of ResourceExchange that asserts that one OrganizationalResource commands another.

Meta Model

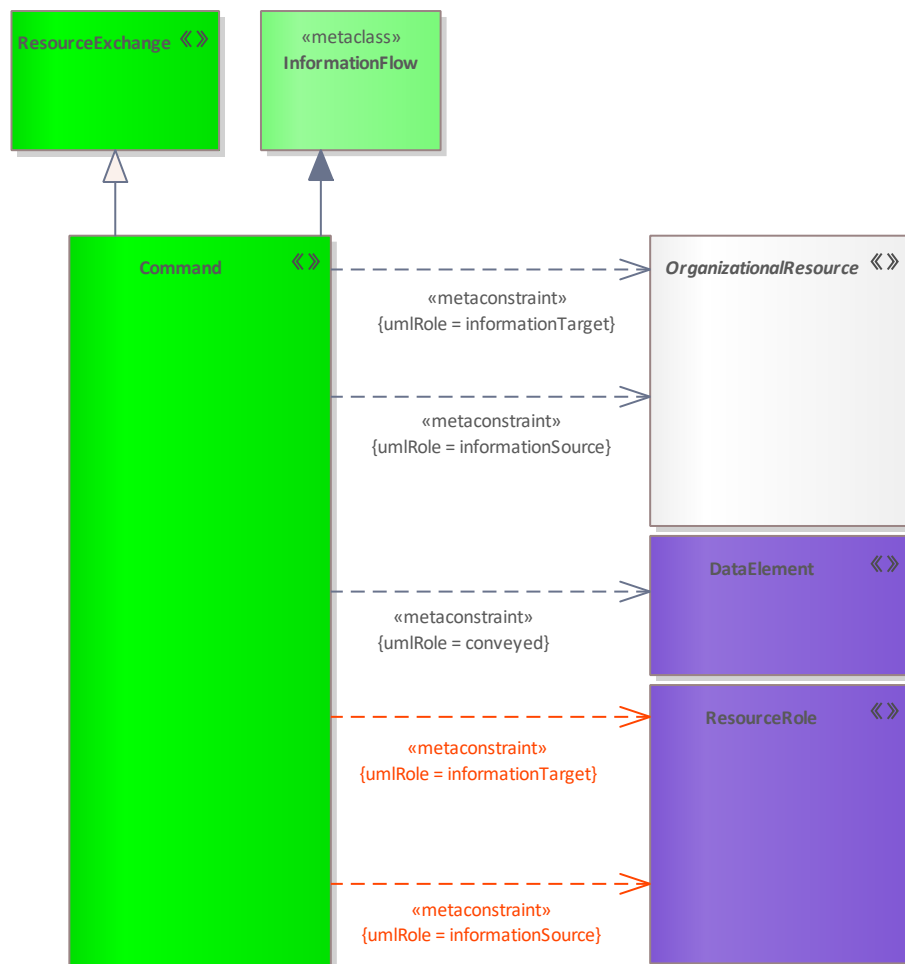


Figure 120: Command

Elements in Diagram

Name	Definition
Command	A type of ResourceExchange that asserts that one OrganizationalResource commands another.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.

Tagged Values

Tag Name	Valid Values
exchangeKind	ResourceCommunication, ResourceMovment, ResourceEnergyFlow, GeoPoliticalExtentExchange
URI	String

Relevant Viewpoints

- [P2 - Resource Structure](#)

3.65 Competence

Definition

A specific set of abilities defined by knowledge, skills and aptitude.

Meta Model

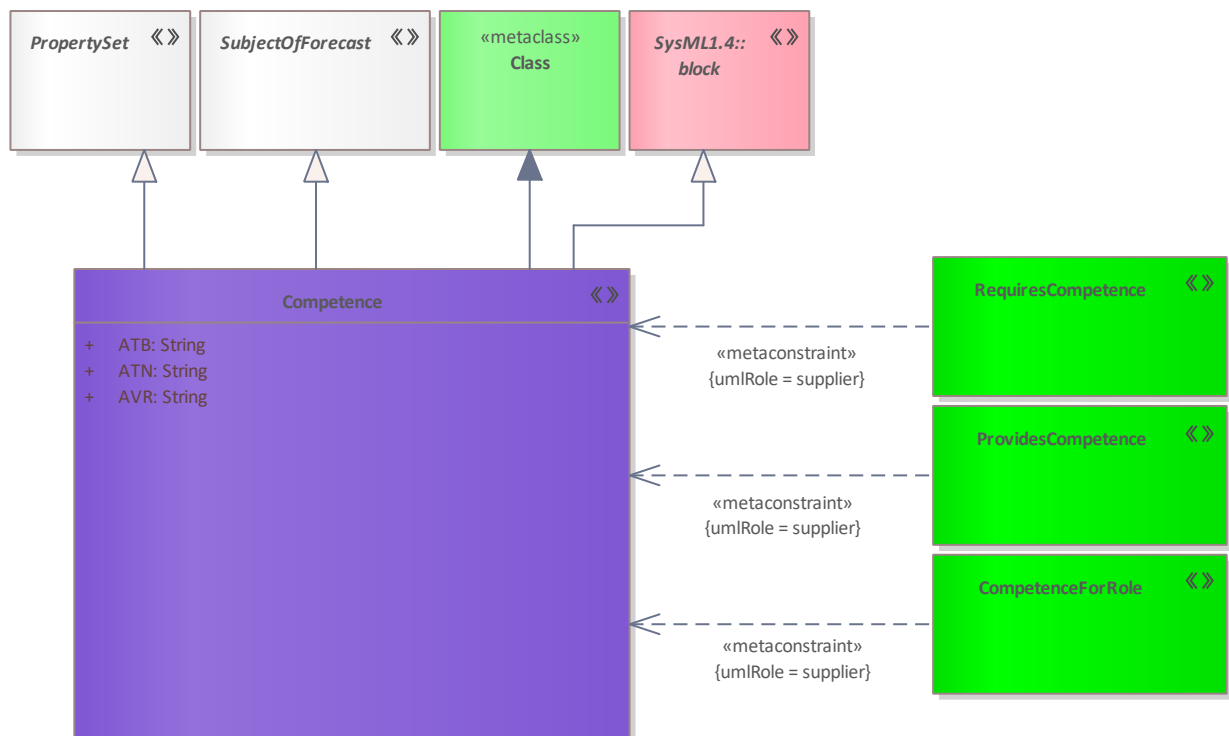


Figure 121: Competence

Elements in Diagram

Name	Definition
Competence	A specific set of abilities defined by knowledge, skills and aptitude.
CompetenceForRole	A tuple used to associate an organizational role with a specific set of required competencies.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
ProvidesCompetence	A tuple that asserts that an ActualOrganizationalResource provides a specific set of Competencies.
RequiresCompetence	A tuple that asserts that an ActualOrganizationalResource is required to have a specific set of Competencies.
SubjectOfForecast	An abstract type grouping elements that can be the subject of a Forecast.

Tagged Values

Tag Name	Valid Values
ATB	String
ATN	String
AVR	String
URI	String

Relevant Viewpoints

- [P1- Resource Types](#)
- [P2 - Resource Structure](#)

3.66 CompetenceForRole

Definition

A tuple used to associate an organizational role with a specific set of required competencies.

Meta Model

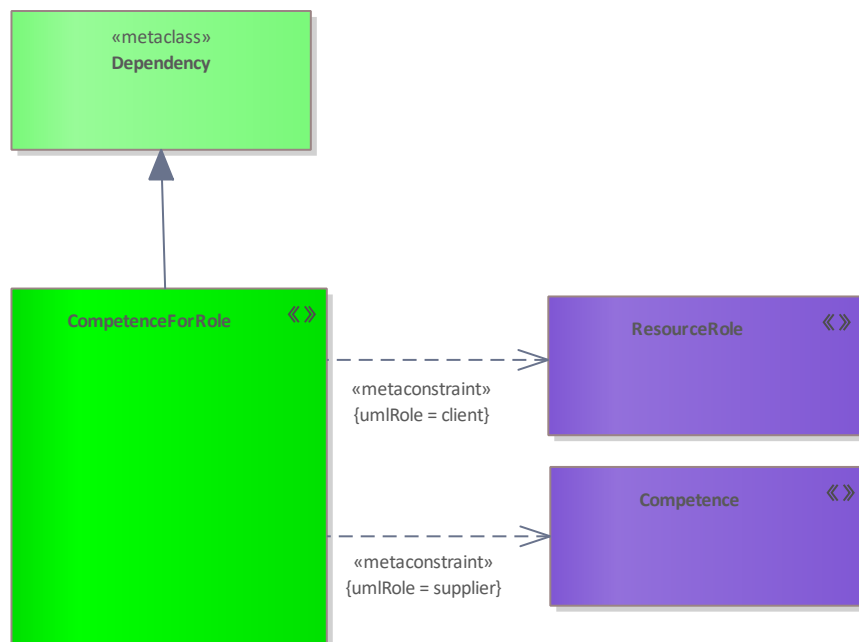


Figure 122: CompetenceForRole

Elements in Diagram

Name	Definition
Competence	A specific set of abilities defined by knowledge, skills and aptitude.
CompetenceForRole	A tuple used to associate an organizational role with a specific set of required competencies.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.

Tagged Values

Relevant Viewpoints

- [P2 - Resource Structure](#)

3.67 CompliesViewpoint

Definition

Relationship that expresses that a view has been created according to the specifications of a viewpoint.

Meta Model

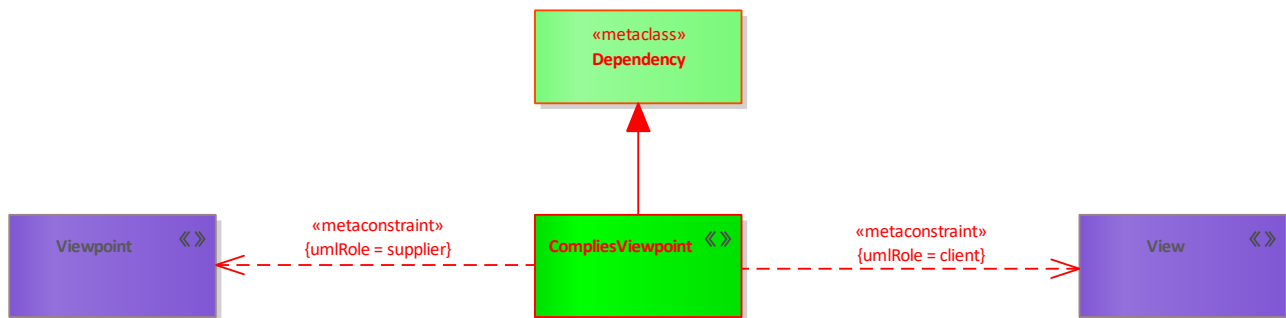


Figure 123: CompliesViewpoint

Elements in Diagram

Name	Definition
CompliesViewpoint	Relationship that expresses that a view has been created according to the specifications of a viewpoint.
View	An architecture view expresses the architecture of the system-of-interest in accordance with an architecture viewpoint (or simply, viewpoint). [ISO/IEC/IEEE 42010:2011(E)].
Viewpoint	An architecture viewpoint frames (to formulate or construct in a particular style or language) one or more concerns. A concern can be framed by more than one viewpoint. [ISO/IEC/IEEE 42010:2011(E)].

Tagged Values

Relevant Viewpoints

- [A2 - Architecture Products](#)

3.68 ConceptItem

Definition

Abstract, an item which may feature in a HighLevelOperationalConcept.

Meta Model

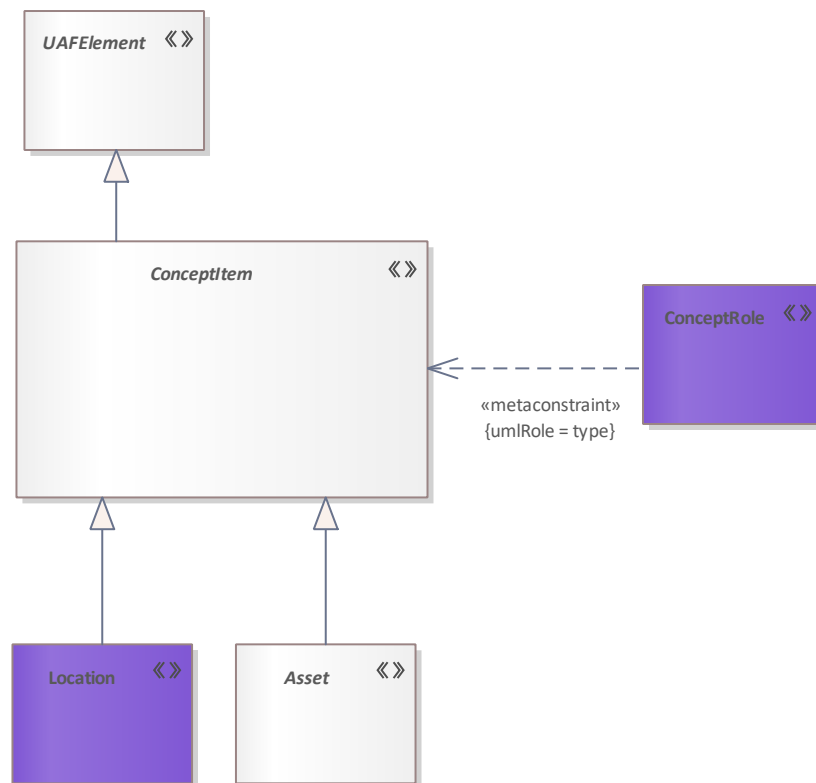


Figure 124: ConceptItem

Elements in Diagram

Name	Definition
Asset	Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.
ConceptItem	Abstract, an item which may feature in a HighLevelOperationalConcept.
ConceptRole	Usage of a ConceptItem in the context of a HighLevelOperationalConcept.
Location	A specification of the generic area in which a LocationHolder is required to be located.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.69 ConceptRole

Definition

Usage of a ConceptItem in the context of a HighLevelOperationalConcept.

Meta Model

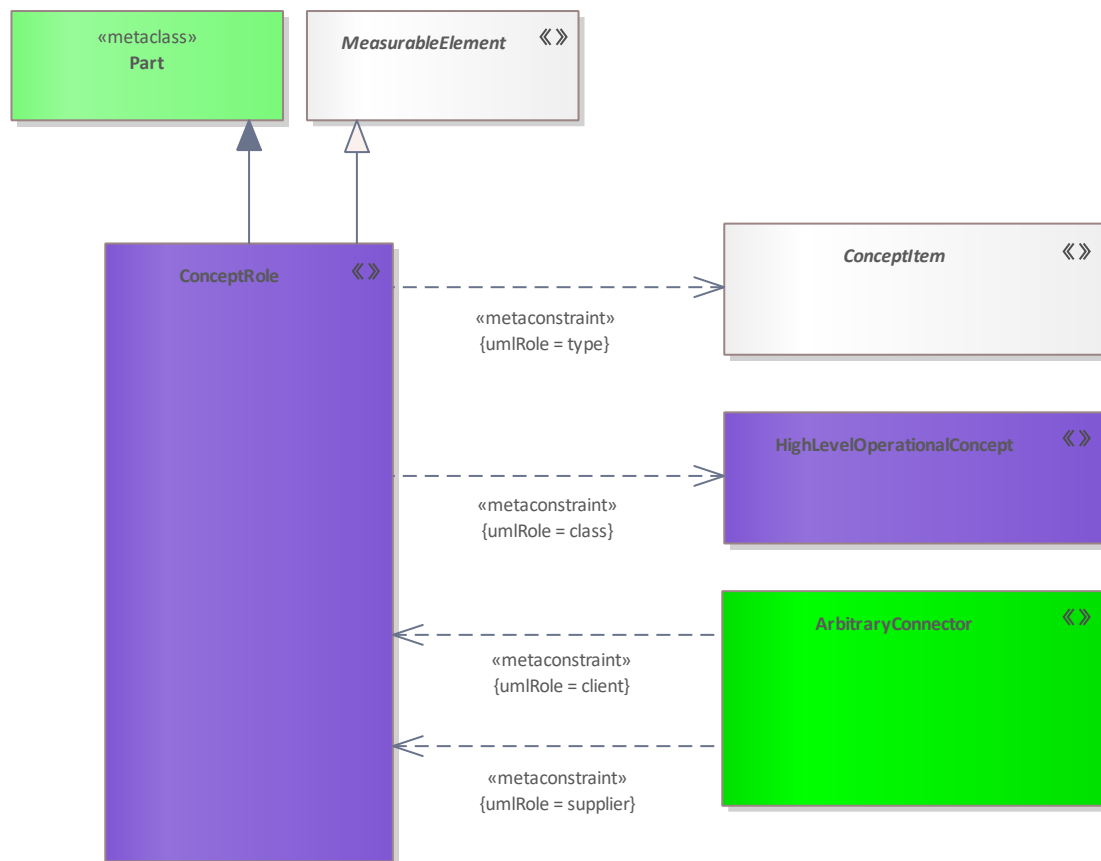


Figure 125: ConceptRole

Elements in Diagram

Name	Definition
ArbitraryConnector	Represents a visual indication of a connection used in high level operational concept diagrams.
ConceptItem	Abstract, an item which may feature in a HighLevelOperationalConcept.
ConceptRole	Usage of a ConceptItem in the context of a HighLevelOperationalConcept.
HighLevelOperationalConcept	Describes the Resources and Locations required to meet an operational scenario from an integrated systems point of view. It is used to communicate overall quantitative and qualitative system characteristics to stakeholders
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L2-L3 - Logical Concept Viewpoint](#)

3.70 Concern

Definition

Interest in an EnterprisePhase (EnterprisePhase is synonym for System in ISO 42010) relevant to one or more of its stakeholders.

Meta Model

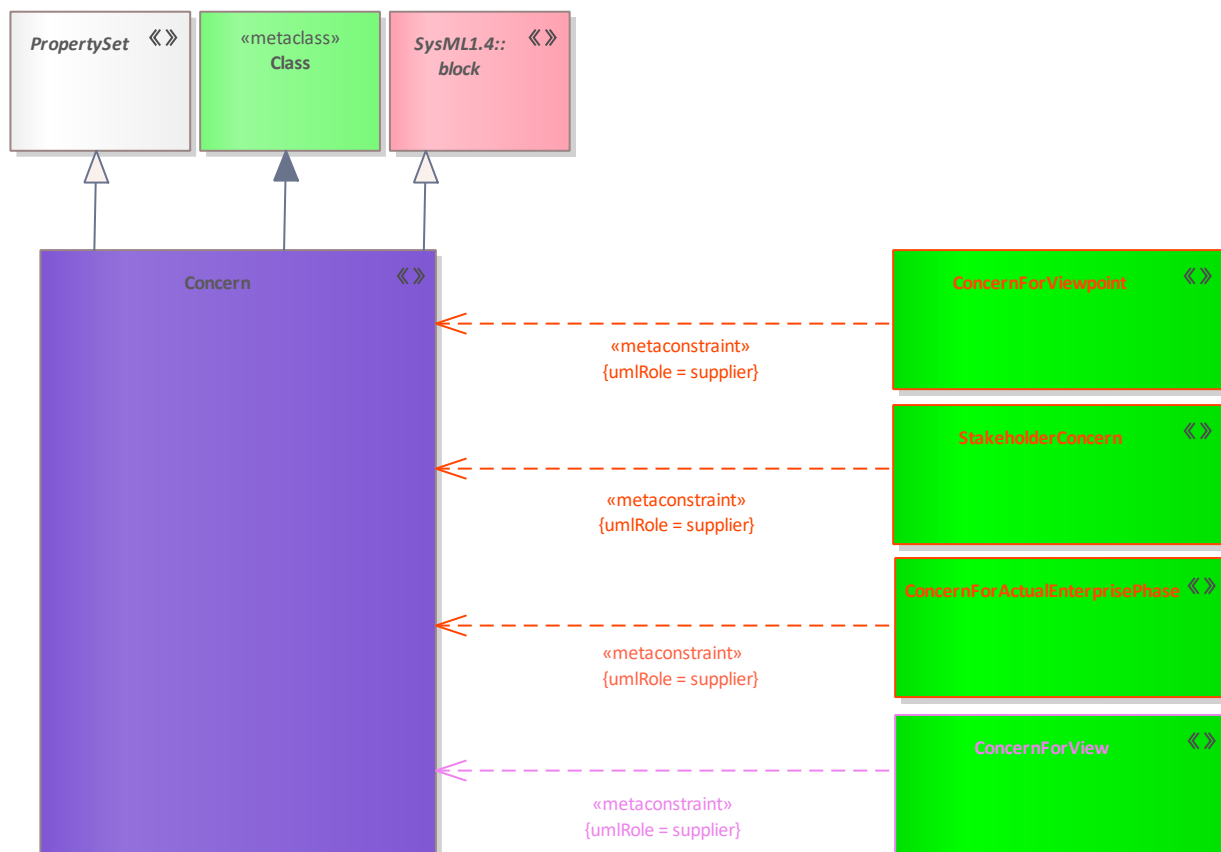


Figure 126: Concern

Elements in Diagram

Name	Definition
Concern	Interest in an EnterprisePhase (EnterprisePhase is synonym for System in ISO 42010) relevant to one or more of its stakeholders.
ConcernForActualEnterprisePhase	A relationship that expresses which concerns are covered by an actual enterprise phase.
ConcernForView	A relationship that expresses which concerns are covered by view.
ConcernForViewpoint	A relationship that expresses which concerns are covered by viewpoint.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
StakeholderConcern	A relationship that expresses which concern a stakeholder has.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [A2 - Architecture Products](#)

3.71 ConcernForActualEnterprisePhase

Definition

A relationship that expresses which concerns are covered by an actual enterprise phase.

Meta Model

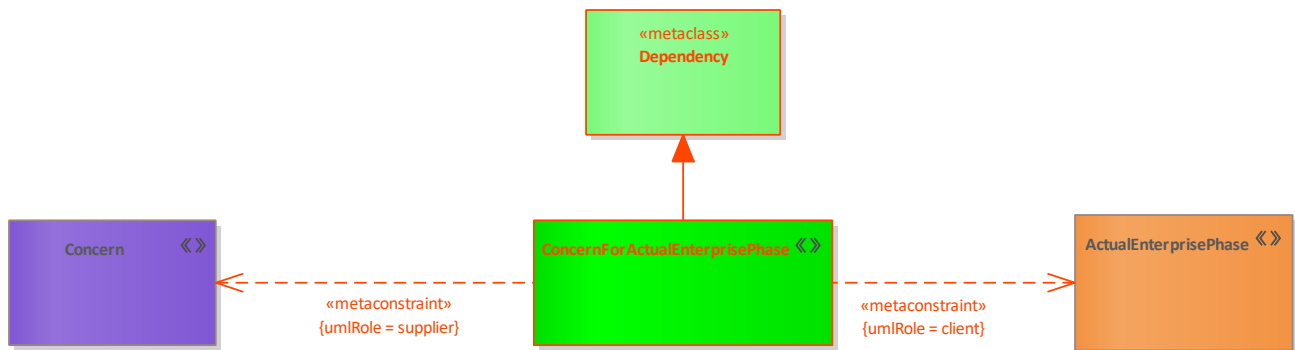


Figure 127: ConcernForActualEnterprisePhase

Elements in Diagram

Name	Definition
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
Concern	Interest in an EnterprisePhase (EnterprisePhase is synonym for System in ISO 42010) relevant to one or more of its stakeholders.
ConcernForActualEnterprisePhase	A relationship that expresses which concerns are covered by an actual enterprise phase.

Tagged Values

Relevant Viewpoints

3.72 ConcernForView

Definition

A relationship that expresses which concerns are covered by view.

Meta Model

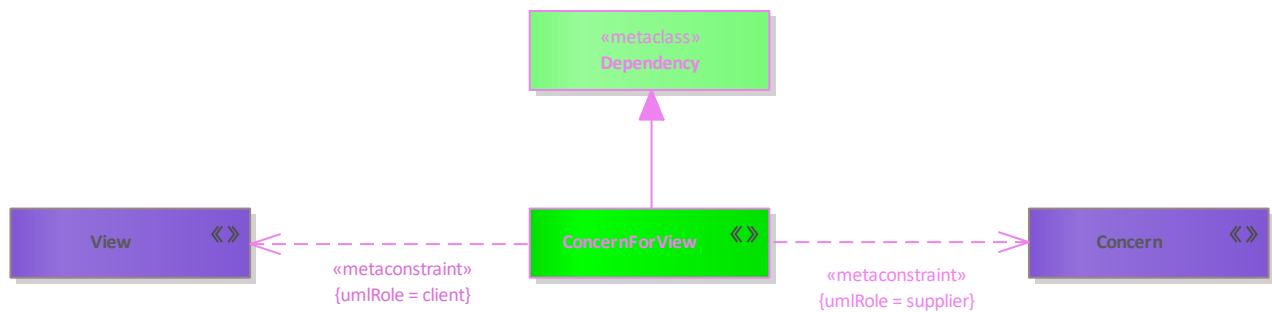


Figure 128: ConcernForView

Elements in Diagram

Name	Definition
Concern	Interest in an EnterprisePhase (EnterprisePhase is synonym for System in ISO 42010) relevant to one or more of its stakeholders.
ConcernForView	A relationship that expresses which concerns are covered by view.
View	An architecture view expresses the architecture of the system-of-interest in accordance with an architecture viewpoint (or simply, viewpoint). [ISO/IEC/IEEE 42010:2011(E)].

Tagged Values

Relevant Viewpoints

- [A2 - Architecture Products](#)

3.73 ConcernForViewpoint

Definition

A relationship that expresses which concerns are covered by viewpoint.

Meta Model

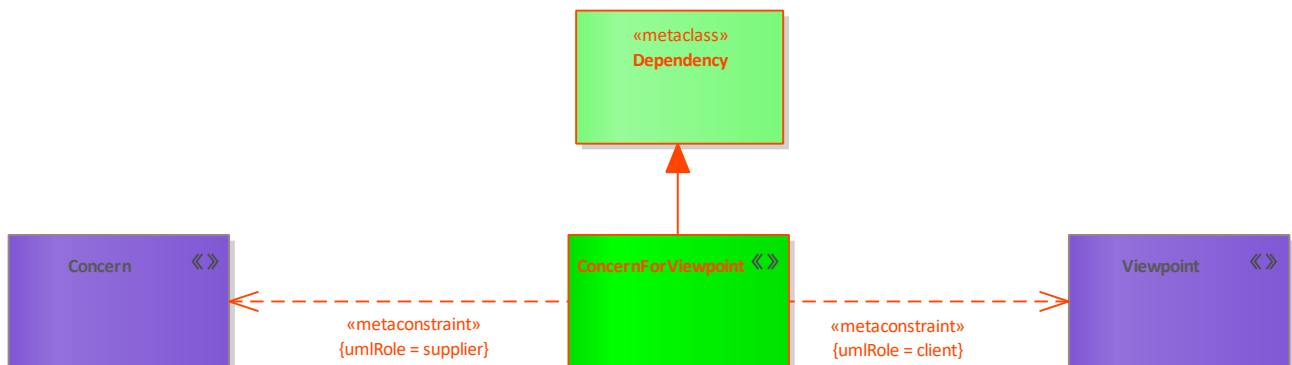


Figure 129: ConcernForViewpoint

Elements in Diagram

Name	Definition
Concern	Interest in an EnterprisePhase (EnterprisePhase is synonym for System in ISO 42010) relevant to one or more of its stakeholders.
ConcernForViewpoint	A relationship that expresses which concerns are covered by viewpoint.
Viewpoint	An architecture viewpoint frames (to formulate or construct in a particular style or language) one or more concerns. A concern can be framed by more than one viewpoint. [ISO/IEC/IEEE 42010:2011(E)].

Tagged Values

Relevant Viewpoints

- [A2 - Architecture Products](#)

3.74Condition

Definition

A type that defines the Location, Environment and/or GeoPoliticalExtent.

Meta Model

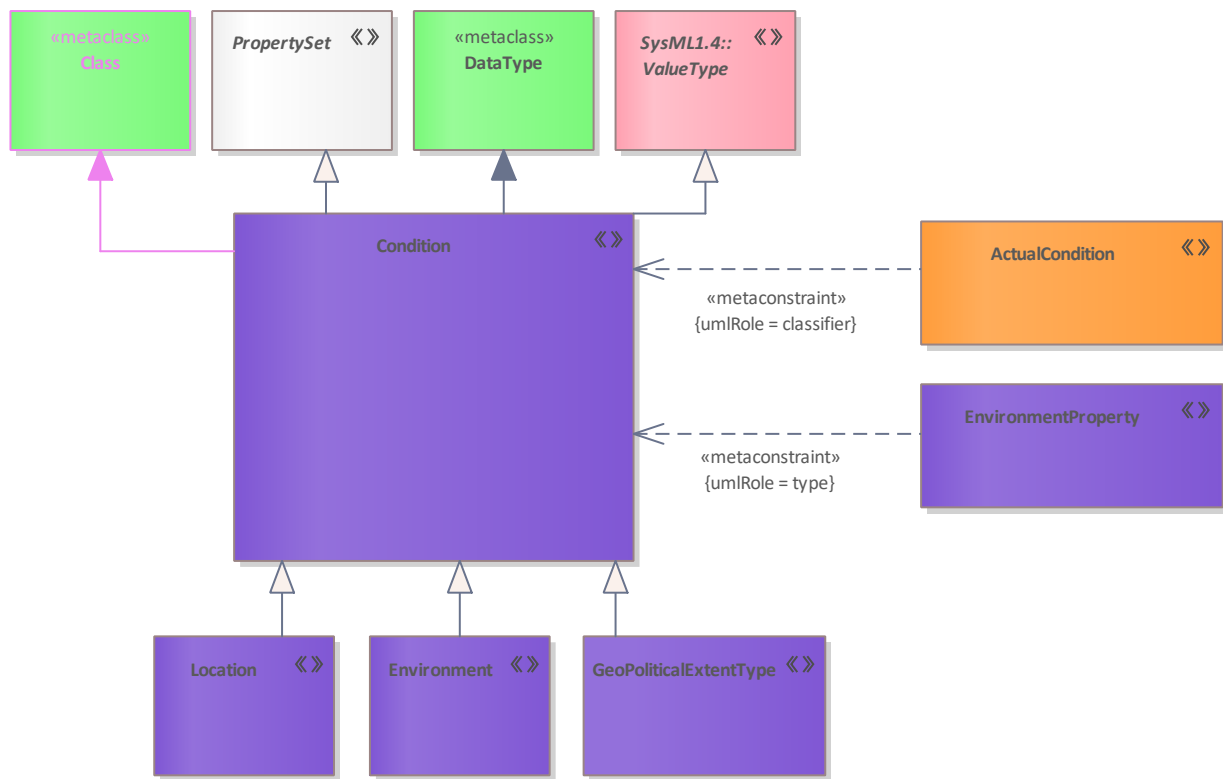


Figure 130: Condition

Elements in Diagram

Name	Definition
ActualCondition	An individual describing an actual situation with respect to circumstances under which an OperationalActivity, Function or ServiceFunction can be performed.
Condition	A type that defines the Location, Environment and/or GeoPoliticalExtent.
Environment	A definition of the environmental factors in which something exists or functions. The definition of an Environment element can be further defined using EnvironmentKind.
EnvironmentProperty	A property of an Environment that is typed by a Condition. The kinds of Condition that can be represented are Location, GeoPoliticalExtentType and Environment.
GeoPoliticalExtentType	A geospatial extent whose boundaries are defined by declaration or agreement by political parties.
Location	A specification of the generic area in which a LocationHolder is required to be located.
PropertySet	An abstract type grouping architectural elements that can own Measurements.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)

- [L3 - Node Interaction](#)

3.75ConflictsWith

Definition

Relation that represents a conflict between two requirements.

Meta Model

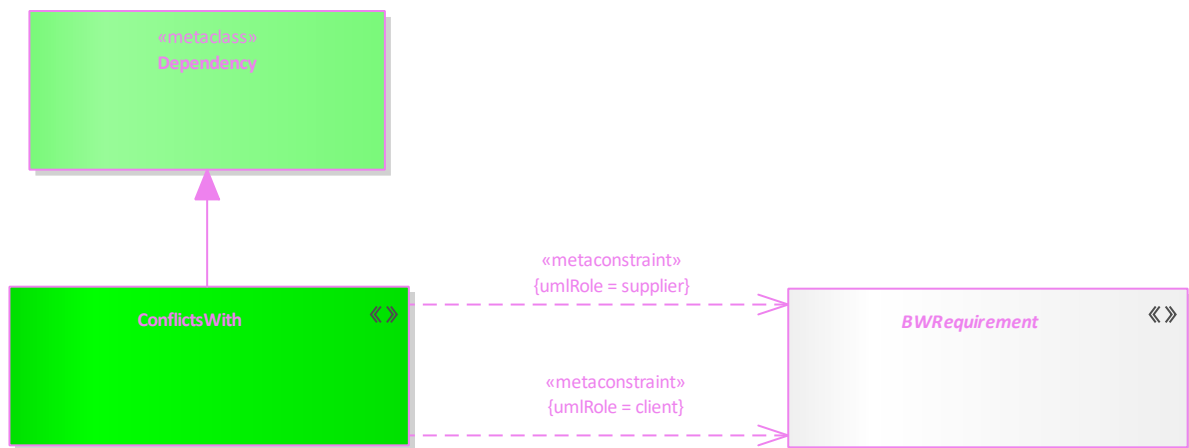


Figure 131: ConflictsWith

Elements in Diagram

Name	Definition
BWRRequirement	Abstract base class for requirements.
ConflictsWith	Relation that represents a conflict between two requirements.

Tagged Values

Relevant Viewpoints

- [R3 - Requirement Dependencies](#)

3.76ConformsTo

Definition

A relationship that expresses that an UAFElement conforms to a standard.

Meta Model

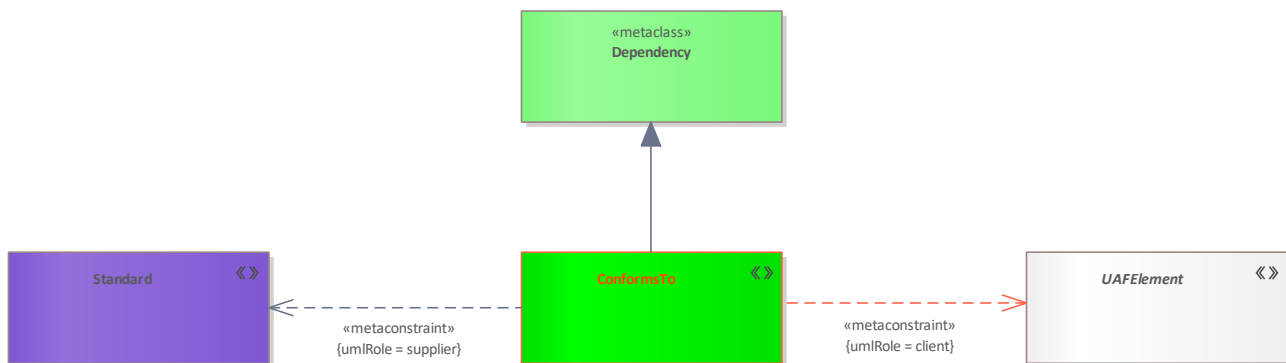


Figure 132: ConformsTo

Elements in Diagram

Name	Definition
ConformsTo	A relationship that expresses that an UAFElement conforms to a standard.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [A2 - Architecture Products](#)
- [A3 - Architecture Correspondence](#)
- [A6 - Architecture Versions](#)
- [A7 - Architecture Compliance](#)
- [A8 - Standards](#)
- [Ar - Architecture Roadmap](#)
- [C1 - Capability Taxonomy](#)
- [C1-S1 - Capability to Service Mapping](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [Cr - Capability Roadmap](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)

- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R2 - Requirement Catalogue](#)
- [R3 - Requirement Dependencies](#)
- [R7 - Requirement Derivation](#)
- [R8 - Requirement Fulfilment](#)
- [Rr - Requirement Realization](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S6 - Service Interactions](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)
- [Sr - Service Roadmap](#)

3.77 ConsumedBy

Definition

Asserts that a service is consumed by a node. It is not required to know what provides the service.

Meta Model

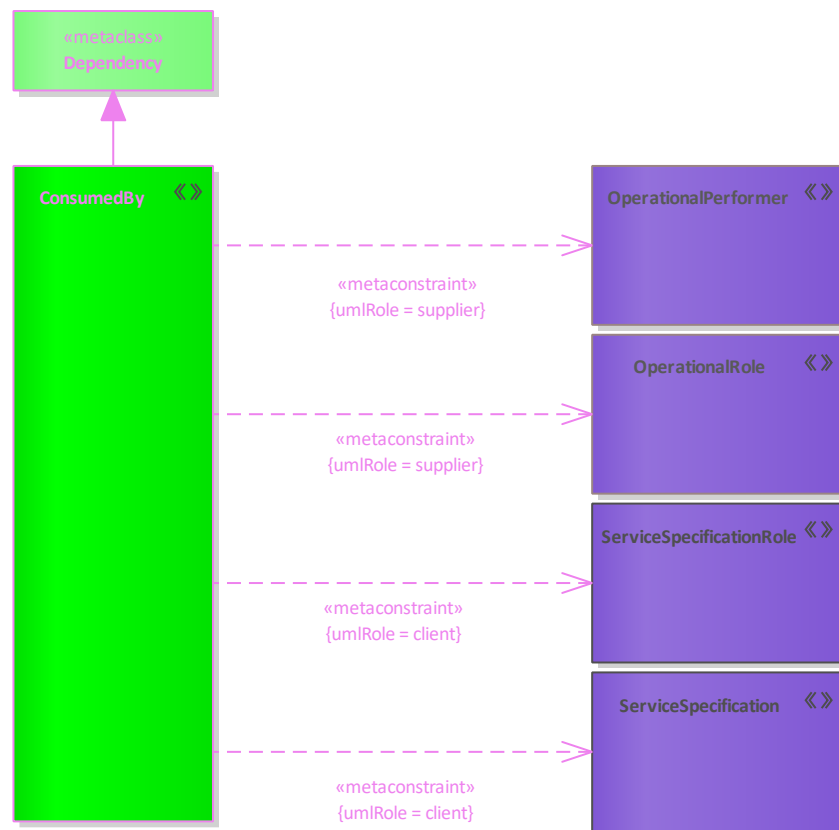


Figure 133: ConsumedBy

Elements in Diagram

Name	Definition
ConsumedBy	Asserts that a service is consumed by a node. It is not required to know what provides the service.
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

Tagged Values

Relevant Viewpoints

- [L3 - Node Interaction](#)

3.78Control

Definition

A type of ResourceExchange that asserts that one PhysicalResource controls another PhysicalResource (i.e. the driver of a vehicle controlling the vehicle speed or direction).

Meta Model

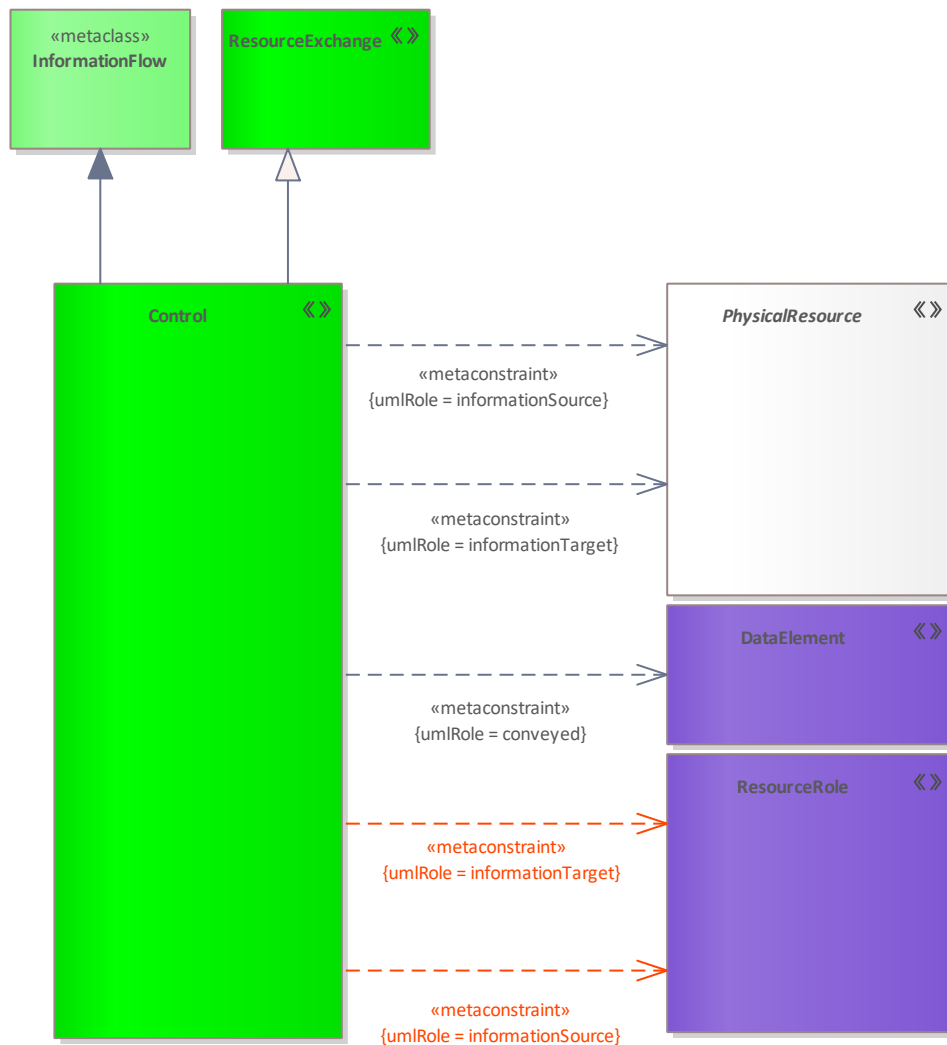


Figure 134: Control

Elements in Diagram

Name	Definition
Control	A type of ResourceExchange that asserts that one PhysicalResource controls another PhysicalResource (i.e. the driver of a vehicle controlling the vehicle speed or direction).
DataElement	A formalized representation of data that is managed by or exchanged between resources.
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.

Tagged Values

Tag Name	Valid Values
----------	--------------

exchangeKind	ResourceCommunication, ResourceMovment, ResourceEnergyFlow, GeoPoliticalExtentExchange
URI	String

Relevant Viewpoints

- [L6 - Logical Sequence](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P6 - Resource Sequence](#)
- [S6 - Service Interactions](#)

3.79 DataElement

Definition

A formalized representation of data that is managed by or exchanged between resources.

Meta Model

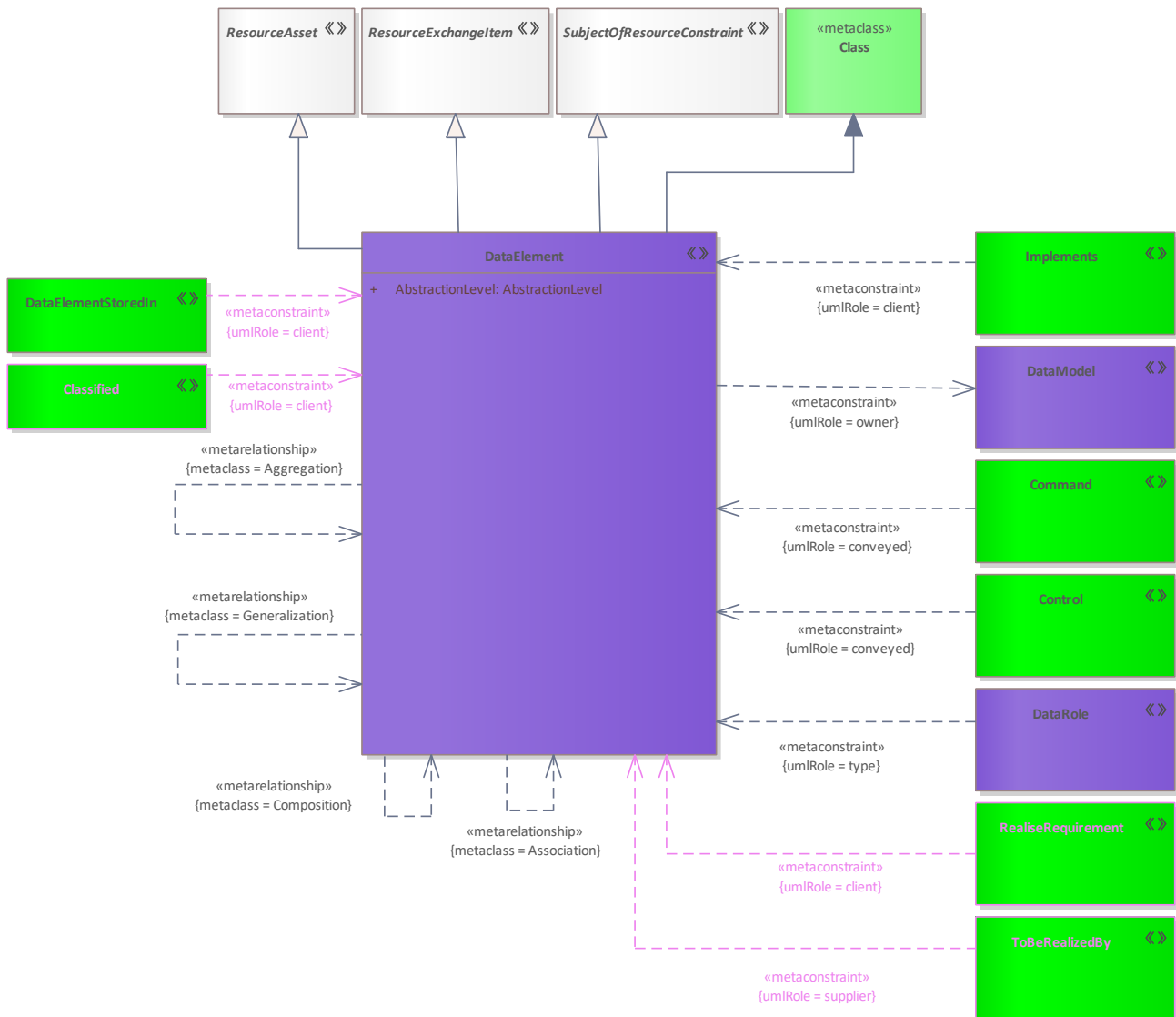


Figure 135: DataElement

Elements in Diagram

Name	Definition
Classified	Relationship that indicates which classification an element has.
Command	A type of ResourceExchange that asserts that one OrganizationalResource commands another.
Control	A type of ResourceExchange that asserts that one PhysicalResource controls another PhysicalResource (i.e. the driver of a vehicle controlling the vehicle speed or direction).
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DataElementStoredIn	Relation says that a data is stored in software.
DataModel	A structural specification of data types, showing relationships between them that is devoid of implementation detail. The type of data captured in the DataModel is described using the enumeration DataModelKind (Conceptual, Logical and Physical).

Name	Definition
DataRole	A usage of DataElement that exists in the context of an ResourceAsset. It also allows the representation of the whole-part aggregation of DataElements.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
ResourceAsset	An abstract element used to group the elements of ResourcePerformer and DataElement allowing them to own DataRoles
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L2-L3 - Logical Concept Viewpoint](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P7 - Data Model](#)
- [S3 - Service Interfaces](#)

3.80 DataElementStoredIn

Definition

Relation says that a data is stored in software.

Meta Model

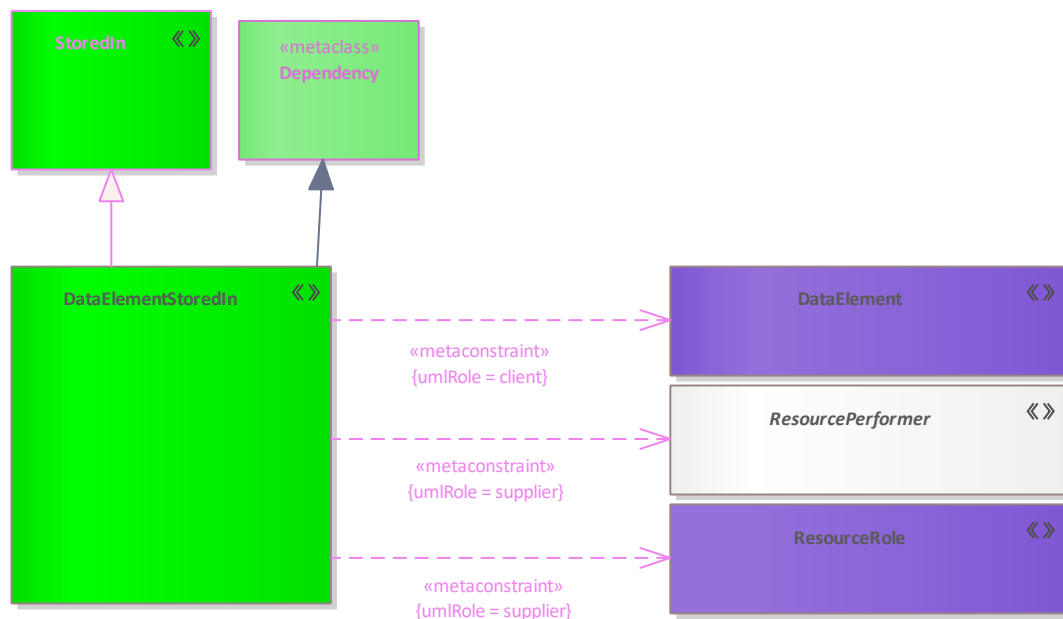


Figure 136: DataElementStoredIn

Elements in Diagram

Name	Definition
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DataElementStoredIn	Relation says that a data is stored in software.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
StoredIn	Relation states that a digital form or data is stored in software.

Tagged Values

Tag Name	Valid Values
originalSource	true, false, unknown, not set

Relevant Viewpoints

- [P1- Resource Types](#)

3.81 DataModel

Definition

A structural specification of data types, showing relationships between them that is devoid of implementation detail. The type of data captured in the DataModel is described using the enumeration DataModelKind (Conceptual, Logical and Physical).

Meta Model

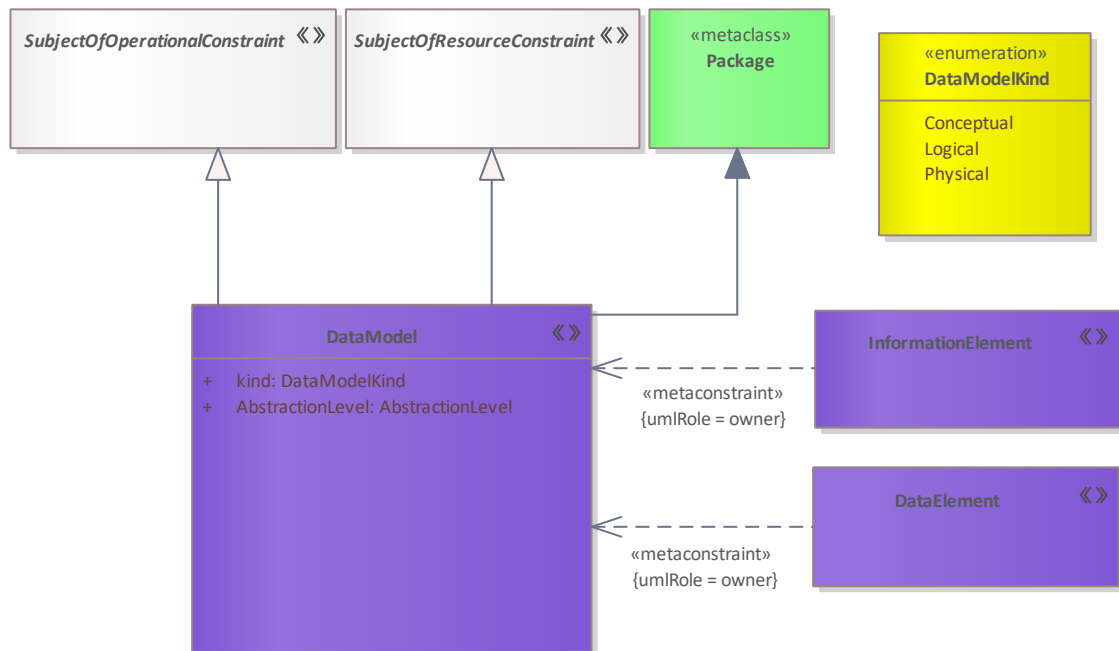


Figure 137: DataModel

Elements in Diagram

Name	Definition
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DataModel	A structural specification of data types, showing relationships between them that is devoid of implementation detail. The type of data captured in the DataModel is described using the enumeration DataModelKind (Conceptual, Logical and Physical).
InformationElement	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable to perform (see IsCapableToPerform).
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.

Tagged Values

Tag Name	Valid Values
kind	Conceptual, Logical, Physical
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [P7 - Data Model](#)

3.82 DataRole

Definition

A usage of DataElement that exists in the context of an ResourceAsset. It also allows the representation of the whole-part aggregation of DataElements.

Meta Model

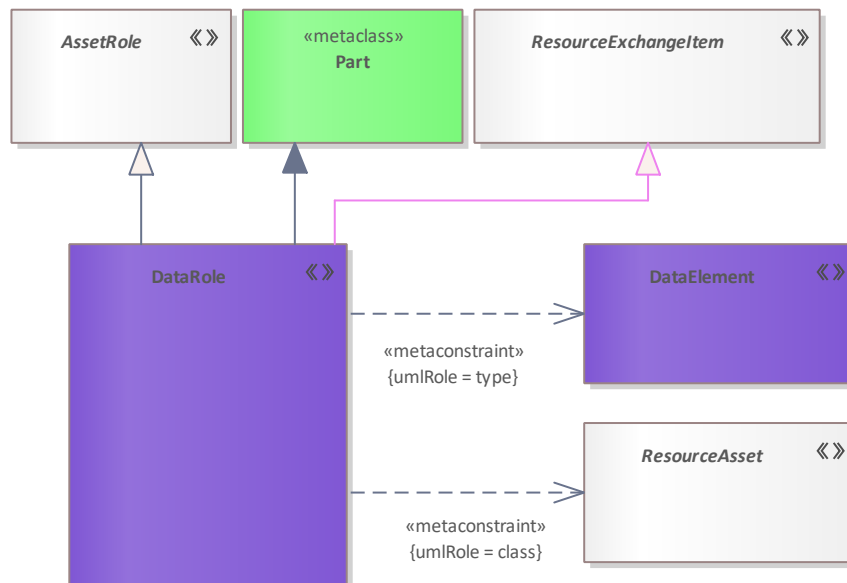


Figure 138: DataRole

Elements in Diagram

Name	Definition
AssetRole	AssetRole as applied to Security views, an abstract element that indicates the type of elements that can be considered as a subject for security analysis in the particular context (currently no security viewpoints in the framework).
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DataRole	A usage of DataElement that exists in the context of an ResourceAsset. It also allows the representation of the whole-part aggregation of DataElements.
ResourceAsset	An abstract element used to group the elements of ResourcePerformer and DataElement allowing them to own DataRoles
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P7 - Data Model](#)
- [S3 - Service Interfaces](#)

3.83 Definition

Definition

A comment containing a description of an element in the architecture.

Meta Model

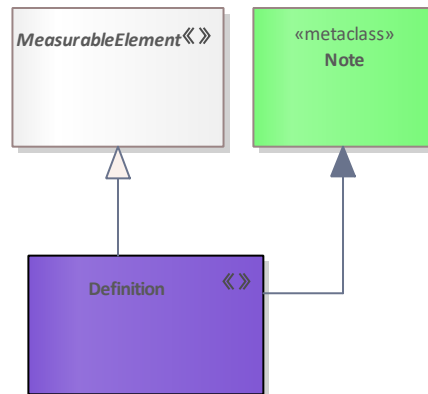


Figure 139: Definition

Elements in Diagram

Name	Definition
Definition	A comment containing a description of an element in the architecture.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.84 DerivedFrom

Definition

Relation that shows that a functional or non-functional requirement is based on a process, role and task carrier, information element or other element.

Meta Model

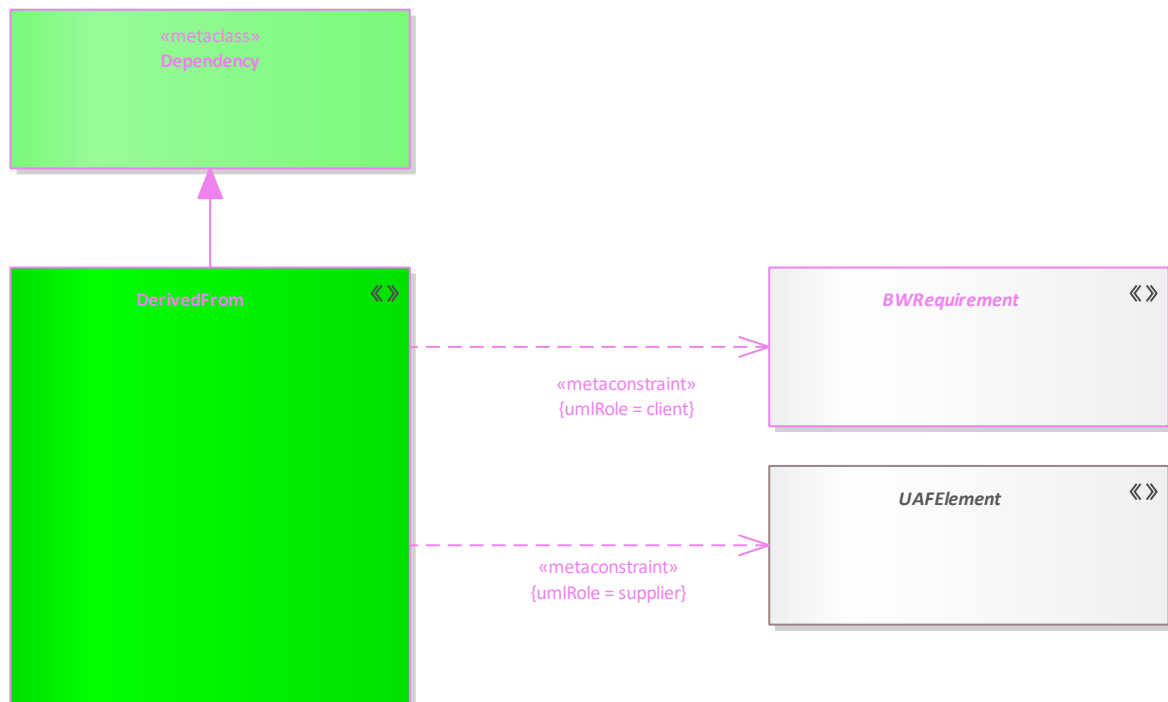


Figure 140: DerivedFrom

Elements in Diagram

Name	Definition
BWRRequirement	Abstract base class for requirements.
DerivedFrom	Relation that shows that a functional or non-functional requirement is based on a process, role and task carrier, information element or other element.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Relevant Viewpoints

- [R7 - Requirement Derivation](#)

3.85 DescribedBy

Definition

A relationship that expresses that an architectural description describes an architecture.

Meta Model

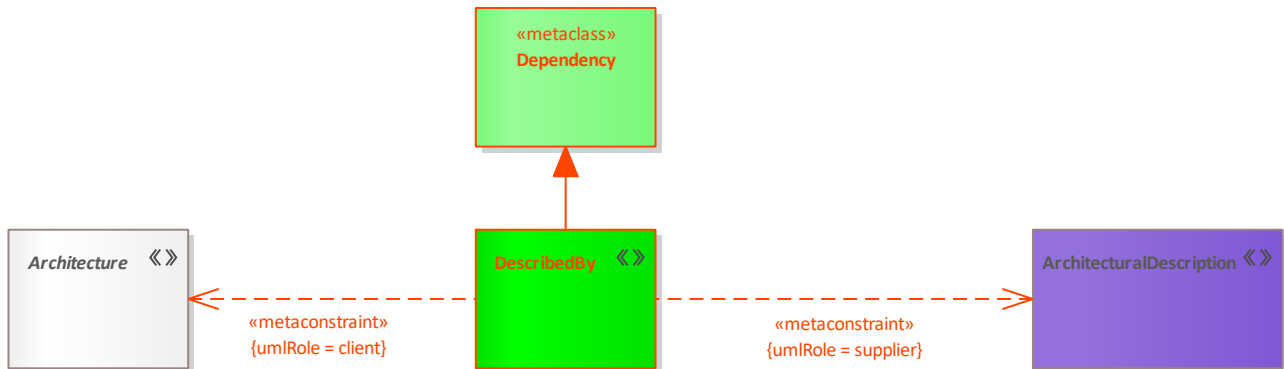


Figure 141: DescribedBy

Elements in Diagram

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
Architecture	An abstract type that represents a generic architecture. Subtypes are OperationalArchitecture and ResourceArchitecture.
DescribedBy	A relationship that expresses that an architectural description describes an architecture.

Tagged Values

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)

3.86 DesiredEffect

Definition

A tuple relating the Desirer (a Capability or OrganizationalResource) to an ActualState.

Meta Model

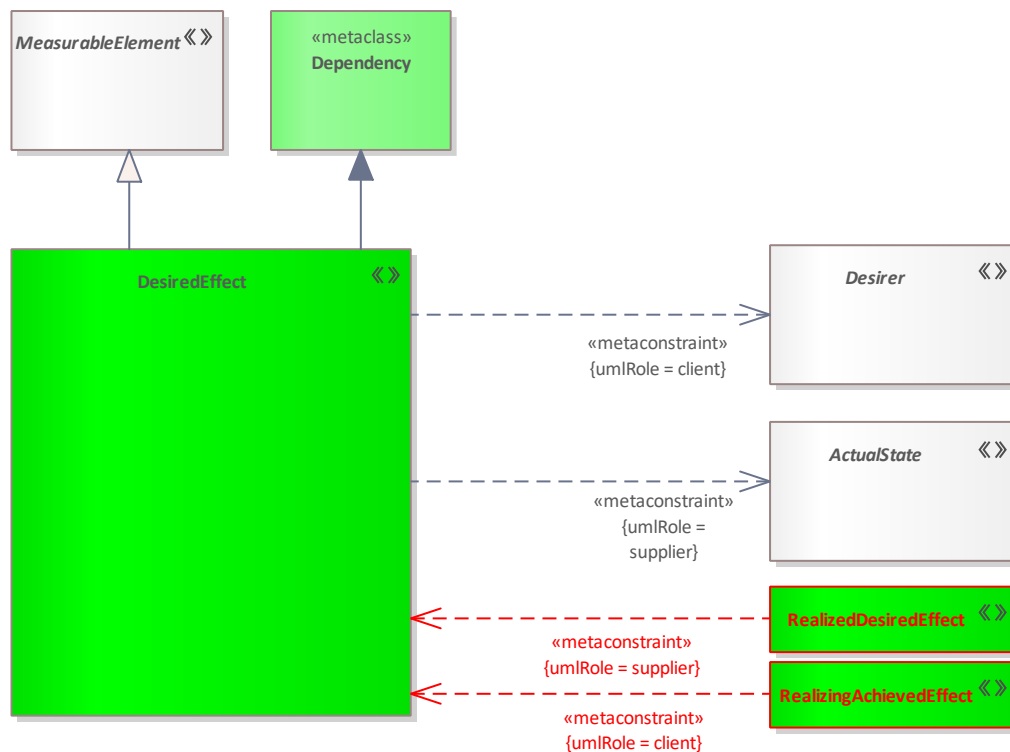


Figure 142: DesiredEffect

Elements in Diagram

Name	Definition
ActualState	Abstract element that applies temporal extent to a set of elements realized as Instance Specifications.
DesiredEffect	A tuple relating the Desirer (a Capability or OrganizationalResource) to an ActualState.
Desirer	Abstract type used to group architecture elements that might desire a particular effect.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
RealizedDesiredEffect	Relationship that expresses which connector DesiredEffect the connector AchievedEffect realizes.
RealizingAchievedEffect	Relationship that expresses which connector AchievedEffect realizes the connector DesiredEffect.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [C5 - Effects](#)

3.87 Desirer

Definition

Abstract type used to group architecture elements that might desire a particular effect.

Meta Model

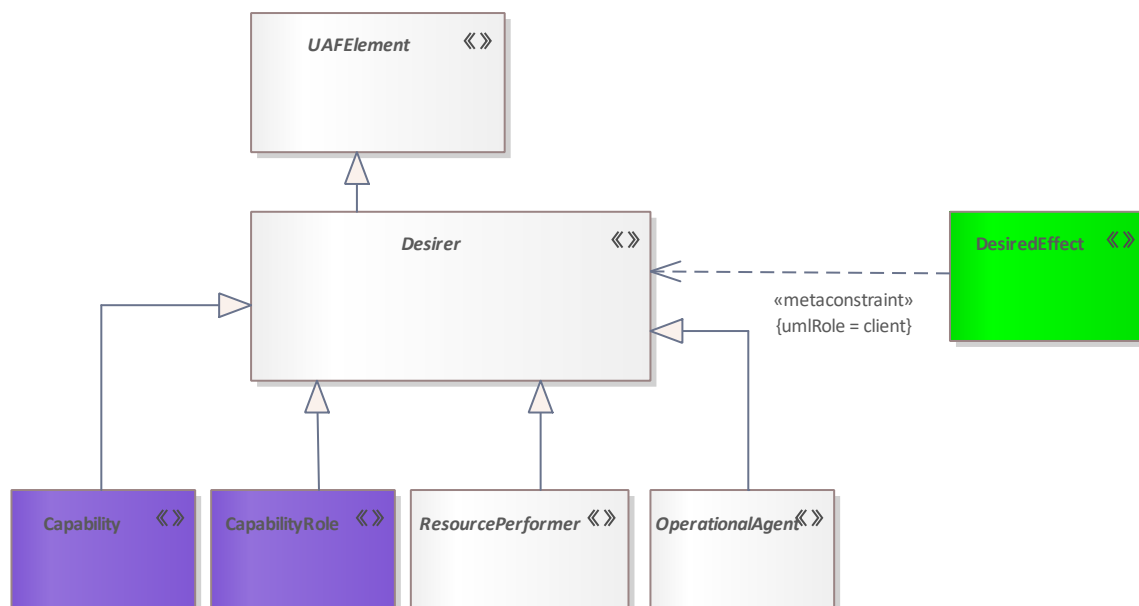


Figure 143: Desirer

Elements in Diagram

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityRole	A high level specification of the enterprise's ability to execute a specified course of action.
DesiredEffect	A tuple relating the Desirer (a Capability or OrganizationalResource) to an ActualState.
Desirer	Abstract type used to group architecture elements that might desire a particular effect.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
UAFEElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.88 DocumentReference

Definition

The element describes a regulation, instruction or a general document.

Meta Model

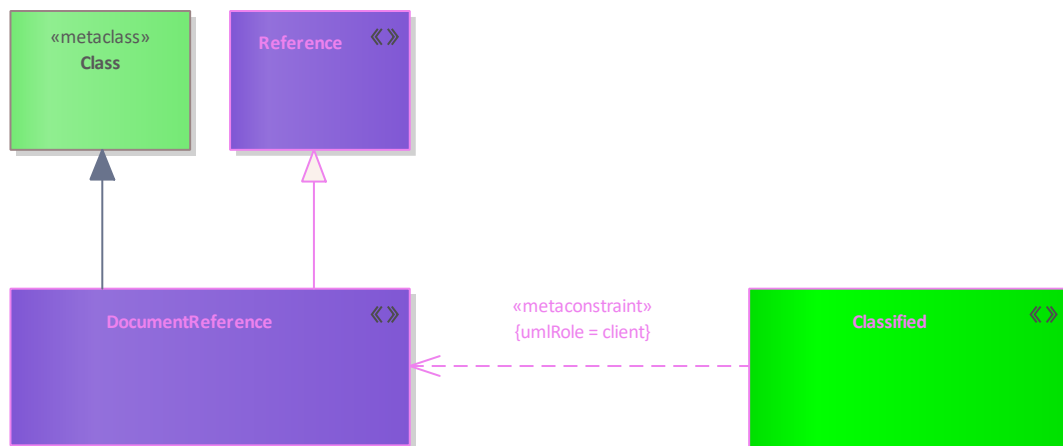


Figure 144: DocumentReference

Elements in Diagram

Name	Definition
Classified	Relationship that indicates which classification an element has.
DocumentReference	The element describes a regulation, instruction or a general document.
Reference	Element describes all types of references.

Tagged Values

Tag Name	Valid Values
Date	Date

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)

- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R7 - Requirement Derivation](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)

3.89EnduringTask

Definition

A type of template behavior recognized by an enterprise as being essential to achieving its goals - i.e. a template for a strategic specification of what the enterprise does.

Meta Model

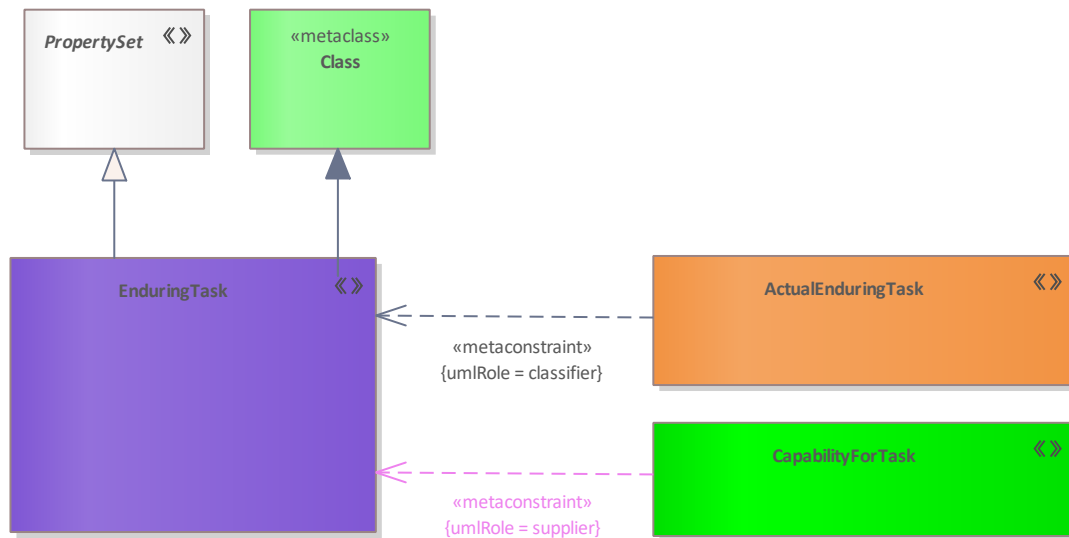


Figure 145: EnduringTask

Elements in Diagram

Name	Definition
ActualEnduringTask	An actual undertaking recognized by an enterprise as being essential to achieving its goals - i.e. a strategic specification of what the enterprise does.
CapabilityForTask	A tuple that asserts that a Capability is required in order for an Enterprise to conduct a phase of an EnduringTask.
EnduringTask	A type of template behavior recognized by an enterprise as being essential to achieving its goals - i.e. a template for a strategic specification of what the enterprise does.
PropertySet	An abstract type grouping architectural elements that can own Measurements.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [C2 - Enterprise Vision](#)
- [C4 - Standard Processes](#)

3.90Energy

Definition

A representation of any kind of energy.

Meta Model

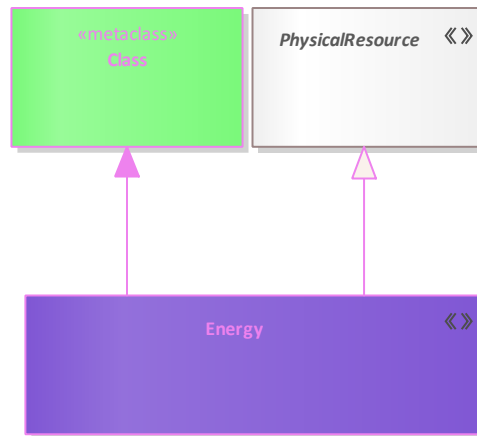


Figure 146: Energy

Elements in Diagram

Name	Definition
Energy	A representation of any kind of energy.
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)

3.91 EnterpriseGoal

Definition

A statement about a state or condition of the enterprise to be brought about or sustained through appropriate Means. An EnterpriseGoal amplifies an EnterpriseVision that is, it indicates what must be satisfied on a continuing basis to effectively attain the EnterpriseVision.

Meta Model

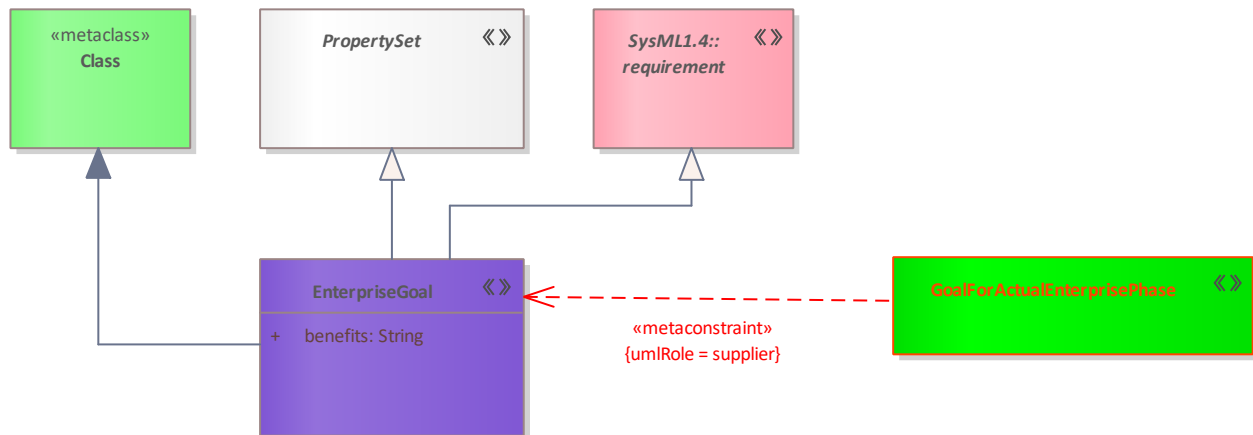


Figure 147: EnterpriseGoal

Elements in Diagram

Name	Definition
EnterpriseGoal	A statement about a state or condition of the enterprise to be brought about or sustained through appropriate Means. An EnterpriseGoal amplifies an EnterpriseVision that is, it indicates what must be satisfied on a continuing basis to effectively attain the EnterpriseVision.
GoalForActualEnterprisePhase	A relationship that expresses which actual enterprise phase implements an enterprise goal.
PropertySet	An abstract type grouping architectural elements that can own Measurements.

Tagged Values

Tag Name	Valid Values
benefits	String
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [C2 - Enterprise Vision](#)

3.92 EnterprisePhase

Definition

A current or future state of the wholeLifeEnterprise or another EnterprisePhase.

Meta Model

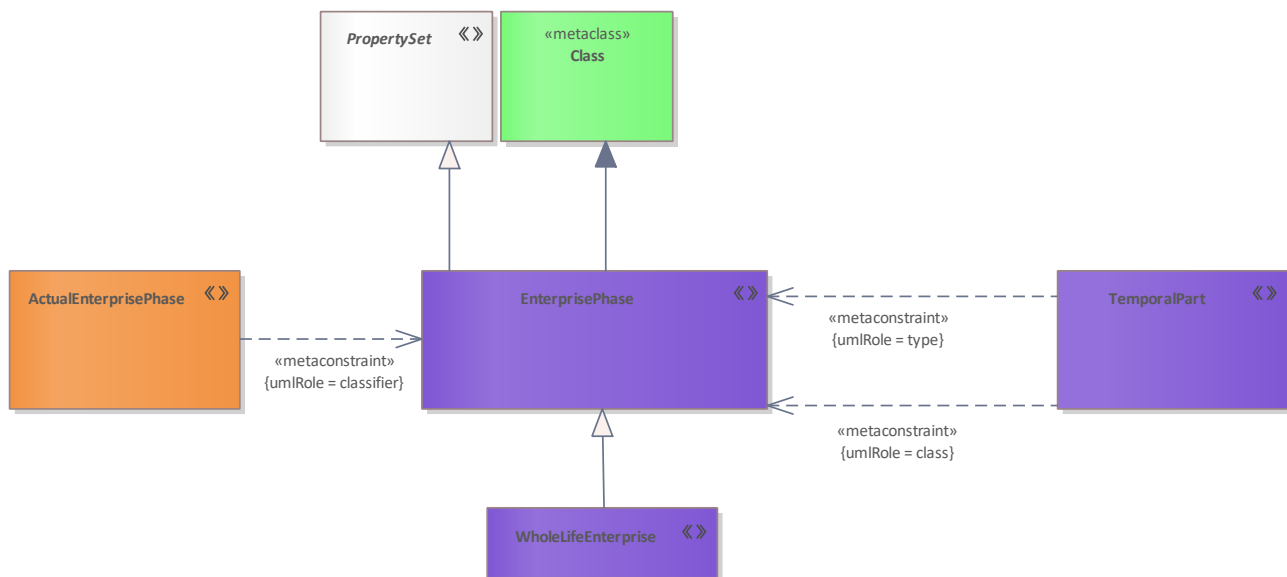


Figure 148: EnterprisePhase

Elements in Diagram

Name	Definition
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
EnterprisePhase	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
TemporalPart	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.
WholeLifeEnterprise	A WholeLifeEnterprise is a purposeful endeavor of any size involving people, organizations and supporting systems. It is made up of TemporalParts and StructuralParts.

Tagged Values

Tag Name	Valid Values
toBe	true, false, unknown, not set
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [A2 - Architecture Products](#)
- [C2 - Enterprise Vision](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)

3.93 EnterpriseVision

Definition

A Vision describes the future state of the enterprise, without regard to how it is to be achieved.

Meta Model

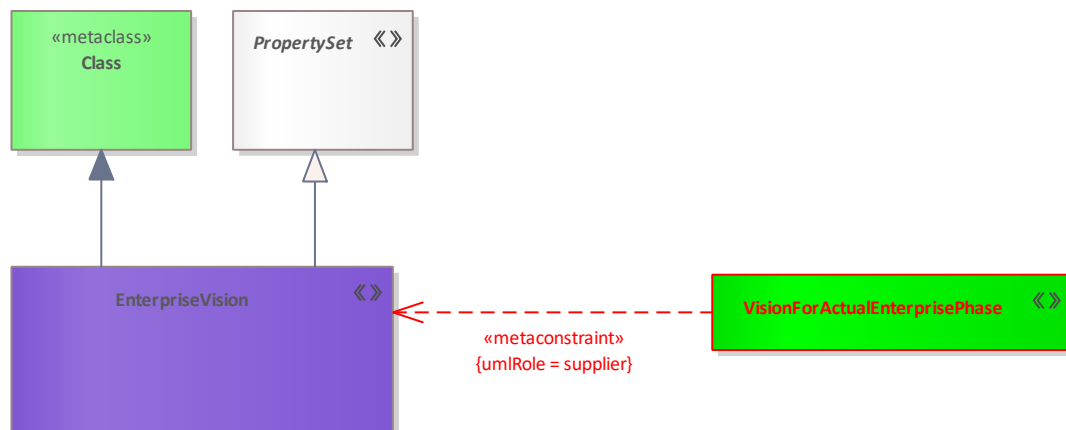


Figure 149: EnterpriseVision

Elements in Diagram

Name	Definition
EnterpriseVision	A Vision describes the future state of the enterprise, without regard to how it is to be achieved.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
VisionForActualEnterprisePhase	A relationship that expresses which actual enterprise phase implements an enterprise vision.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [C2 - Enterprise Vision](#)

3.94 Environment

Definition

A definition of the environmental factors in which something exists or functions. The definition of an Environment element can be further defined using EnvironmentKind.

Meta Model

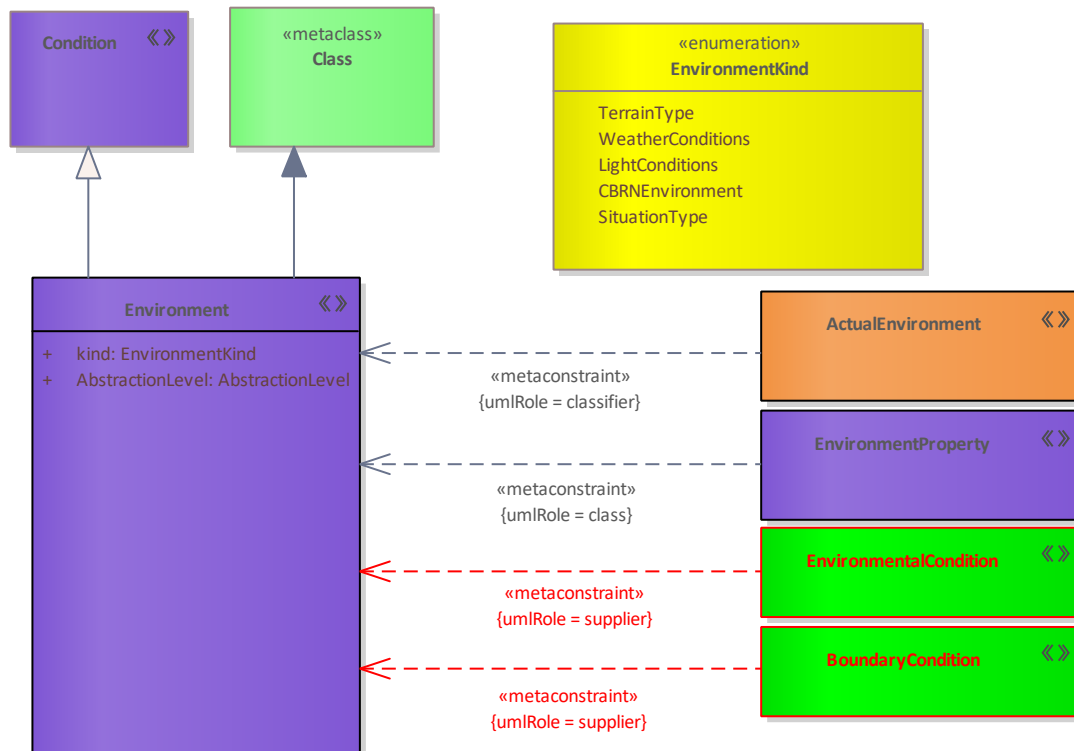


Figure 150: Environment

Elements in Diagram

Name	Definition
ActualEnvironment	The ActualState that describes the circumstances of an Environment.
BoundaryCondition	A relationship that expresses which environment is relevant to an resource exchange.
Condition	A type that defines the Location, Environment and/or GeoPoliticalExtent.
Environment	A definition of the environmental factors in which something exists or functions. The definition of an Environment element can be further defined using EnvironmentKind.
EnvironmentalCondition	Relationship that indicates under which environment an exhibits-relationship takes place.
EnvironmentProperty	A property of an Environment that is typed by a Condition. The kinds of Condition that can be represented are Location, GeoPoliticalExtentType and Environment.

Tagged Values

Tag Name	Valid Values
kind	TerrainType, WeatherConditions, LightConditions, CBRNEnvironment, SituationType
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [C1-S1 - Capability to Service Mapping](#)

- [C2 - Enterprise Vision](#)
- [C5 - Effects](#)
- [Cr - Capability Roadmap](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [P2 - Resource Structure](#)

3.95 EnvironmentalCondition

Definition

Relationship that indicates under which environment an exhibits-relationship takes place.

Meta Model

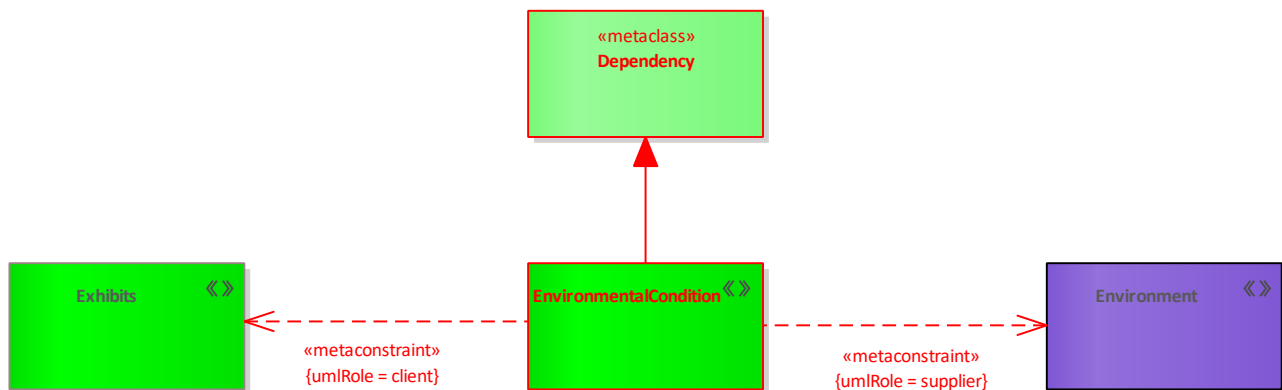


Figure 151: EnvironmentalCondition

Elements in Diagram

Name	Definition
Environment	A definition of the environmental factors in which something exists or functions. The definition of an Environment element can be further defined using EnvironmentKind.
EnvironmentalCondition	Relationship that indicates under which environment an exhibits-relationship takes place.
Exhibits	A tuple that exists between a CapableElement and a Capability that it meets under specific environmental conditions.

Tagged Values

Relevant Viewpoints

- [C1-S1 - Capability to Service Mapping](#)
- [C2 - Enterprise Vision](#)
- [C5 - Effects](#)
- [Cr - Capability Roadmap](#)
- [L1 - Node Types](#)

3.96 EnvironmentalContext

Definition

Relationship that indicates under which condition an measurement counts.

Meta Model

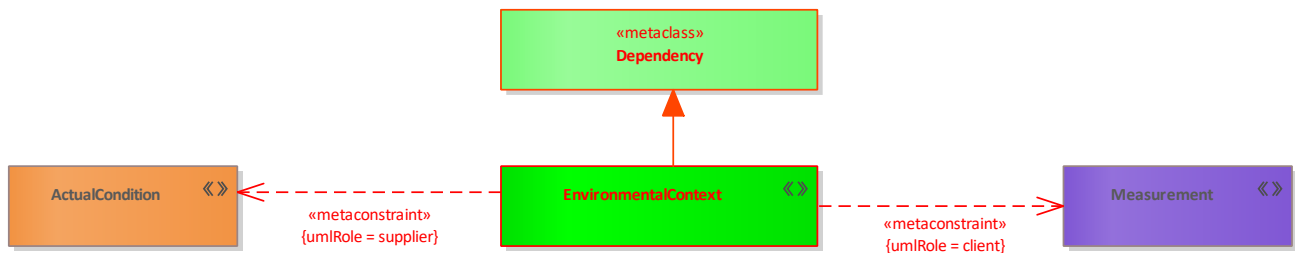


Figure 152: EnvironmentalContext

Elements in Diagram

Name	Definition
ActualCondition	An individual describing an actual situation with respect to circumstances under which an OperationalActivity, Function or ServiceFunction can be performed.
EnvironmentalContext	Relationship that indicates under which condition an measurement counts.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.

Tagged Values

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C7 - Performance Parameters](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S8 - Service Policy](#)

3.97 EnvironmentProperty

Definition

A property of an Environment that is typed by a Condition. The kinds of Condition that can be represented are Location, GeoPoliticalExtentType and Environment.

Meta Model

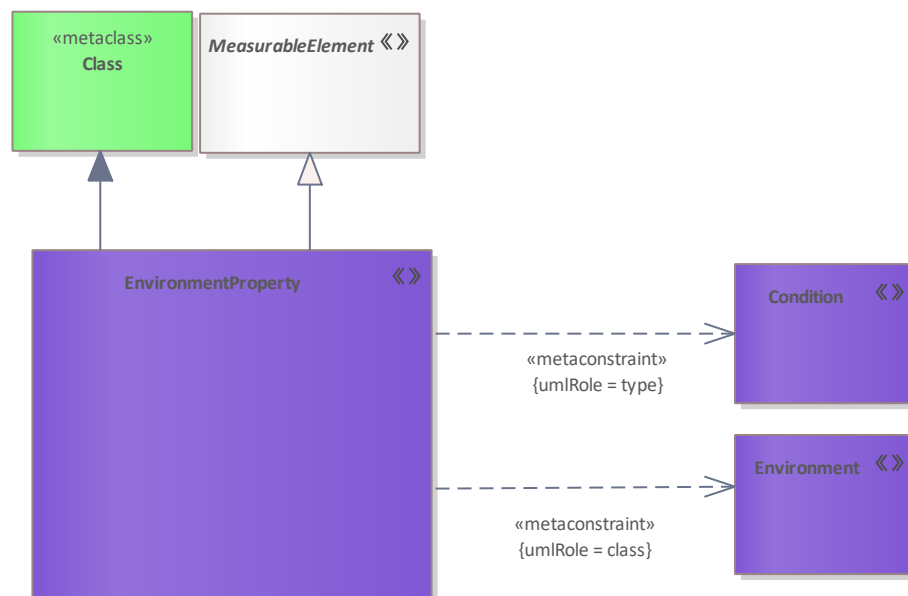


Figure 153: EnvironmentProperty

Elements in Diagram

Name	Definition
Condition	A type that defines the Location, Environment and/or GeoPoliticalExtent.
Environment	A definition of the environmental factors in which something exists or functions. The definition of an Environment element can be further defined using EnvironmentKind.
EnvironmentProperty	A property of an Environment that is typed by a Condition. The kinds of Condition that can be represented are Location, GeoPoliticalExtentType and Environment.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.98Evaluates

Definition

This relation states that an evaluation criterion (FulfilmentCriterion) can be assigned to a specific acceptance criterion (FitCriterion).

Meta Model

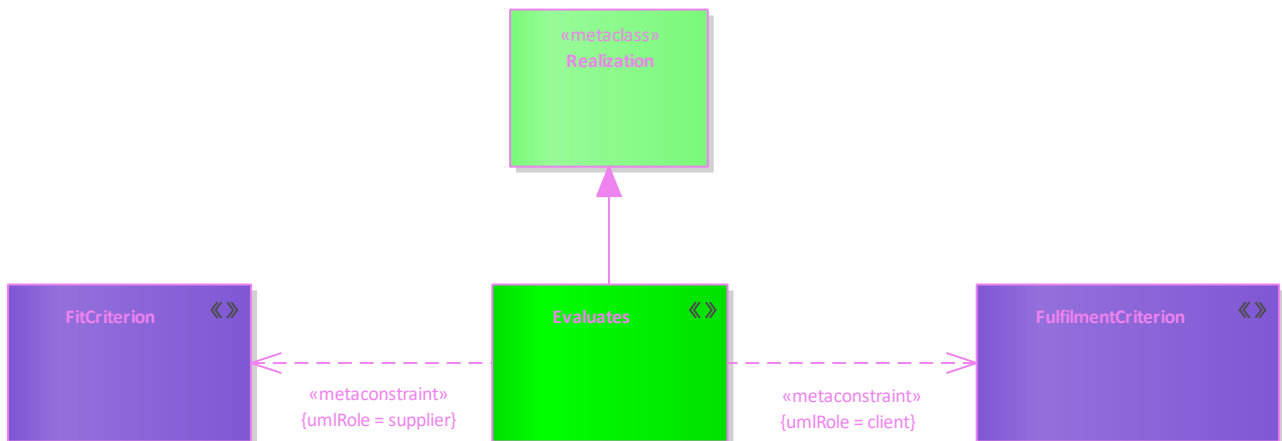


Figure 154: Evaluates

Elements in Diagram

Name	Definition
Evaluates	This relation states that an evaluation criterion (FulfilmentCriterion) can be assigned to a specific acceptance criterion (FitCriterion).
FitCriterion	This element represents an acceptance criterion for a functional or non-functional requirement.
FulfilmentCriterion	This element represents a criterion for evaluating the degree of implementation of a functional or non-functional requirement.

Tagged Values

Relevant Viewpoints

- [R8 - Requirement Fulfilment](#)

3.99Exchange

Definition

Abstract tuple, grouping OperationalExchanges and ResourceExchanges that exchange Resources.

Meta Model

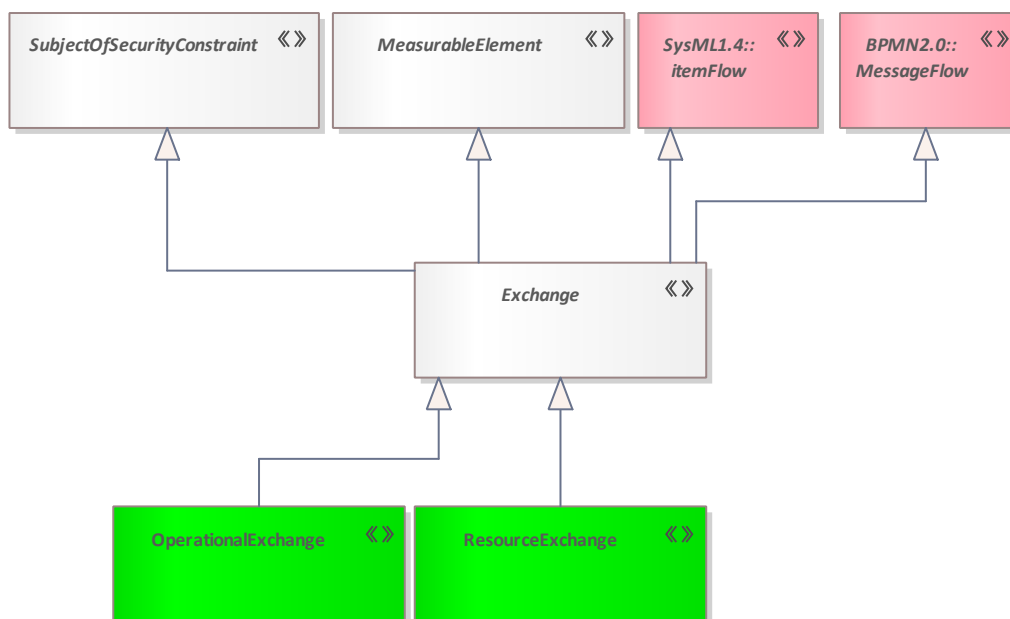


Figure 155: Exchange

Elements in Diagram

Name	Definition
Exchange	Abstract tuple, grouping OperationalExchanges and ResourceExchanges that exchange Resources.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
SubjectOfSecurityConstraint	An abstract grouping of elements that can be the subject of a SecurityConstraint. Element is not used in the current version of the framework and reserved for future developments.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.100 Exchangeltem

Definition

An abstract grouping for elements that defines the types of elements that can be exchanged between Assets and conveyed by an Exchange.

Meta Model

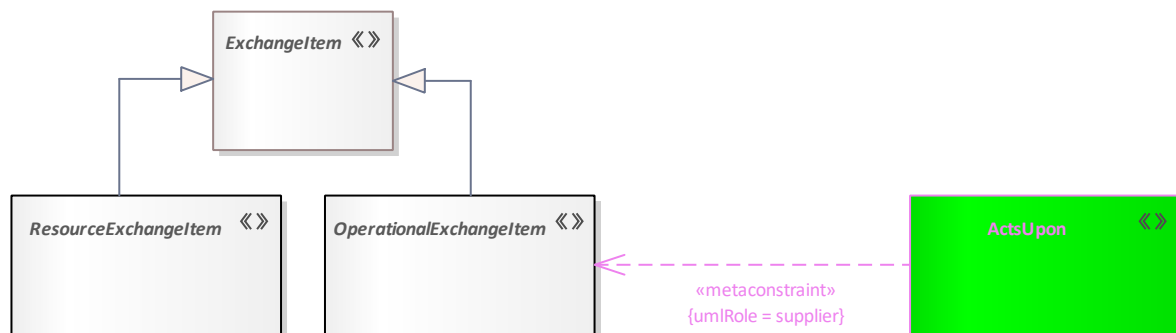


Figure 156: Exchangeltem

Elements in Diagram

Name	Definition
ActsUpon	Asserts that something (subject) is acted upon by an OperationalActivity (activity).
Exchangeltem	An abstract grouping for elements that defines the types of elements that can be exchanged between Assets and conveyed by an Exchange.
OperationalExchangeltem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
ResourceExchangeltem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R

Relevant Viewpoints

3.101 Exhibits

Definition

A tuple that exists between a CapableElement and a Capability that it meets under specific environmental conditions.

Meta Model

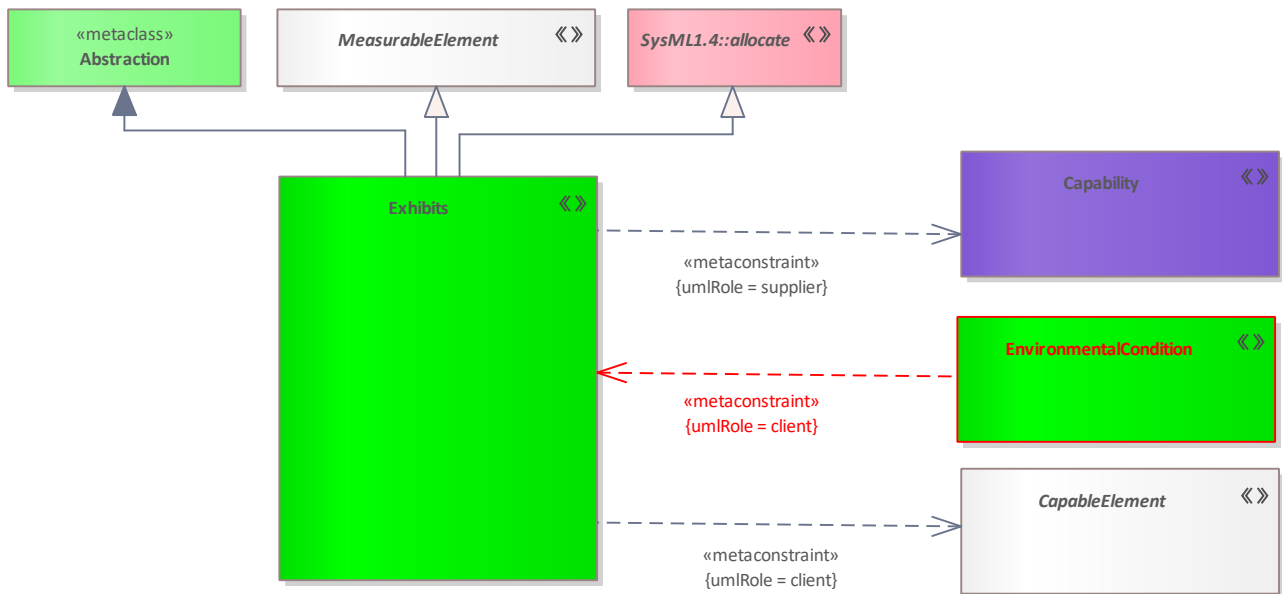


Figure 157: Exhibits

Elements in Diagram

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
EnvironmentalCondition	Relationship that indicates under which environment an exhibits-relationship takes place.
Exhibits	A tuple that exists between a CapableElement and a Capability that it meets under specific environmental conditions.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [C1-S1 - Capability to Service Mapping](#)
- [C2 - Enterprise Vision](#)
- [C5 - Effects](#)
- [Cr - Capability Roadmap](#)
- [L1 - Node Types](#)

3.102 Expresses

Definition

A relationship that expresses that an architectural description includes the following architectures.

Meta Model

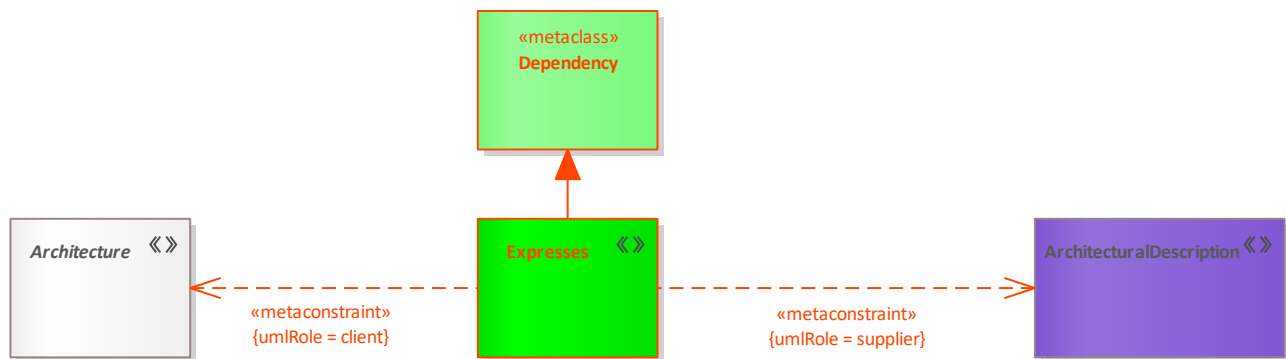


Figure 158: Expresses

Elements in Diagram

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
Architecture	An abstract type that represents a generic architecture. Subtypes are OperationalArchitecture and ResourceArchitecture.
Expresses	A relationship that expresses that an architectural description includes the following architectures.

Tagged Values

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)

3.103 FieldedCapability

Definition

An individual, fully-realized capability.

Meta Model

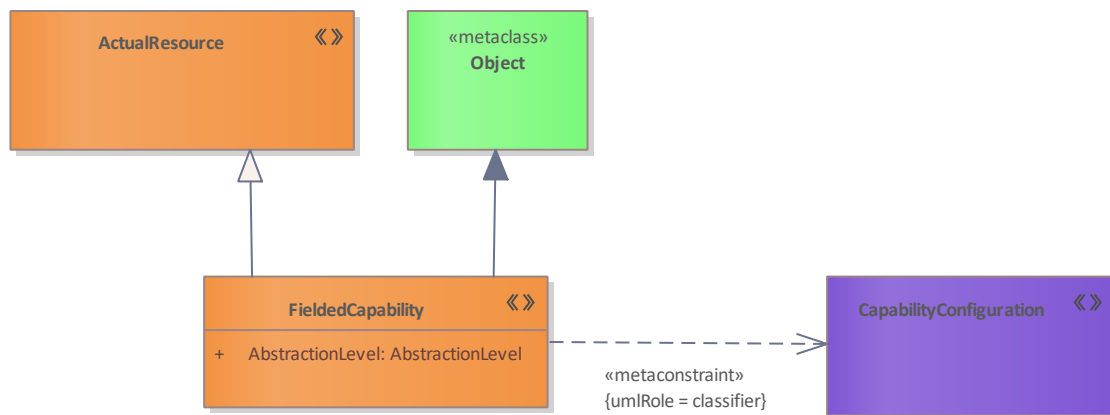


Figure 159: FieldedCapability

Elements in Diagram

Name	Definition
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
CapabilityConfiguration	A composite structure representing the physical and human resources (and their interactions) in an enterprise, assembled to meet a capability).
FieldedCapability	An individual, fully-realized capability.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String
endDate	endDate
startDate	startDate

Relevant Viewpoints

- [C5 - Effects](#)
- [Cr - Capability Roadmap](#)

3.104 FillsPost

Definition

A tuple that asserts that an ActualPerson fills an ActualPost.

Meta Model

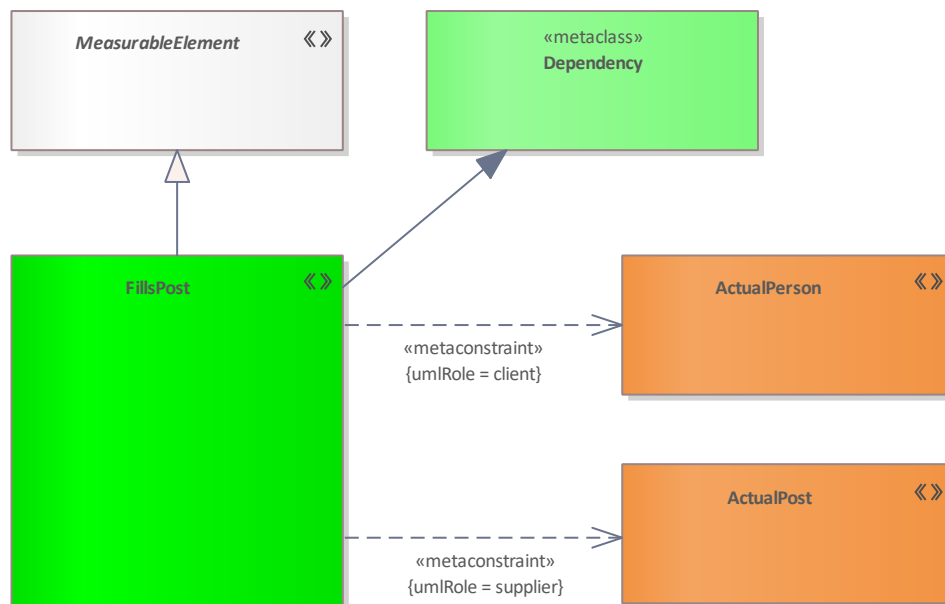


Figure 160: FillsPost

Elements in Diagram

Name	Definition
ActualPerson	An individual human being.
ActualPost	An actual, specific post, an instance of a Post "type" - e.g., "President of the United States of America." where the Post would be president.
FillsPost	A tuple that asserts that an ActualPerson fills an ActualPost.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [P8 - Resource Constraints](#)

3.105 Finding

Definition

An ascertainment made in the model, which relates to the methodology used, the subject under consideration, the tool or something else.

Meta Model

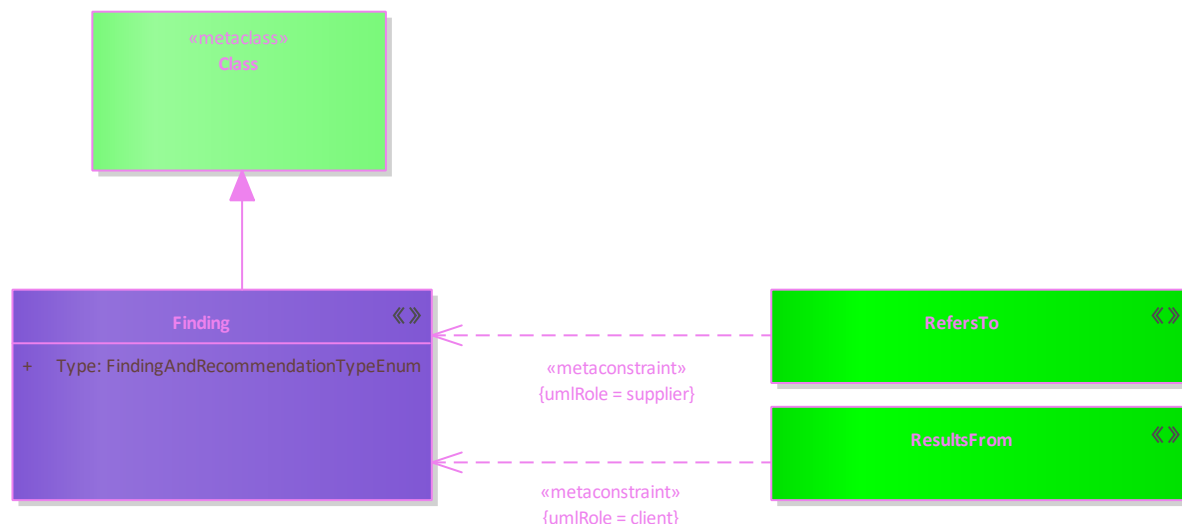


Figure 161: Finding

Elements in Diagram

Name	Definition
Finding	An ascertainment made in the model, which relates to the methodology used, the subject under consideration, the tool or something else.
RefersTo	Relationship that assigns a finding to a recommendation.
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.

Tagged Values

Tag Name	Valid Values
Type	Method, Tool, Others, Subject

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [A2 - Architecture Products](#)
- [A3 - Architecture Correspondence](#)
- [A6 - Architecture Versions](#)
- [A7 - Architecture Compliance](#)
- [A8 - Standards](#)
- [Ar - Architecture Roadmap](#)
- [C1 - Capability Taxonomy](#)
- [C1-S1 - Capability to Service Mapping](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [Cr - Capability Roadmap](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)

- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R2 - Requirement Catalogue](#)
- [R3 - Requirement Dependencies](#)
- [R7 - Requirement Derivation](#)
- [R8 - Requirement Fulfilment](#)
- [Rr - Requirement Realization](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S6 - Service Interactions](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)
- [Sr - Service Roadmap](#)

3.106 FitCriterion

Definition

This element represents an acceptance criterion for a functional or non-functional requirement.

Meta Model

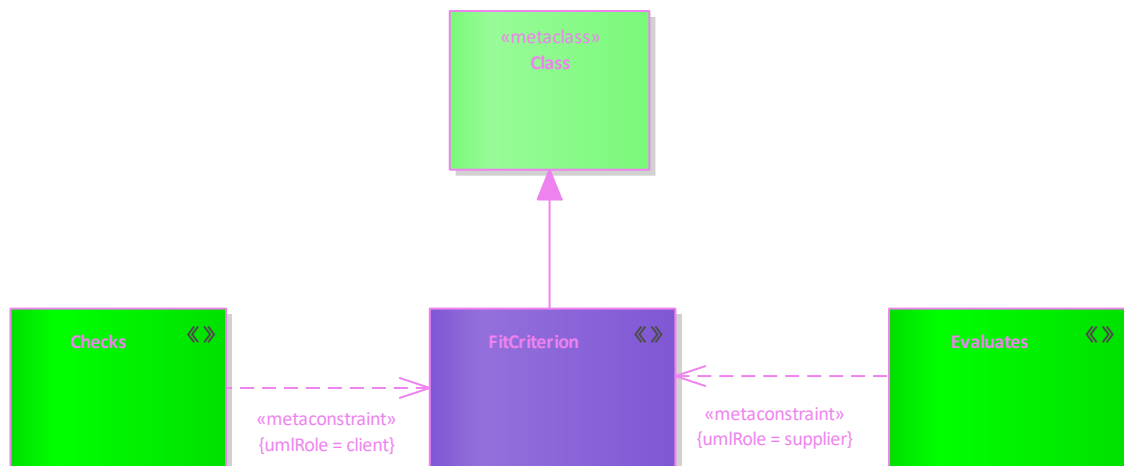


Figure 162: FitCriterion

Elements in Diagram

Name	Definition
Checks	Relation that shows that an acceptance criterion (FitCriterion) is valid for a functional or non-functional requirement.
Evaluates	This relation states that an evaluation criterion (FulfilmentCriterion) can be assigned to a specific acceptance criterion (FitCriterion).
FitCriterion	This element represents an acceptance criterion for a functional or non-functional requirement.

Tagged Values

Tag Name	Valid Values
text	String

Relevant Viewpoints

- [R8 - Requirement Fulfilment](#)

3.107 Forecast

Definition

A tuple that specifies a transition from one Asset, Standard, Competence to another future one. It is related to an ActualEnterprisePhase to give it a temporal context.

Meta Model

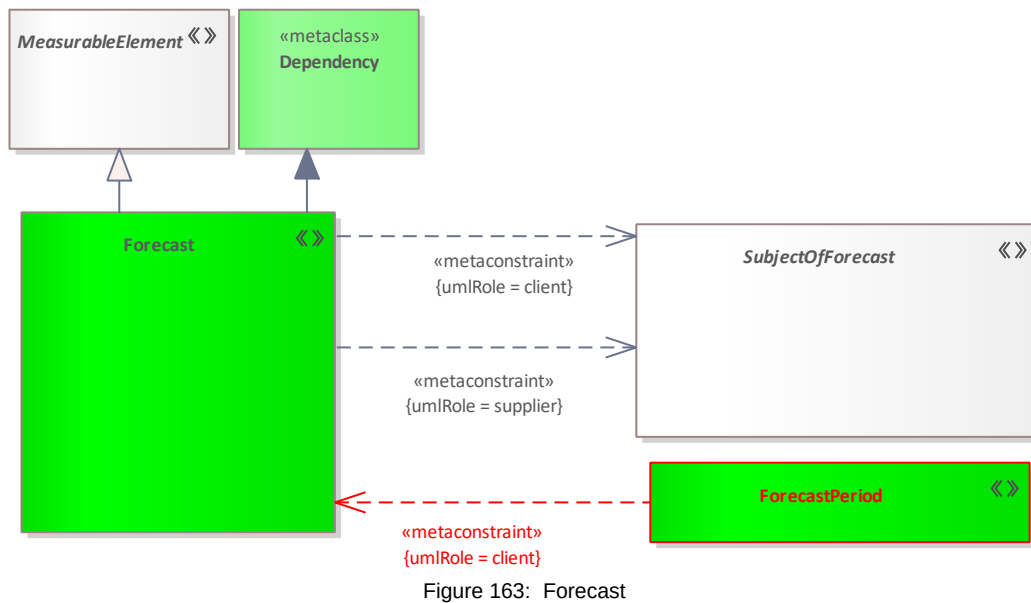


Figure 163: Forecast

Elements in Diagram

Name	Definition
Forecast	A tuple that specifies a transition from one Asset, Standard, Competence to another future one. It is related to an ActualEnterprisePhase to give it a temporal context.
ForecastPeriod	Planning phase for which the forecast is valid.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
SubjectOfForecast	An abstract type grouping elements that can be the subject of a Forecast.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [P1- Resource Types](#)

3.108 ForecastPeriod

Definition

Planning phase for which the forecast is valid.

Meta Model

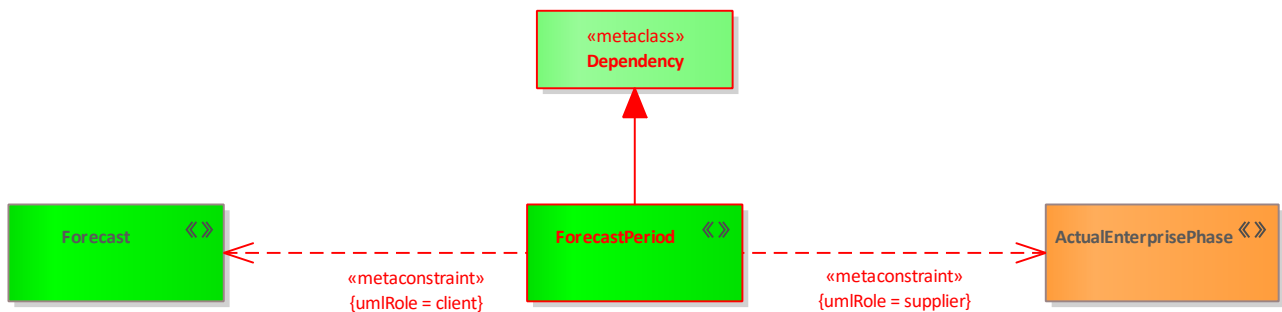


Figure 164: ForecastPeriod

Elements in Diagram

Name	Definition
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
Forecast	A tuple that specifies a transition from one Asset, Standard, Competence to another future one. It is related to an ActualEnterprisePhase to give it a temporal context.
ForecastPeriod	Planning phase for which the forecast is valid.

Tagged Values

Relevant Viewpoints

- [P1- Resource Types](#)

3.109 FormStoredIn

Definition

Relation states that a digital form is stored in software.

Meta Model

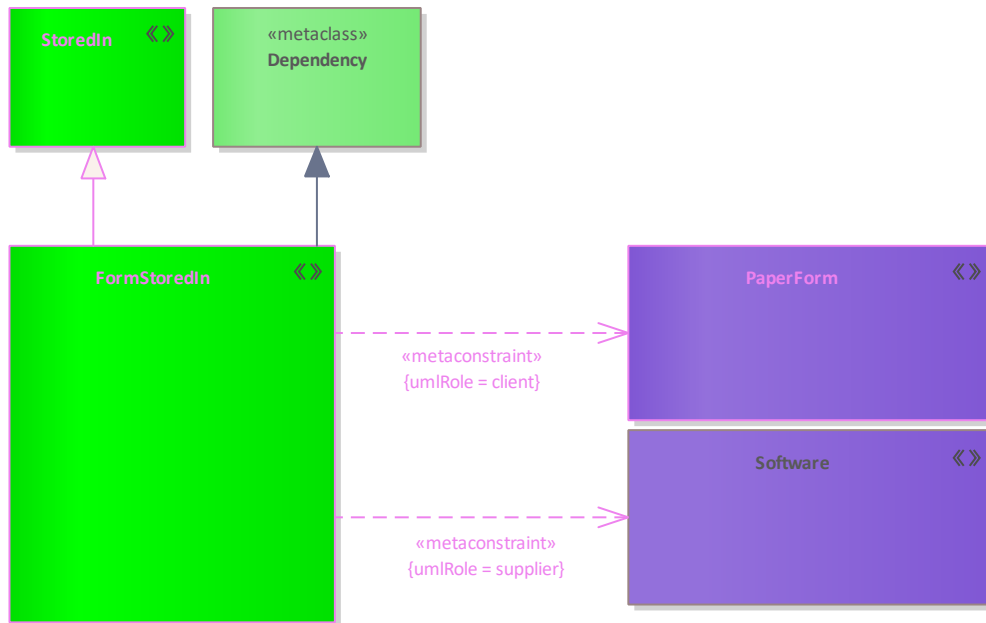


Figure 165: FormStoredIn

Elements in Diagram

Name	Definition
FormStoredIn	Relation states that a digital form is stored in software.
PaperForm	Form is a digitized or digitizable document, for example a scanned document.
Software	A sub-type of ResourceArtifact that specifies an executable computer program.
StoredIn	Relation states that a digital form or data is stored in software.

Tagged Values

Tag Name	Valid Values
originalSource	true, false, unknown, not set

Relevant Viewpoints

- [P1- Resource Types](#)

3.110 FulfilmentCriterion

Definition

This element represents a criterion for evaluating the degree of implementation of a functional or non-functional requirement.

Meta Model

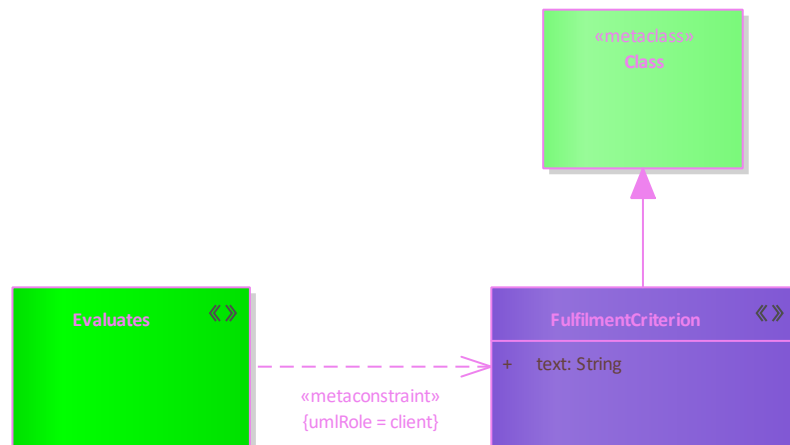


Figure 166: FulfilmentCriterion

Elements in Diagram

Name	Definition
Evaluates	This relation states that an evaluation criterion (FulfilmentCriterion) can be assigned to a specific acceptance criterion (FitCriterion).
FulfilmentCriterion	This element represents a criterion for evaluating the degree of implementation of a functional or non-functional requirement.

Tagged Values

Tag Name	Valid Values
text	String

Relevant Viewpoints

- [R8 - Requirement Fulfilment](#)

3.111 Function

Definition

An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.

Meta Model

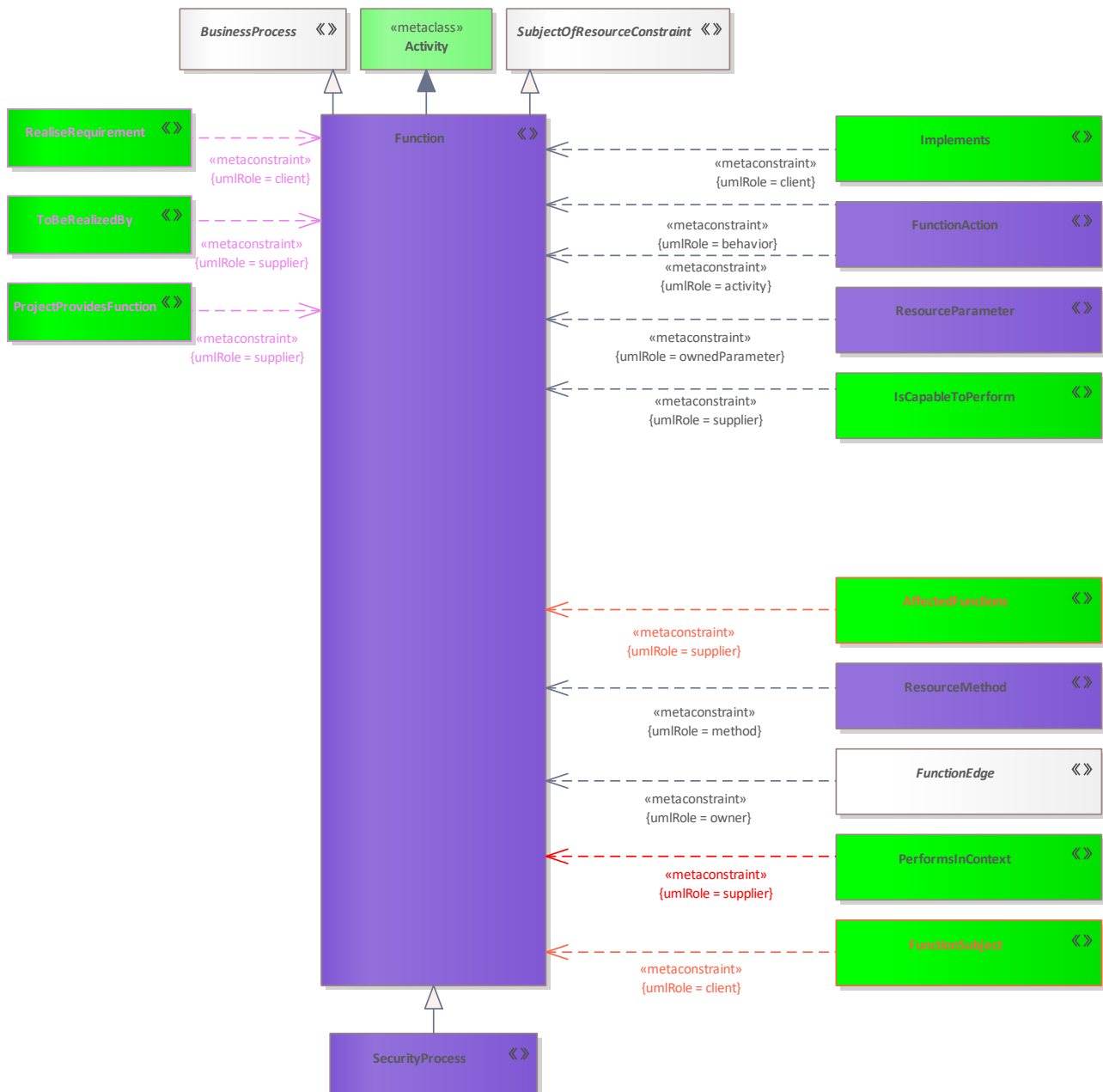


Figure 167: Function

Elements in Diagram

Name	Definition
AffectedFunctions	A relationship that expresses which function is affected by a resource.
BusinessProcess	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
FunctionAction	A call of a Function indicating that the Function is performed by a ResourceRole in a specific context.
FunctionEdge	A tuple that shows the flow of Resources (objects/data) between FunctionActions.

Name	Definition
FunctionSubject	A relationship that expresses that a function uses certain resources.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
ProjectProvidesFunction	Relation states that a project realizes a function.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
ResourceMethod	A behavioral feature of a ResourcePerformer whose behavior is specified in a Function.
ResourceParameter	A type that represents inputs and outputs of an Function. It is typed by a ResourceInteractionItem.
SecurityProcess	The security-related procedure that satisfies the security control requirement. Element is not used in the current version of the framework and reserved for future developments.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [P2 - Resource Structure](#)
- [P4 - Resource Functions](#)
- [Rr - Requirement Realization](#)

3.112 FunctionAction

Definition

A call of a Function indicating that the Function is performed by a ResourceRole in a specific context.

Meta Model

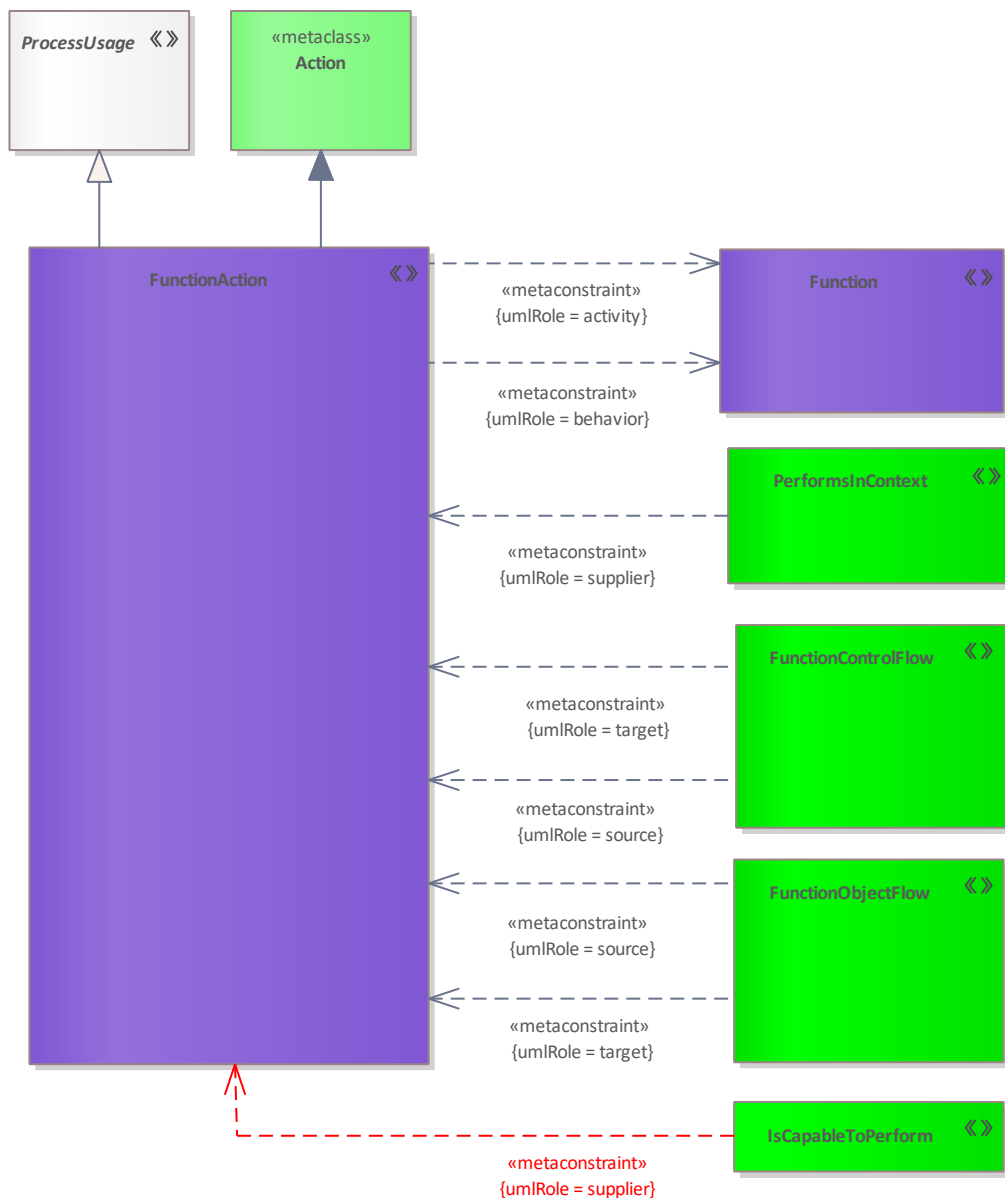


Figure 168: FunctionAction

Elements in Diagram

Name	Definition
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
FunctionAction	A call of a Function indicating that the Function is performed by a ResourceRole in a specific context.
FunctionControlFlow	An ActivityEdge that shows the flow of control between FunctionActions.
FunctionObjectFlow	An ActivityEdge that shows the flow of Resources (objects/data) between FunctionActions.
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.

Name	Definition
ProcessUsage	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer or Role.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [P4 - Resource Functions](#)

3.113 FunctionalRequirement

Definition

The element represents a functional requirement (what should the system / software be able to do?).

Meta Model

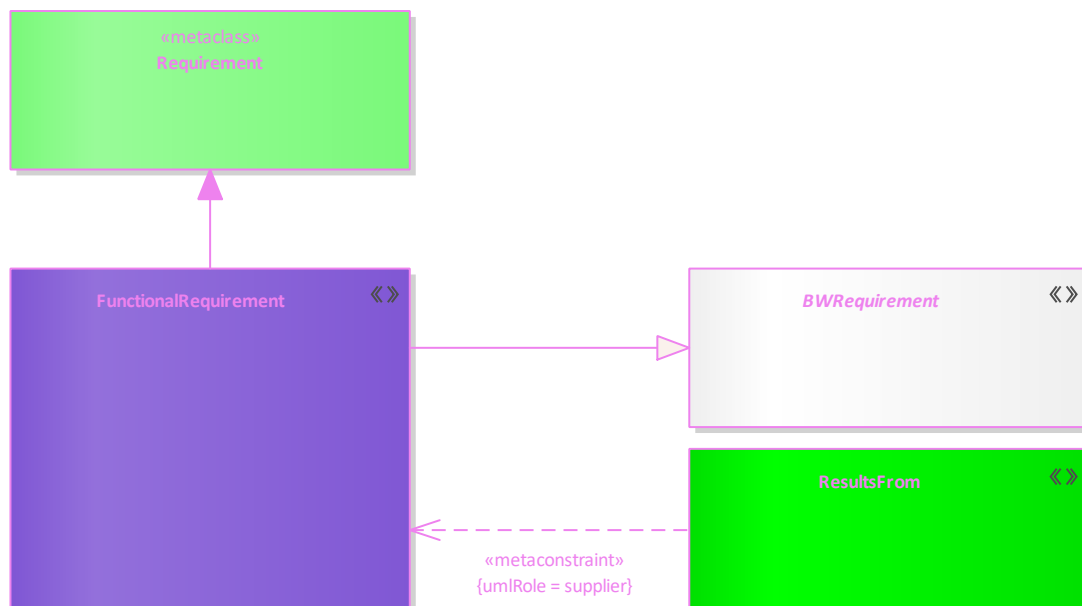


Figure 169: FunctionalRequirement

Elements in Diagram

Name	Definition
BWRequirement	Abstract base class for requirements.
FunctionalRequirement	The element represents a functional requirement (what should the system / software be able to do?).
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.

Tagged Values

Tag Name	Valid Values
Uuid	String
Afo_ID	String
AG_ID	String
Akteur	String
Anforderungsart	String
Ansprechpartner	String
Detailstufe	int
Freitext	String
Gewicht (absolut)	float
Kategorie	String
Kritikalität	String
Markierung	boolean
Objectid	String
Object und Ergänzungen	String
Operative Bewertung	String
Phasen	String
Position	int

Projektrolle	String
Prozesswort	String
QS_Status	String
Rang	int
Singular	boolean
Status	String
Subjekt	String
Text	String
Titelsperre	boolean
Bezug	String
Verbindlichkeit	String
Hinweis	String
Zu	boolean
Priorität Vergabe	String
Regelungen	String
Vererbung	String
Nachweisart	String
Bemerkung	String
Anforderung manuell	boolean
Aktivität	String
Qualität	String
Randbedingung	String

Relevant Viewpoints

- [R2 - Requirement Catalogue](#)
- [R3 - Requirement Dependencies](#)
- [R7 - Requirement Derivation](#)

3.114 FunctionControlFlow

Definition

An ActivityEdge that shows the flow of control between FunctionActions.

Meta Model

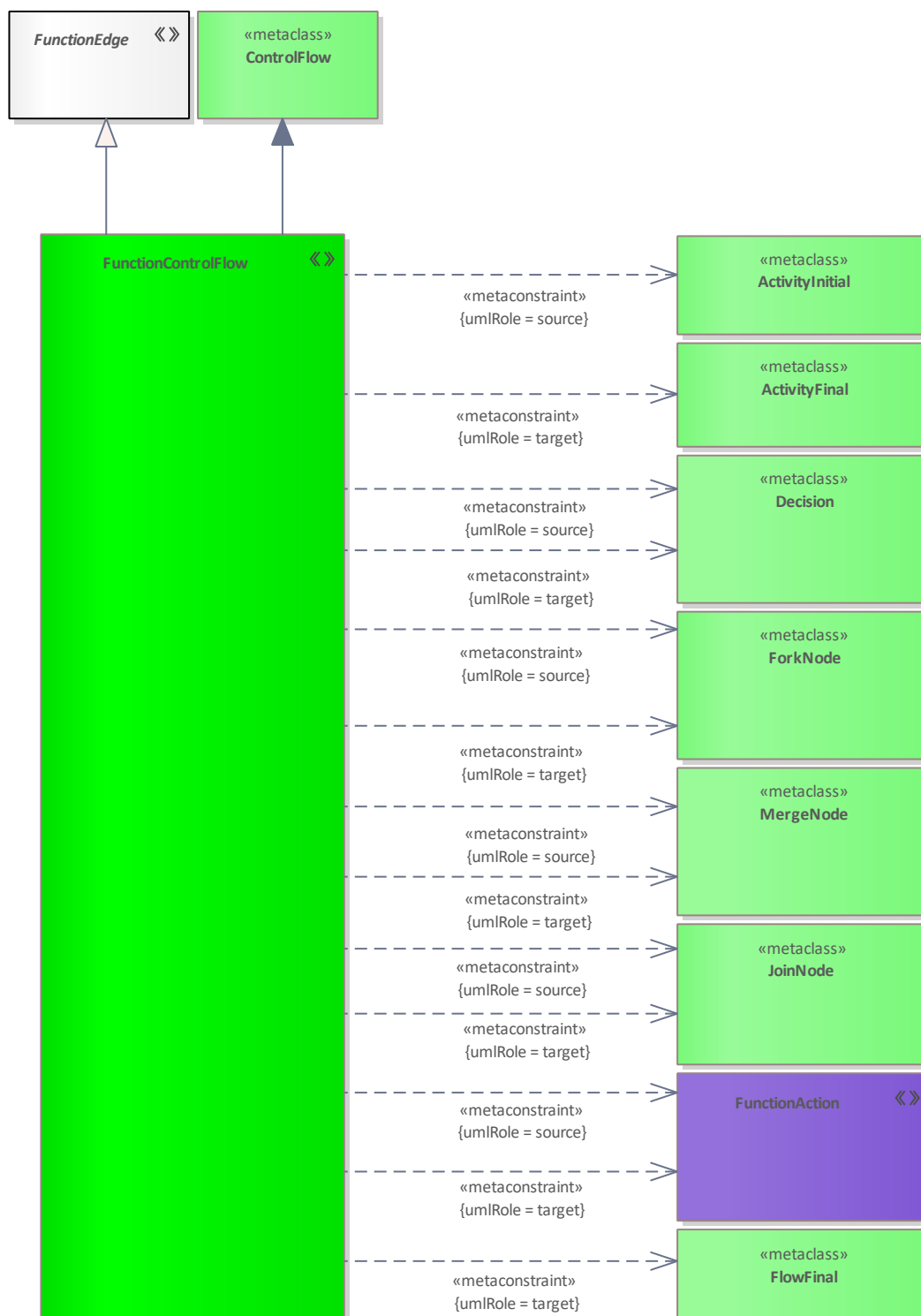


Figure 170: FunctionControlFlow

Elements in Diagram

Name	Definition
FunctionAction	A call of a Function indicating that the Function is performed by a ResourceRole in a specific context.
FunctionControlFlow	An ActivityEdge that shows the flow of control between FunctionActions.

Name	Definition
FunctionEdge	A tuple that shows the flow of Resources (objects/data) between FunctionActions.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [P4 - Resource Functions](#)

3.115 FunctionEdge

Definition

A tuple that shows the flow of Resources (objects/data) between FunctionActions.

Meta Model

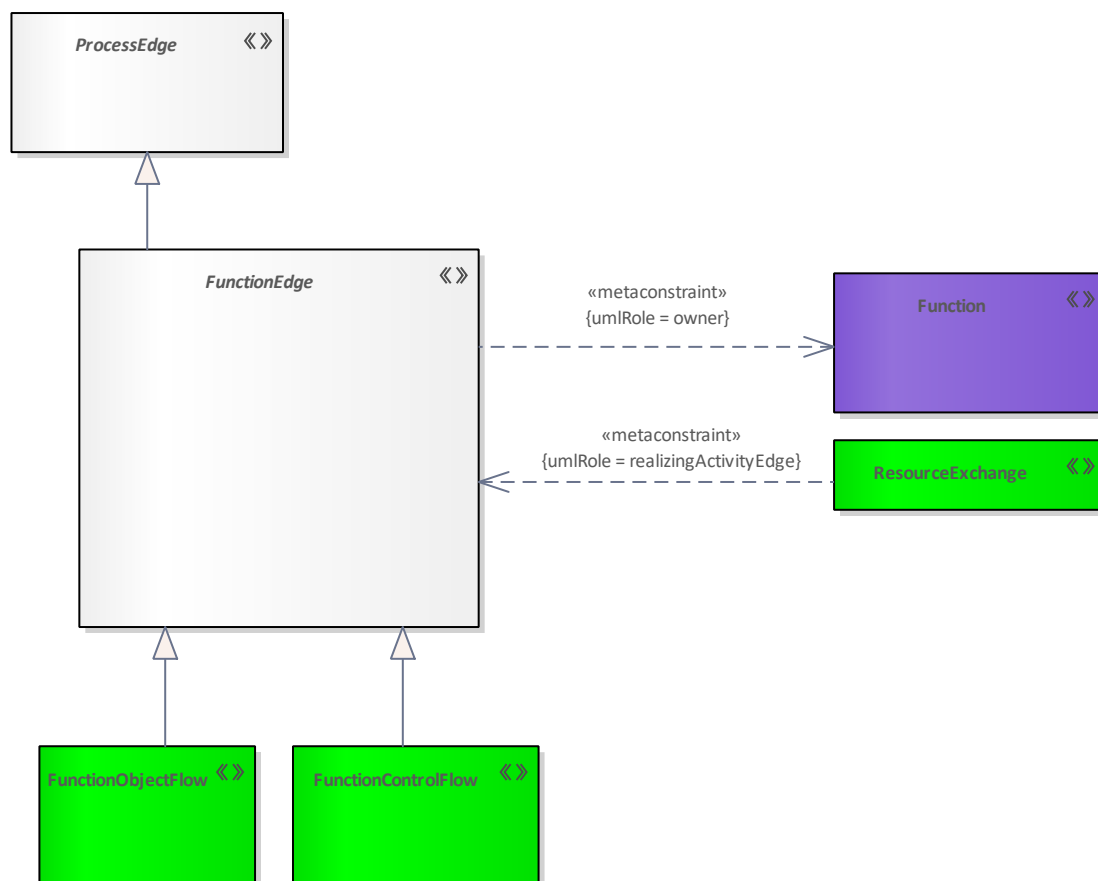


Figure 171: FunctionEdge

Elements in Diagram

Name	Definition
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
FunctionControlFlow	An ActivityEdge that shows the flow of control between FunctionActions.
FunctionEdge	A tuple that shows the flow of Resources (objects/data) between FunctionActions.
FunctionObjectFlow	An ActivityEdge that shows the flow of Resources (objects/data) between FunctionActions.
ProcessEdge	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.116 FunctionObjectFlow

Definition

An ActivityEdge that shows the flow of Resources (objects/data) between FunctionActions.

Meta Model

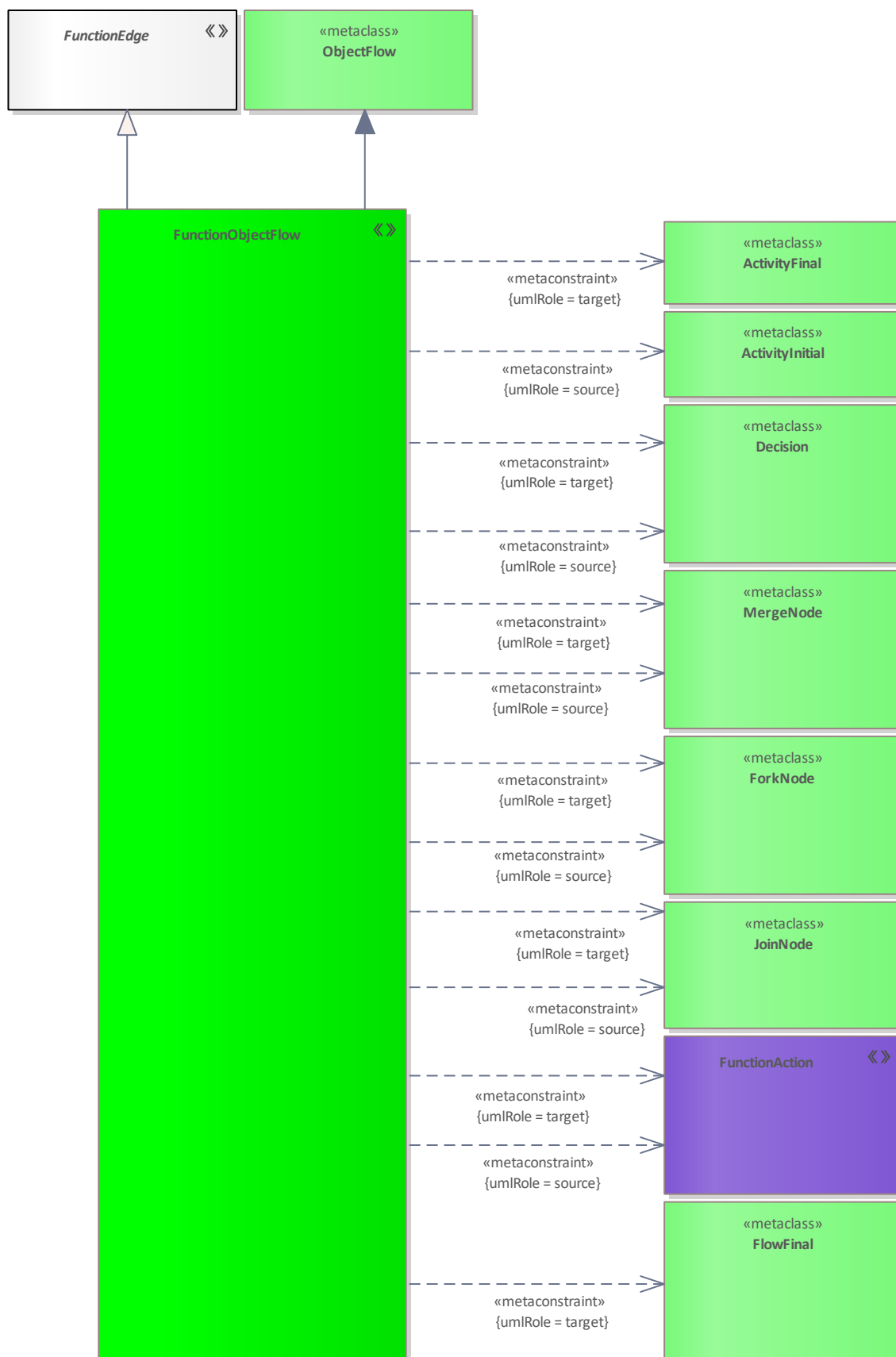


Figure 172: FunctionObjectFlow

Elements in Diagram

Name	Definition
FunctionAction	A call of a Function indicating that the Function is performed by a ResourceRole in a specific context.
FunctionEdge	A tuple that shows the flow of Resources (objects/data) between FunctionActions.
FunctionObjectFlow	An ActivityEdge that shows the flow of Resources (objects/data) between FunctionActions.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [P4 - Resource Functions](#)

3.117 FunctionSubject

Definition

A relationship that expresses that a function uses certain resources.

Meta Model

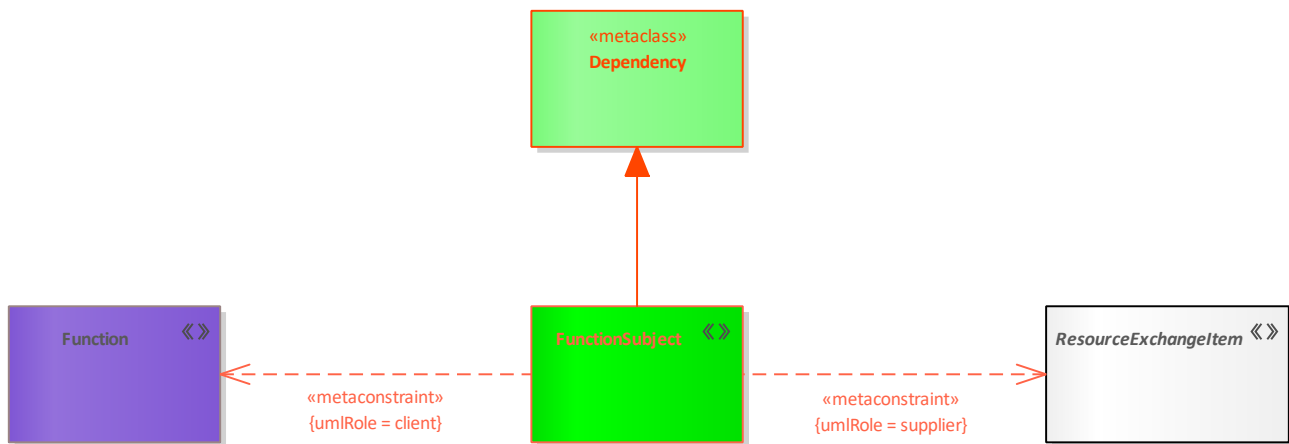


Figure 173: FunctionSubject

Elements in Diagram

Name	Definition
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
FunctionSubject	A relationship that expresses that a function uses certain resources.
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.

Tagged Values

Relevant Viewpoints

- [P4 - Resource Functions](#)

3.118 GeoPoliticalExtentType

Definition

A geospatial extent whose boundaries are defined by declaration or agreement by political parties.

Meta Model

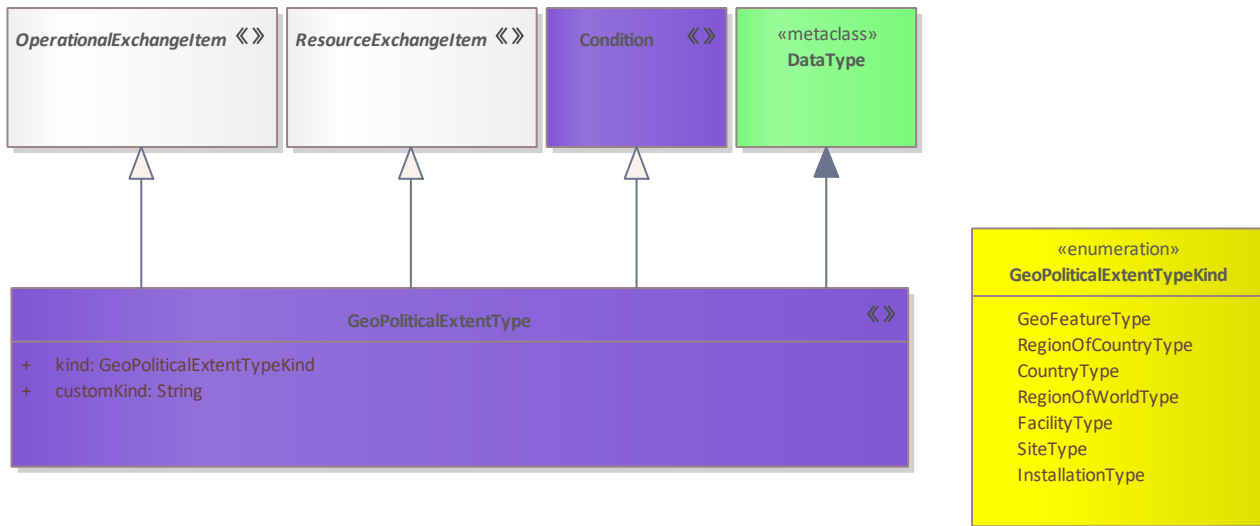


Figure 174: GeoPoliticalExtentType

Elements in Diagram

Name	Definition
Condition	A type that defines the Location, Environment and/or GeoPoliticalExtent.
GeoPoliticalExtentType	A geospatial extent whose boundaries are defined by declaration or agreement by political parties.
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.

Tagged Values

Tag Name	Valid Values
kind	GeoFeatureType, RegionOfCountryType, CountryType, RegionOfWorldType, FacilityType, SiteType, InstallationType
customKind	String
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [P2 - Resource Structure](#)

3.119 GoalForActualEnterprisePhase

Definition

A relationship that expresses which actual enterprisephase implements an enterprisegoal.

Meta Model

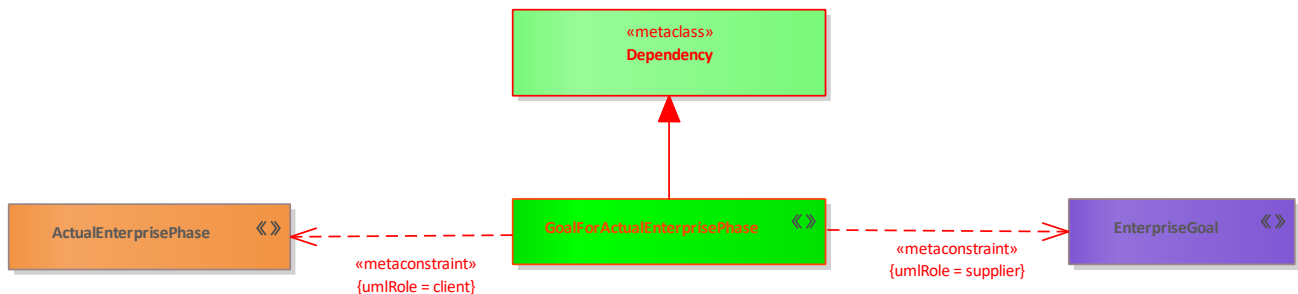


Figure 175: GoalForActualEnterprisePhase

Elements in Diagram

Name	Definition
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
EnterpriseGoal	A statement about a state or condition of the enterprise to be brought about or sustained through appropriate Means. An EnterpriseGoal amplifies an EnterpriseVision that is, it indicates what must be satisfied on a continuing basis to effectively attain the EnterpriseVision.
GoalForActualEnterprisePhase	A relationship that expresses which actual enterprisephase implements an enterprisegoal.

Tagged Values

Relevant Viewpoints

- [C2 - Enterprise Vision](#)

3.120 HighLevelOperationalConcept

Definition

Describes the Resources and Locations required to meet an operational scenario from an integrated systems point of view. It is used to communicate overall quantitative and qualitative system characteristics to stakeholders

Meta Model

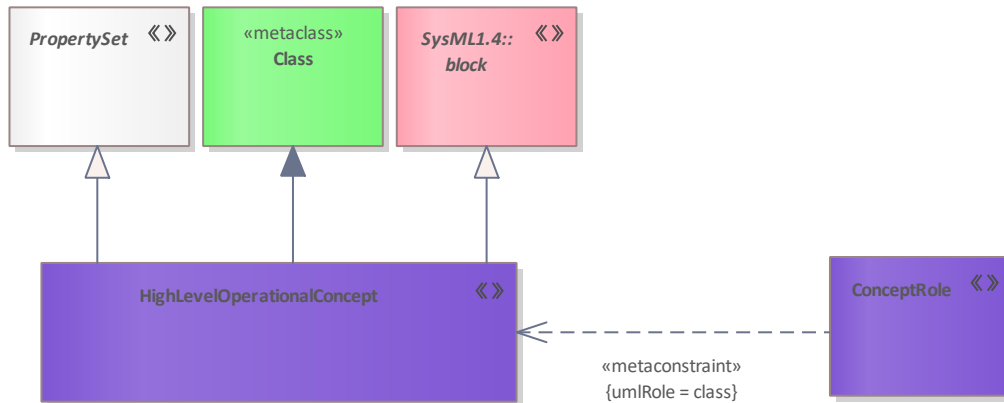


Figure 176: HighLevelOperationalConcept

Elements in Diagram

Name	Definition
ConceptRole	Usage of a ConceptItem in the context of a HighLevelOperationalConcept.
HighLevelOperationalConcept	Describes the Resources and Locations required to meet an operational scenario from an integrated systems point of view. It is used to communicate overall quantitative and qualitative system characteristics to stakeholders
PropertySet	An abstract type grouping architectural elements that can own Measurements.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L2-L3 - Logical Concept Viewpoint](#)

3.121 HostedOn

Definition

Relation states that hardware (virtualized) or software is hosted on a virtualized platform or physical hardware.

Meta Model

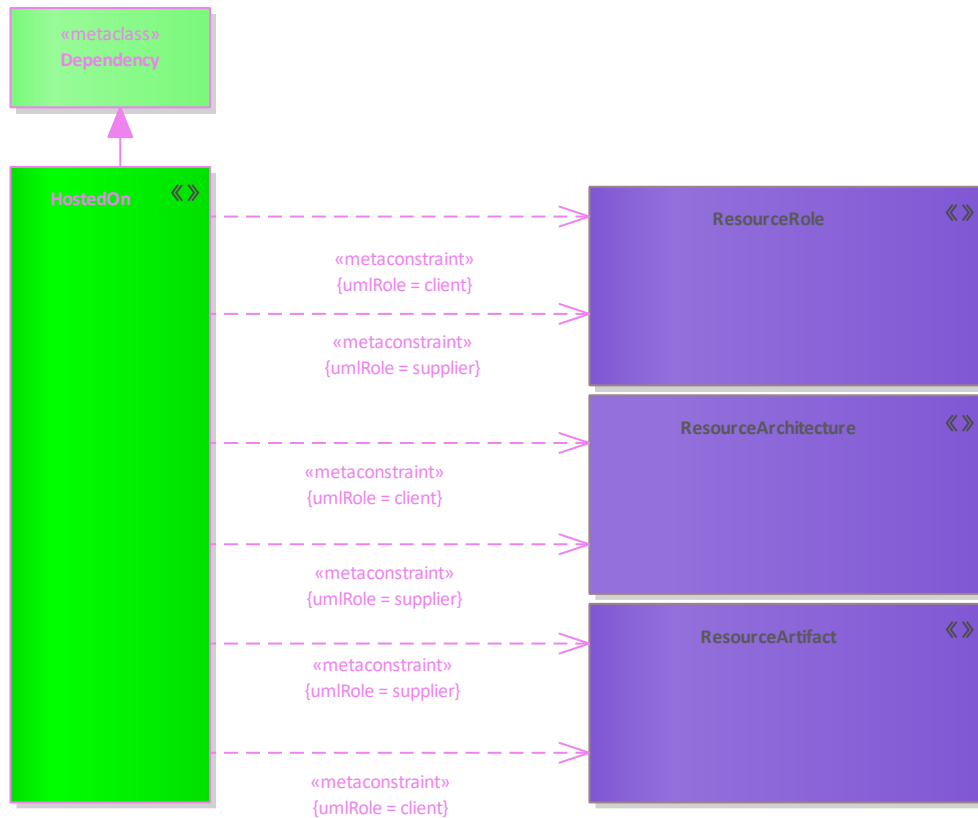


Figure 177: HostedOn

Elements in Diagram

Name	Definition
HostedOn	Relation states that hardware (virtualized) or software is hosted on a virtualized platform or physical hardware.
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourceArtifact	A type of man-made object that contains no human beings (i.e. satellite, radio, petrol, gasoline, etc.).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.

Tagged Values

Relevant Viewpoints

- [P2 - Resource Structure](#)

3.122 Implements

Definition

A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.

Meta Model



Figure 178: Implements

Elements in Diagram

Name	Definition
ActualEnduringTask	An actual undertaking recognized by an enterprise as being essential to achieving its goals - i.e. a strategic specification of what the enterprise does.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
InformationElement	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable to perform (see IsCapableToPerform).
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalConnector	A Connector that goes between OperationalRoles representing a need to exchange Resources. It can carry a number of OperationalExchanges.
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalInterface	A declaration that specifies a contract between the OperationalPerformer it is related to, and any other OperationalPerformers it can interact with.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
ResourceConnector	A channel for exchange between two ResourceRoles.
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceInterface	A declaration that specifies a contract between the ResourcePerformers it is related to and any other ResourcePerformers it can interact with. It is also intended to be an implementation of a specification of an Interface in the Business and/or Service layer.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
StrategicConstraint	A Rule governing a capability.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [C8 - Planning Assumption](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L8 - Logical Constraints](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [R7 - Requirement Derivation](#)
- [S8 - Service Policy](#)

3.123 ImplementsProtocol

Definition

A relationship that expresses which protocol implements an architectural element.

Meta Model

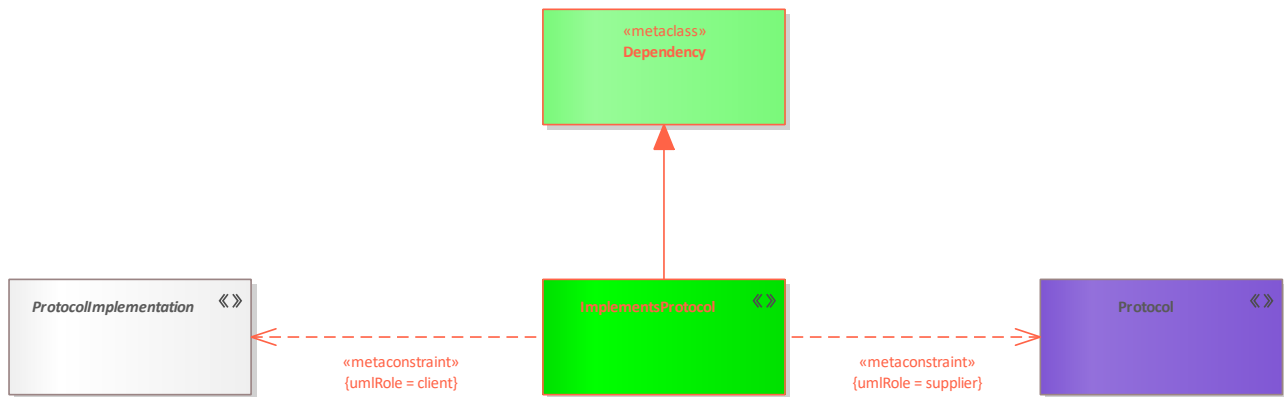


Figure 179: ImplementsProtocol

Elements in Diagram

Name	Definition
ImplementsProtocol	A relationship that expresses which protocol implements an architectural element.
Protocol	A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.
ProtocolImplementation	An abstract type grouping architectural elements that can implement Protocols.

Tagged Values

Relevant Viewpoints

- [P3 - Resource Connectivity](#)

3.124 Information

Definition

A comment that describes the state of an item of interest in any medium or form -- and is communicated or received.

Meta Model

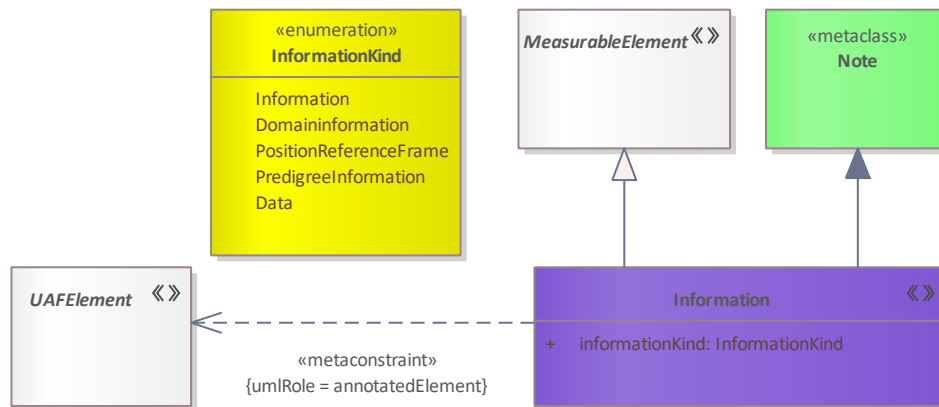


Figure 180: Information

Elements in Diagram

Name	Definition
Information	A comment that describes the state of an item of interest in any medium or form -- and is communicated or received.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
informationKind	Information, Domaininformation, PositionReferenceFrame, PredigreeInformation, Data
URI	String

Relevant Viewpoints

- [A7 - Architecture Compliance](#)

3.125 InformationElement

Definition

An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable to perform (see IsCapableToPerform).

Meta Model

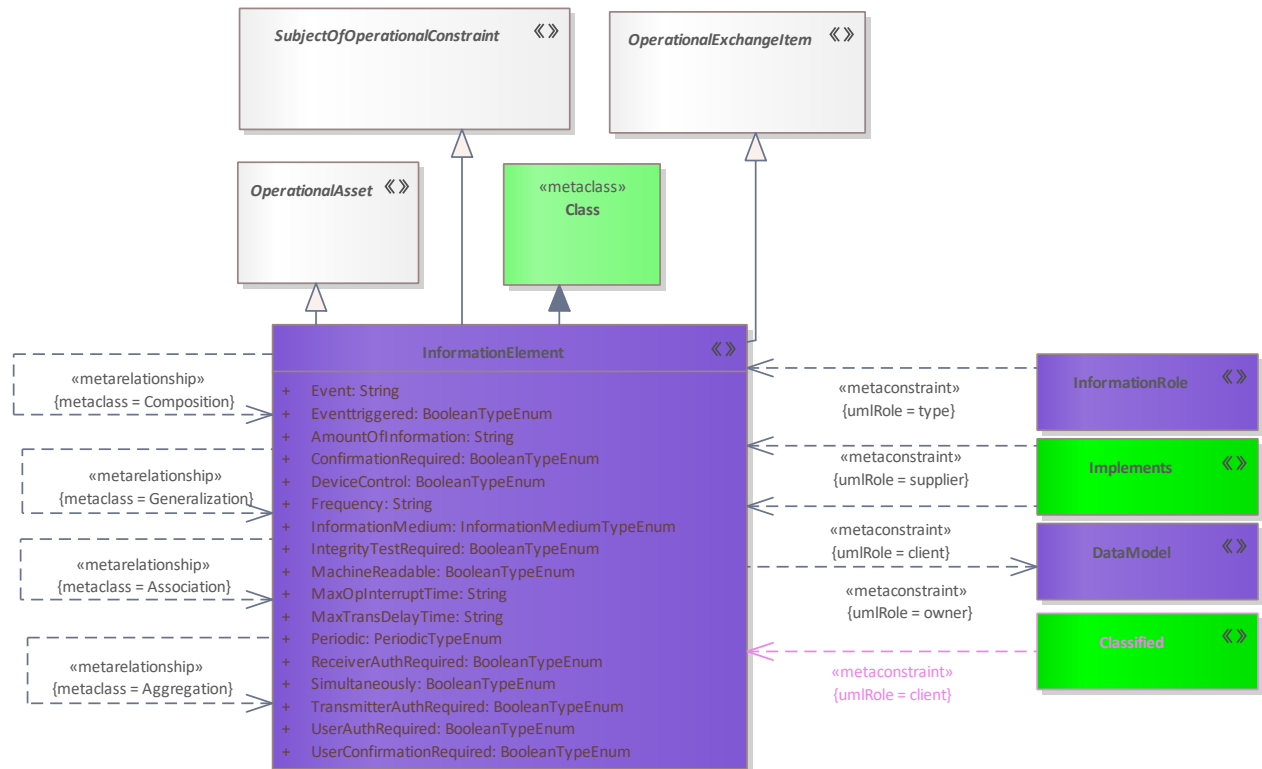


Figure 181: InformationElement

Elements in Diagram

Name	Definition
Classified	Relationship that indicates which classification an element has.
DataModel	A structural specification of data types, showing relationships between them that is devoid of implementation detail. The type of data captured in the DataModel is described using the enumeration DataModelKind (Conceptual, Logical and Physical).
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
InformationElement	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable to perform (see IsCapableToPerform).
InformationRole	A usage of InformationElement that exists in the context of an OperationalAsset. It also allows the representation of the whole-part aggregation of InformationElements.
OperationalAsset	An abstract element used to group the elements of OperationalAgent and InformationElement allowing them to own InformationRoles.
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.

Tagged Values

Tag Name	Valid Values
Event	String
Eventtriggered	true, false, unknown, not set
AmountOfInformation	String
ConfirmationRequired	true, false, unknown, not set
DeviceControl	true, false, unknown, not set
Frequency	String
InformationMedium	voice, data, both, unknown
IntegrityTestRequired	true, false, unknown, not set
MachineReadable	true, false, unknown, not set
MaxOpInterruptTime	String
MaxTransDelayTime	String
Periodic	unknown, automated, none-automated, both
ReceiverAuthRequired	true, false, unknown, not set
Simultaneously	true, false, unknown, not set
TransmitterAuthRequired	true, false, unknown, not set
UserAuthRequired	true, false, unknown, not set
UserConfirmationRequired	true, false, unknown, not set
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)

3.126 InformationRole

Definition

A usage of InformationElement that exists in the context of an OperationalAsset. It also allows the representation of the whole-part aggregation of InformationElements.

Meta Model

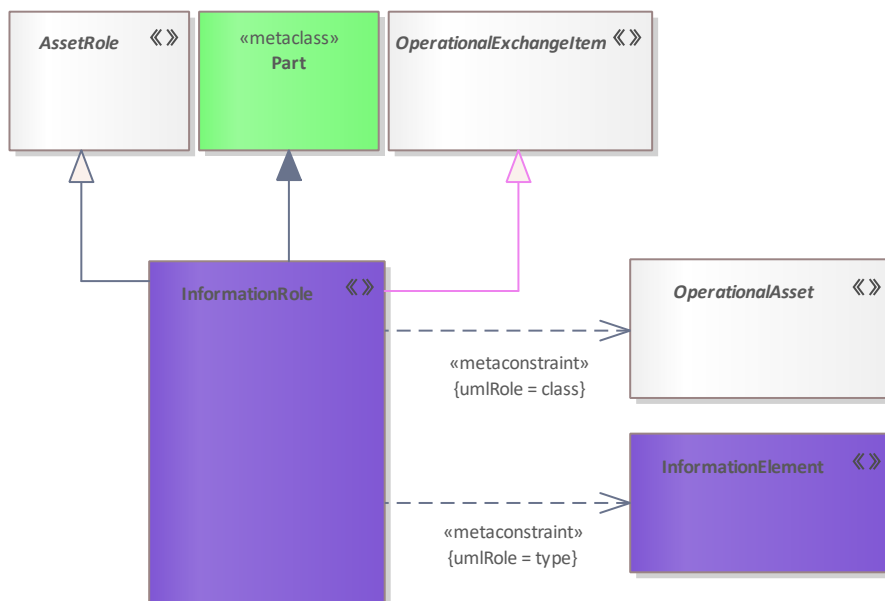


Figure 182: InformationRole

Elements in Diagram

Name	Definition
AssetRole	AssetRole as applied to Security views, an abstract element that indicates the type of elements that can be considered as a subject for security analysis in the particular context (currently no security viewpoints in the framework).
InformationElement	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable to perform (see IsCapableToPerform).
InformationRole	A usage of InformationElement that exists in the context of an OperationalAsset. It also allows the representation of the whole-part aggregation of InformationElements.
OperationalAsset	An abstract element used to group the elements of OperationalAgent and InformationElement allowing them to own InformationRoles.
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)

3.127 InteractionMessage

Definition

An abstract type that groups several types of messages used in the InteractionScenario.

Meta Model

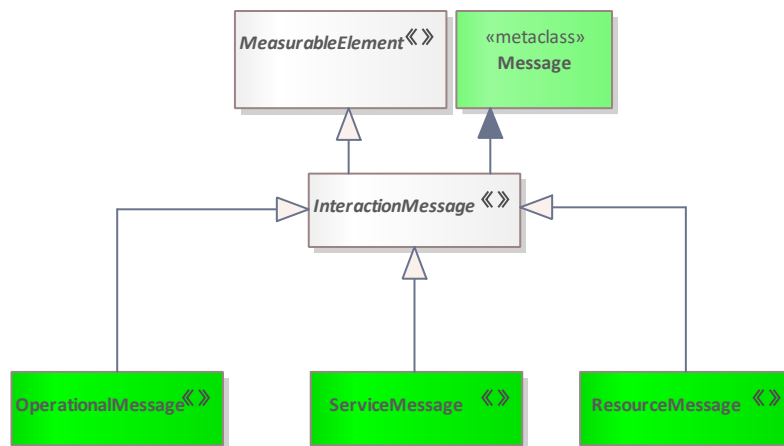


Figure 183: InteractionMessage

Elements in Diagram

Name	Definition
InteractionMessage	An abstract type that groups several types of messages used in the InteractionScenario.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalMessage	Message for use in an Operational Event-Trace which carries any of the subtypes of OperationalExchange.
ResourceMessage	Message for use in an Resource Event-Trace which carries any of the subtypes of ResourceExchange.
ServiceMessage	Message for use in a Service Event-Trace.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.128 InteractionRole

Definition

An abstract type that represents an individual participant in the InteractionScenario.

Meta Model

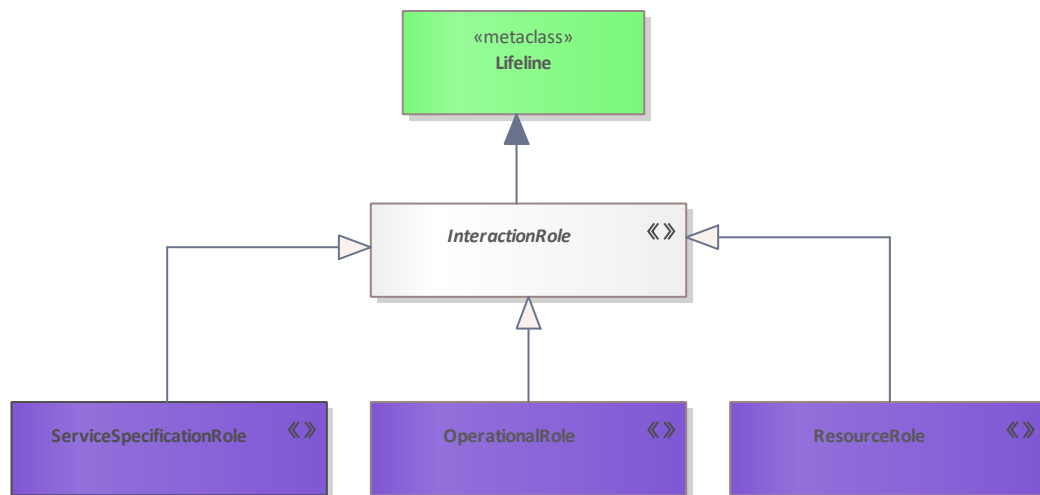


Figure 184: InteractionRole

Elements in Diagram

Name	Definition
InteractionRole	An abstract type that represents an individual participant in the InteractionScenario.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

Tagged Values

Relevant Viewpoints

3.129 IsAccountableFor

Definition

A relation that expresses that an OrganizationalResource is responsible for a resource, service or project in the context of an approval.

Meta Model

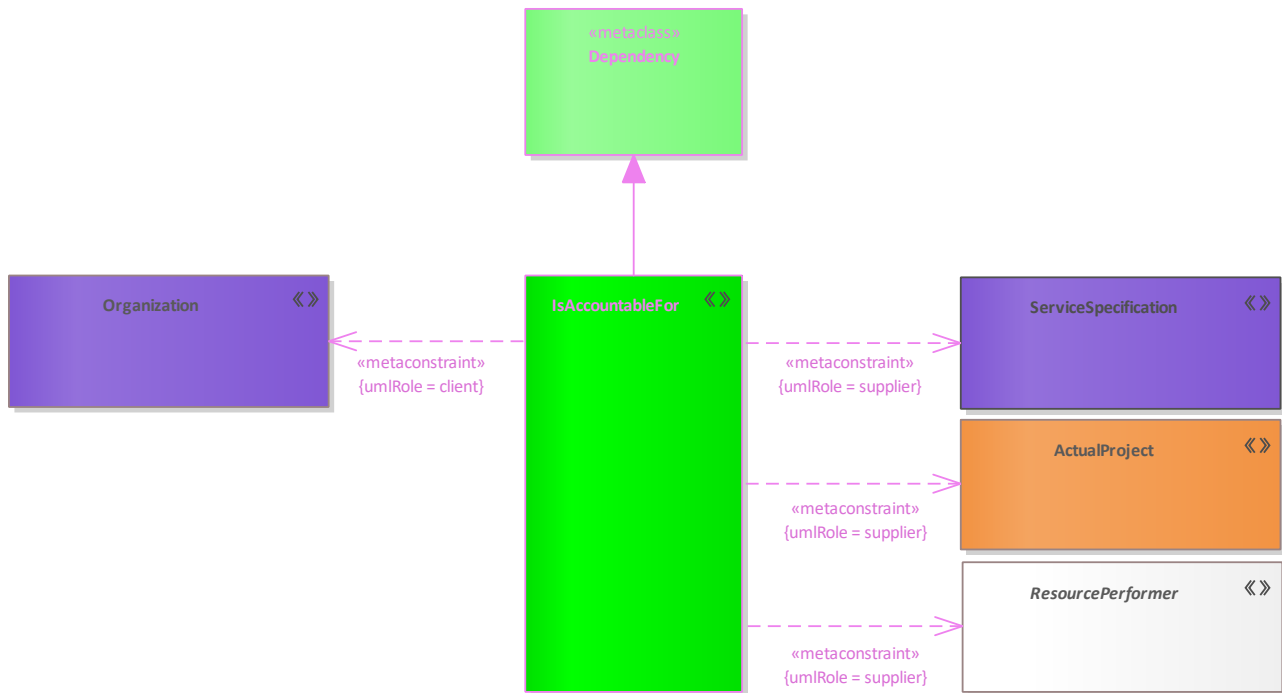


Figure 185: IsAccountableFor

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
IsAccountableFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project in the context of an approval.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Tagged Values

Relevant Viewpoints

- [Lr - Lines of Development](#)
- [P2 - Resource Structure](#)
- [S2 - Service Structure](#)
- [Sr - Service Roadmap](#)

3.130 IsCapableToPerform

Definition

A relationship that says that a capable element performs an activity or action.

Meta Model

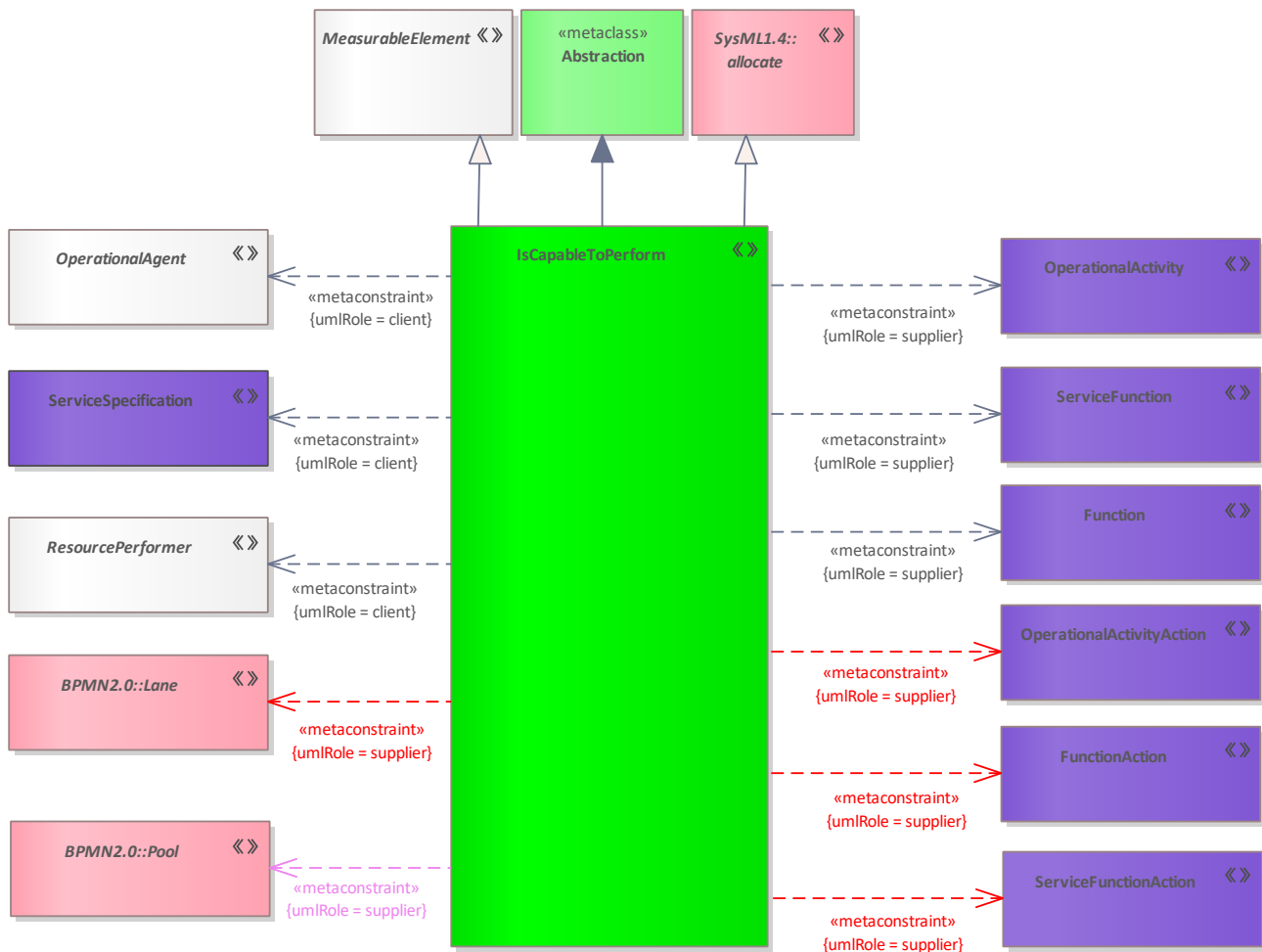


Figure 186: IsCapableToPerform

Elements in Diagram

Name	Definition
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
FunctionAction	A call of a Function indicating that the Function is performed by a ResourceRole in a specific context.
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.

Name	Definition
ServiceFunctionAction	A call of a ServiceFunction in the context of another ServiceFunction.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [P4 - Resource Functions](#)
- [S2 - Service Structure](#)
- [S4 - Service Functions](#)

3.131 IsDuplicateOf

Definition

Relation that represents that two requirements convey the same content.

Meta Model

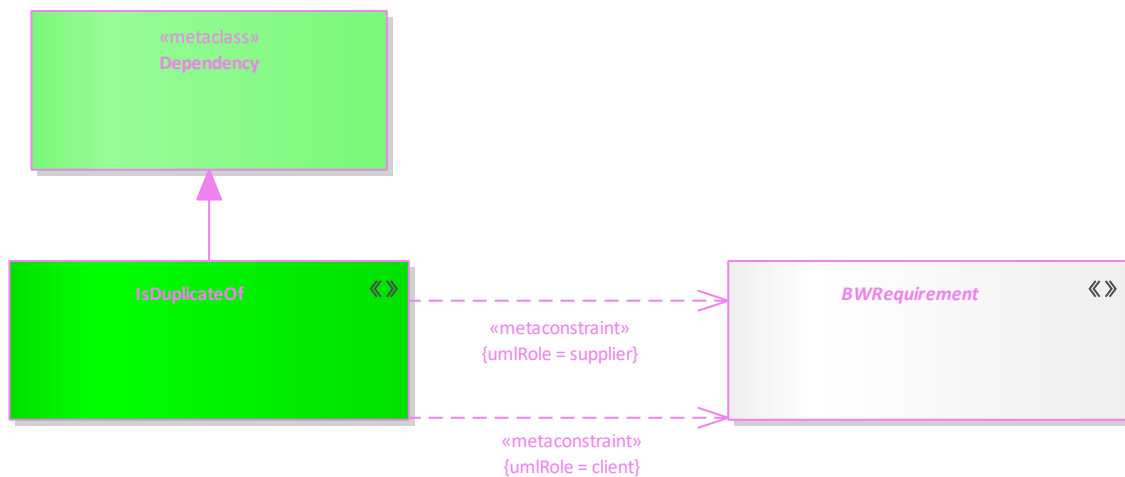


Figure 187: IsDuplicateOf

Elements in Diagram

Name	Definition
BWRRequirement	Abstract base class for requirements.
IsDuplicateOf	Relation that represents that two requirements convey the same content.

Tagged Values

Relevant Viewpoints

- [R3 - Requirement Dependencies](#)

3.132 IsEquivalentToStandardElement

Definition

Relationship that indicates that a model element corresponds to a catalog element.

Meta Model

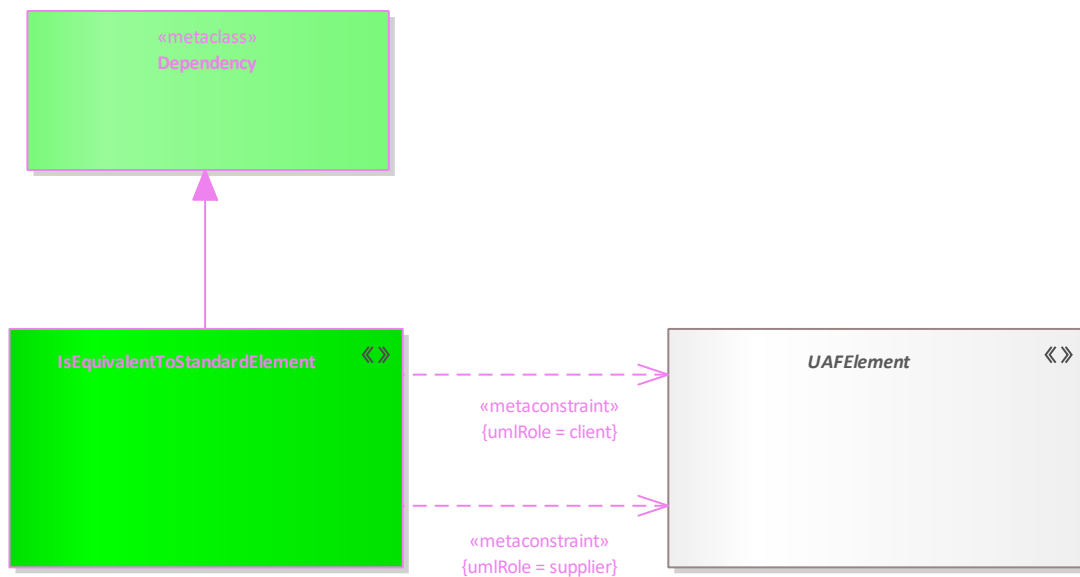


Figure 188: IsEquivalentToStandardElement

Elements in Diagram

Name	Definition
IsEquivalentToStandardElement	Relationship that indicates that a model element corresponds to a catalog element.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Relevant Viewpoints

3.133 IsResponsibleFor

Definition

A relation that expresses that an OrganizationalResource is responsible for a resource, service or project.

Meta Model

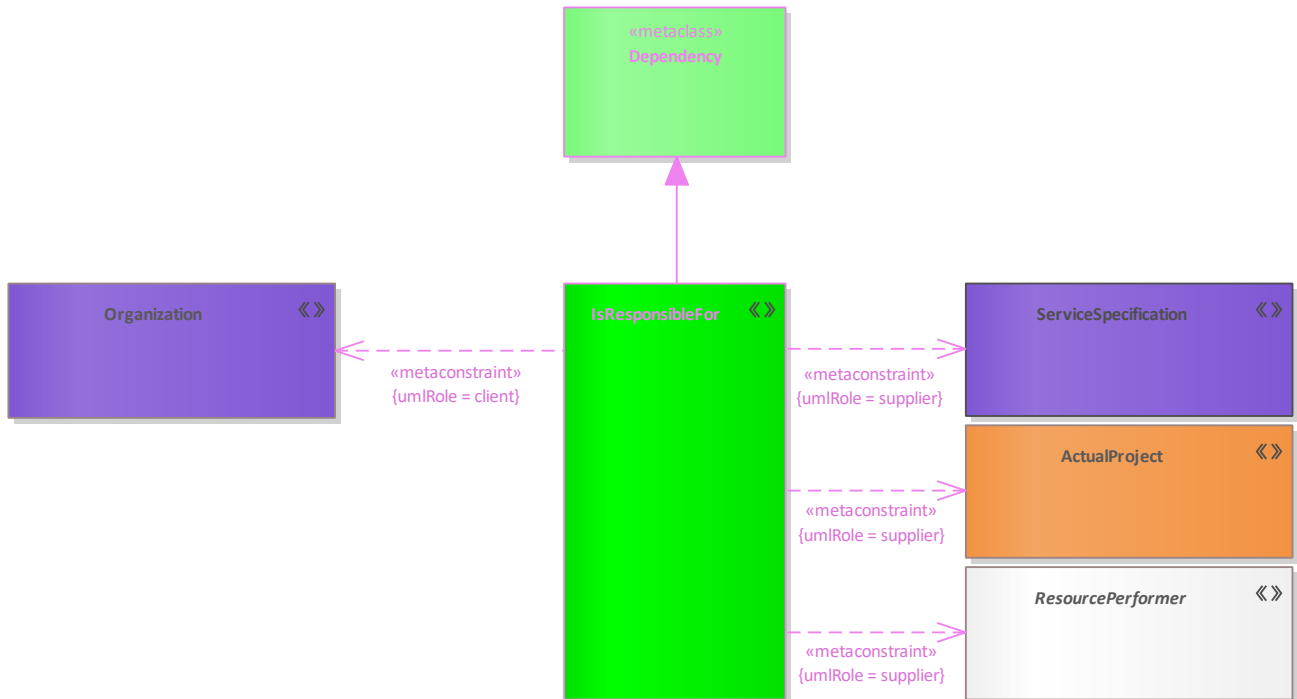


Figure 189: IsResponsibleFor

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
IsResponsibleFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Tagged Values

Relevant Viewpoints

- [Lr - Lines of Development](#)
- [P2 - Resource Structure](#)
- [S2 - Service Structure](#)
- [Sr - Service Roadmap](#)

3.134 JustifiedBy

Definition

Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).

Meta Model

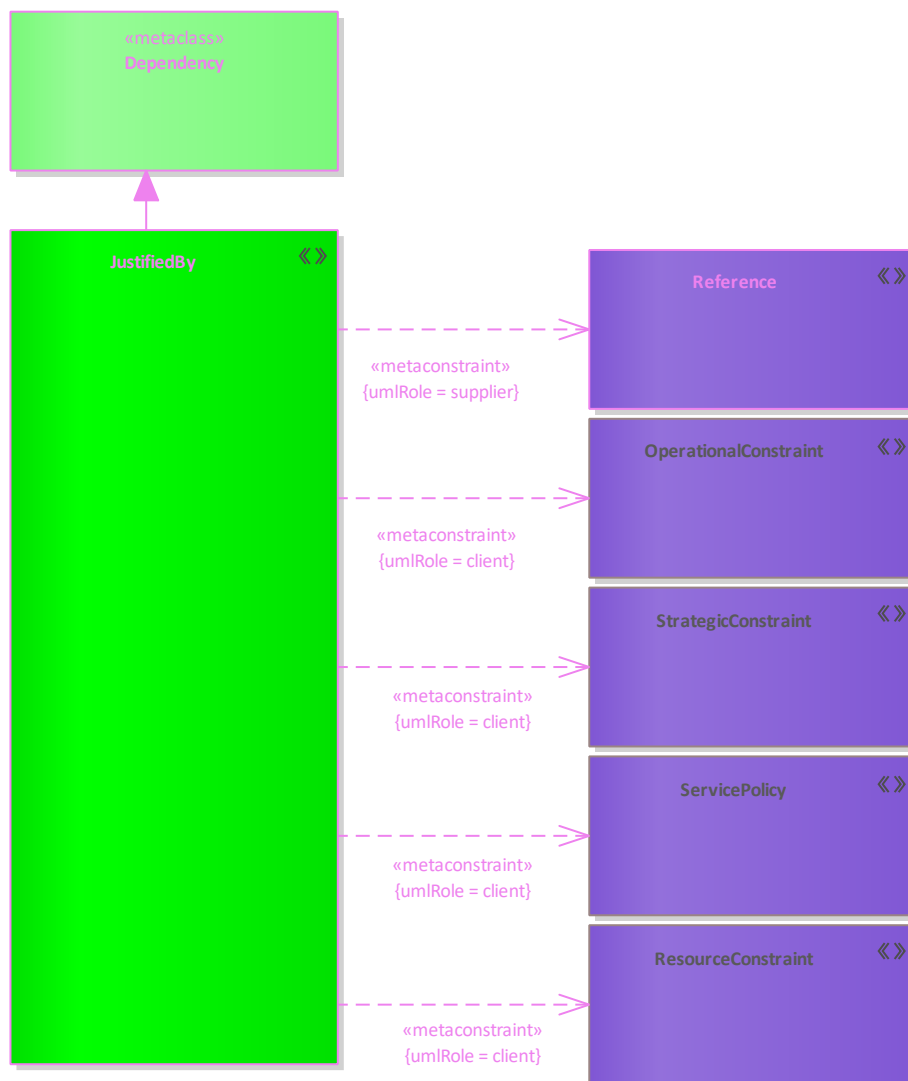


Figure 190: JustifiedBy

Elements in Diagram

Name	Definition
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
Reference	Element describes all types of references.
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
StrategicConstraint	A Rule governing a capability.

Tagged Values

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R7 - Requirement Derivation](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)

3.135 KnownResource

Definition

Asserts that a known ResourcePerformer constrains the implementation of the OperationalPerformer that plays the role in the LogicalArchitecture.

Meta Model

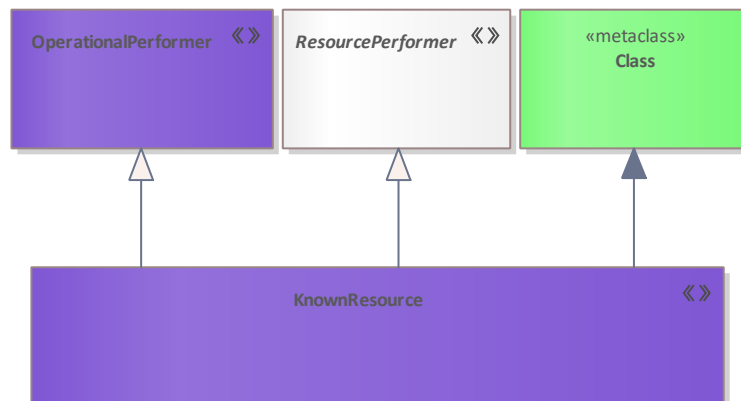


Figure 191: KnownResource

Elements in Diagram

Name	Definition
KnownResource	Asserts that a known ResourcePerformer constrains the implementation of the OperationalPerformer that plays the role in the LogicalArchitecture.
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
Nationality	UN, NATO-PfP, NATO, DEU, MN, EU, TCN, NLD, National, Unknown, not set
SizeIndicator	Theatre, Armygroup, Army, Corps, Command, Division, Brigade, Regiment, Battalion, Company, Echelon, Platoon, Section, Squad, Team, Unknown, not set
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)

3.137 LocationHolder

Definition

Abstract type, used to group elements that are allowed to be associated with a Location.

Meta Model

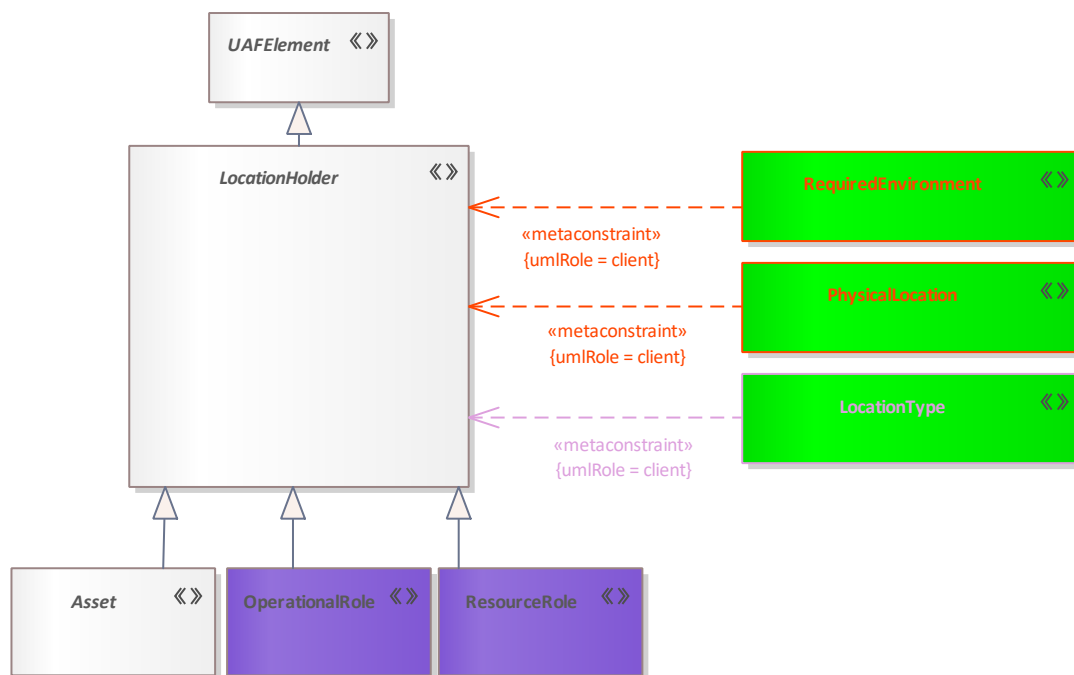


Figure 193: LocationHolder

Elements in Diagram

Name	Definition
Asset	Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.
LocationHolder	Abstract type, used to group elements that are allowed to be associated with a Location.
LocationType	A relationship that expresses which location is assigned to a location holder.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
PhysicalLocation	A relationship that expresses that a location holder operates in an actual location.
RequiredEnvironment	A relationship that expresses that a location holder operates under specific environmental conditions.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
UAElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.138 LocationType

Definition

A relationship that expresses which location is assigned to a location holder.

Meta Model

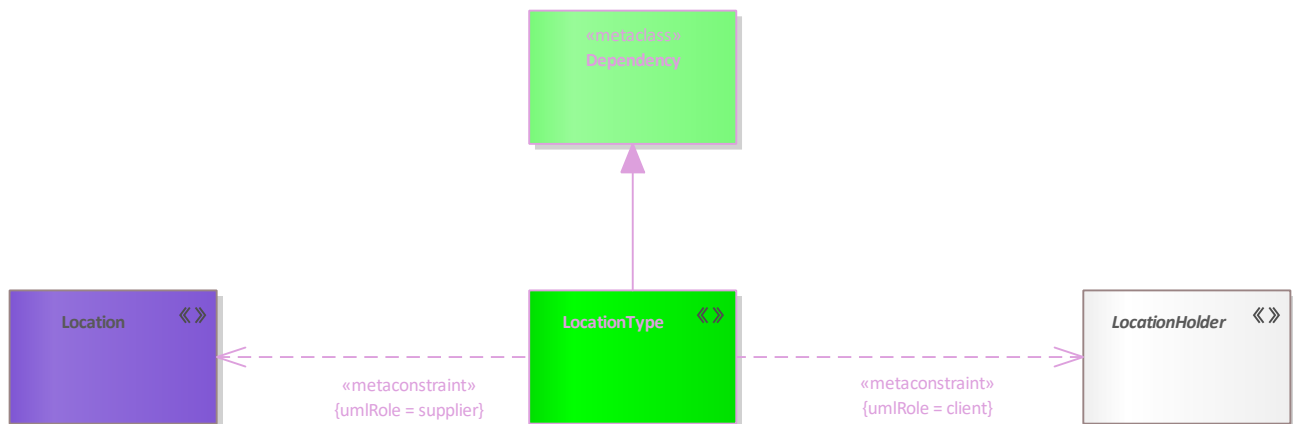


Figure 194: LocationType

Elements in Diagram

Name	Definition
Location	A specification of the generic area in which a LocationHolder is required to be located.
LocationHolder	Abstract type, used to group elements that are allowed to be associated with a Location.
LocationType	A relationship that expresses which location is assigned to a location holder.

Tagged Values

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [P2 - Resource Structure](#)

3.139 MapsToCapability

Definition

A tuple denoting that an Activity contributes to providing a Capability.

Meta Model

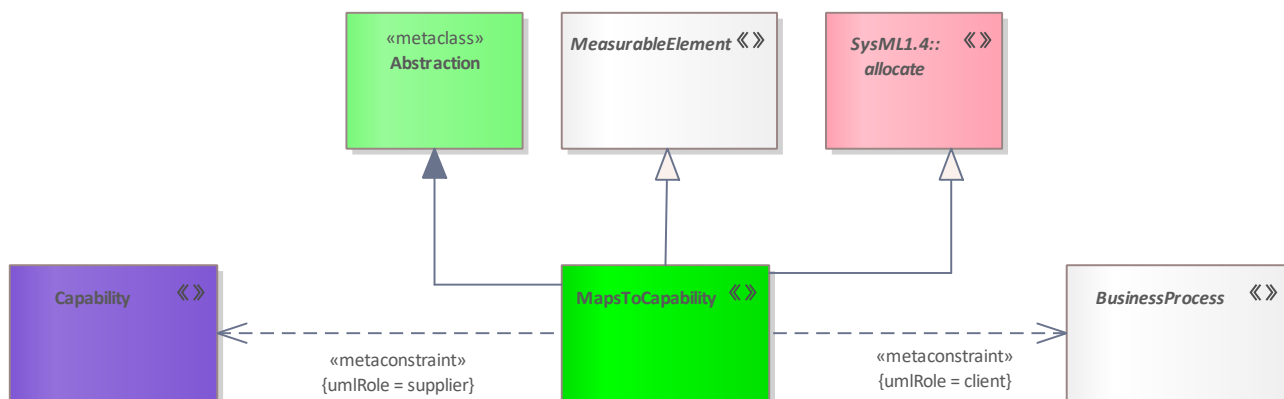


Figure 195: MapsToCapability

Elements in Diagram

Name	Definition
BusinessProcess	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
MapsToCapability	A tuple denoting that an Activity contributes to providing a Capability.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [C4 - Standard Processes](#)
- [L1 - Node Types](#)

3.140 MeasurableElement

Definition

Abstract type, grouping elements that can be measured by applying MeasurementSets to them.

Meta Model

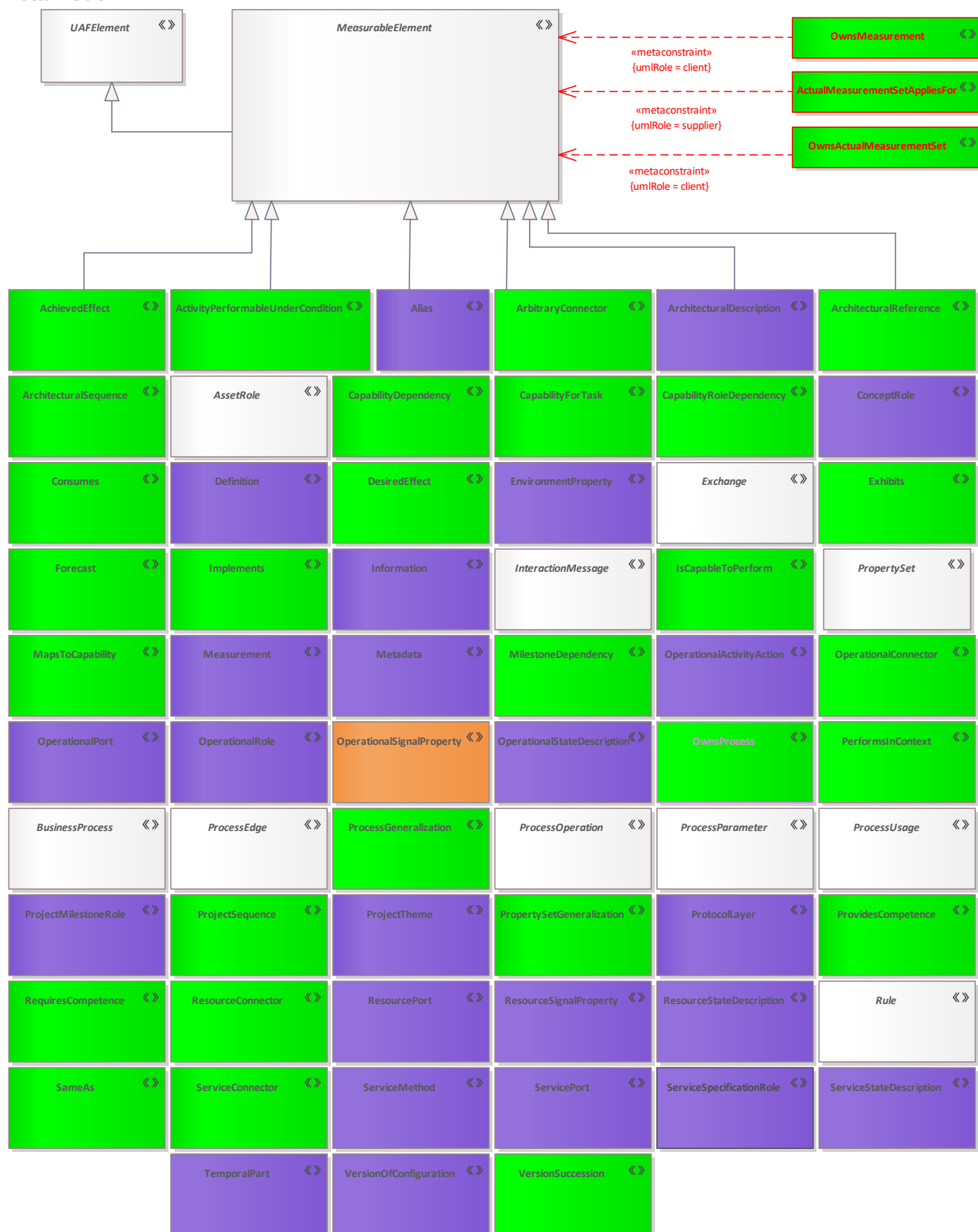


Figure 196: MeasurableElement

Elements in Diagram

Name	Definition
<u>AchievedEffect</u>	A tuple that exists between an ActualState (e.g., observed/measured during testing) of an element that attempts to achieve a DesiredEffect and an Achiever.
<u>ActivityPerformableUnderCondition</u>	The ActualCondition under which an Activity is performed.
<u>ActualMeasurementSetAppliesFor</u>	A relationship that expresses which actual measurement applies for an element.
<u>Alias</u>	A metamodel Artifact used to define an alternative name for an element.
<u>ArbitraryConnector</u>	Represents a visual indication of a connection used in high level operational concept diagrams.
<u>ArchitecturalDescription</u>	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
<u>ArchitecturalReference</u>	A tuple that specifies that one architectural description refers to another.
<u>ArchitecturalSequence</u>	A relationship that specifies that one architectural description is the successor of another.
<u>AssetRole</u>	AssetRole as applied to Security views, an abstract element that indicates the type of elements that can be considered as a subject for security analysis in the particular context (currently no security viewpoints in the framework).
<u>BusinessProcess</u>	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
<u>CapabilityDependency</u>	A tuple that asserts that one Capability is dependent from another.
<u>CapabilityForTask</u>	A tuple that asserts that a Capability is required in order for an Enterprise to conduct a phase of an EnduringTask.
<u>CapabilityRoleDependency</u>	A tuple that asserts that one CapabilityRole is dependent from another.
<u>ConceptRole</u>	Usage of a ConceptItem in the context of a HighLevelOperationalConcept.
<u>Consumes</u>	A tuple that asserts that a service in someway contributes or assists in the execution of an OperationalActivity.
<u>Definition</u>	A comment containing a description of an element in the architecture.
<u>DesiredEffect</u>	A tuple relating the Desirer (a Capability or OrganizationalResource) to an ActualState.
<u>EnvironmentProperty</u>	A property of an Environment that is typed by a Condition. The kinds of Condition that can be represented are Location, GeoPoliticalExtentType and Environment.
<u>Exchange</u>	Abstract tuple, grouping OperationalExchanges and ResourceExchanges that exchange Resources.
<u>Exhibits</u>	A tuple that exists between a CapableElement and a Capability that it meets under specific environmental conditions.
<u>Forecast</u>	A tuple that specifies a transition from one Asset, Standard, Competence to another future one. It is related to an ActualEnterprisePhase to give it a temporal context.
<u>Implements</u>	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
<u>Information</u>	A comment that describes the state of an item of interest in any medium or form -- and is communicated or received.
<u>InteractionMessage</u>	An abstract type that groups several types of messages used in the InteractionScenario.
<u>IsCapableToPerform</u>	A relationship that says that a capable element performs an activity or action.
<u>MapsToCapability</u>	A tuple denoting that an Activity contributes to providing a Capability.

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
Metadata	A comment that can be applied to any element in the architecture. The attributes associated with this element details the relationship between the element and its related dublinCoreElement, metaDataScheme, category and name. This allows the element to be referenced using the Semantic Web.
MilestoneDependency	A tuple between two ActualProjectMilestones that denotes one ActualProjectMilestone follows from another.
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalConnector	A Connector that goes between OperationalRoles representing a need to exchange Resources. It can carry a number of OperationalExchanges.
OperationalPort	An interaction point for an OperationalAgent through which it can interact with the outside environment and which is defined by an OperationalInterface.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
OperationalSignalProperty	A property of an OperationalSignal typed by OperationalExchangeItem. It enables OperationalExchangeItem e.g. InformationElement to be passed as arguments of the OperationalSignal.
OperationalStateDescription	A state machine describing the behavior of a OperationalPerformer, depicting how the OperationalPerformer responds to various events and the actions.
OwnsActualMeasurementSet	A relationship that expresses which actual measurement set an element owns.
OwnsMeasurement	A relationship that expresses which measurement or measurement type an element owns.
OwnsProcess	A dependency relationship denoting that an ActualOrganizationResource owns an OperationalActivity.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
ProcessEdge	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
ProcessGeneralization	A ProcessGeneralization is a taxonomic relationship between a more general Process and a more specific Process.
ProcessOperation	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
ProcessParameter	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
ProcessUsage	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer or Role.
ProjectMilestoneRole	The role played by a ProjectMilestone in the context of a Project.
ProjectSequence	A tuple between two ActualProjects that denotes one ActualProject cannot start before the previous ActualProject is finished.
ProjectTheme	A property of a ProjectMilestone that captures an aspect by which the progress of ActualProjects may be measured.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
ProtocolLayer	Usage of a Protocol in the context of another Protocol. Creates a whole-part relationship.
ProvidesCompetence	A tuple that asserts that an ActualOrganizationalResource provides a specific set of Competencies.
RequiresCompetence	A tuple that asserts that an ActualOrganizationalResource is required to have a specific set of Competencies.

Name	Definition
ResourceConnector	A channel for exchange between two ResourceRoles.
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.
ResourceSignalProperty	A property of an ResourceSignal typed by ResourceExchangeItem. It enables ResourceExchangeItem e.g. DataElement to be passed as arguments of the ResourceSignal.
ResourceStateDescription	A state machine describing the behavior of a ResourcePerformer, depicting how the ResourcePerformer responds to various events and the actions.
Rule	An abstract type for all types of constraint (i.e. an OperationalConstraint could detail the rules of accountancy best practice).
SameAs	A tuple that asserts that two elements refer to the same real-world thing.
ServiceConnector	A channel for exchange between two ServiceSpecifications. Where one acts as the consumer of the other.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
ServicePort	An interaction point for a ServiceSpecification through which it can interact with the outside environment and which is defined by a ServiceInterface.
ServiceSpecificationRole	An assertion that a ServiceSpecification calls upon another ServiceSpecification in order to deliver its stated functionality.
ServiceStateDescription	A state machine describing the behavior of a ServiceSpecification, depicting how the ServiceSpecification responds to various events and the actions.
TemporalPart	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.
VersionOfConfiguration	A property of a WholeLifeConfiguration, used in version control of a VersionedElement. It asserts that a VersionedElement is a version of a WholeLifeConfiguration.
VersionSuccession	A tuple between two VersionOfConfigurations that denotes that one VersionOfConfiguration follows from another.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.141 Measurement

Definition

A property of an element representing something in the physical world, expressed in amounts of a unit of measure.

Meta Model

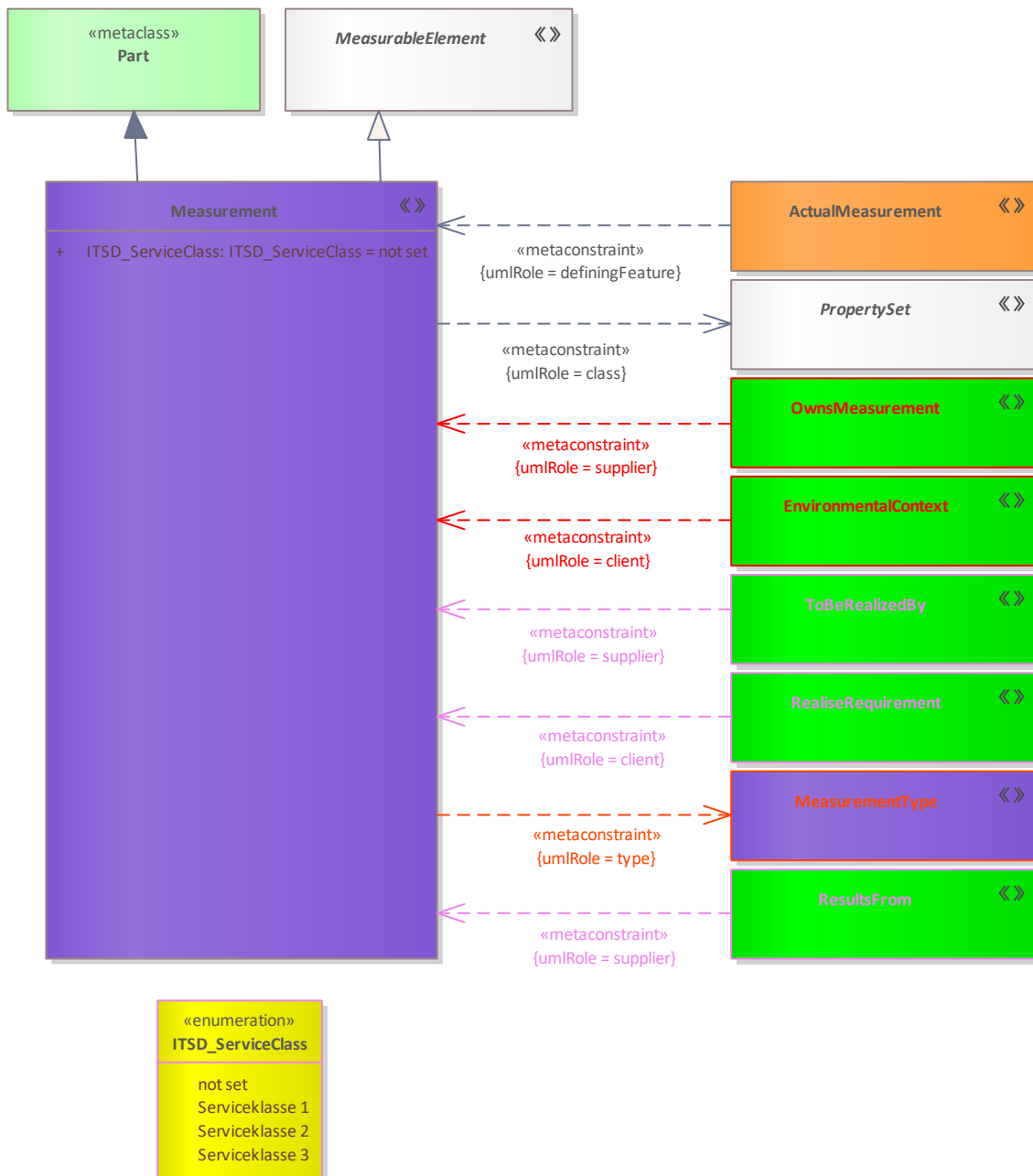


Figure 197: Measurement

Elements in Diagram

Name	Definition
ActualMeasurement	An actual value that is applied to a Measurement.
EnvironmentalContext	Relationship that indicates under which condition an measurement counts.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.

Name	Definition
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
OwnsMeasurement	A relationship that expresses which measurement or measurement type an element owns.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
ITSD_ServiceClass	not set, Serviceklasse 1, Serviceklasse 2, Serviceklasse 3
URI	String

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C7 - Performance Parameters](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [Rr - Requirement Realization](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S8 - Service Policy](#)

3.142 MeasurementType

Definition

A type of a property representing something in the physical world, expressed in amounts of a unit of measure.

Meta Model

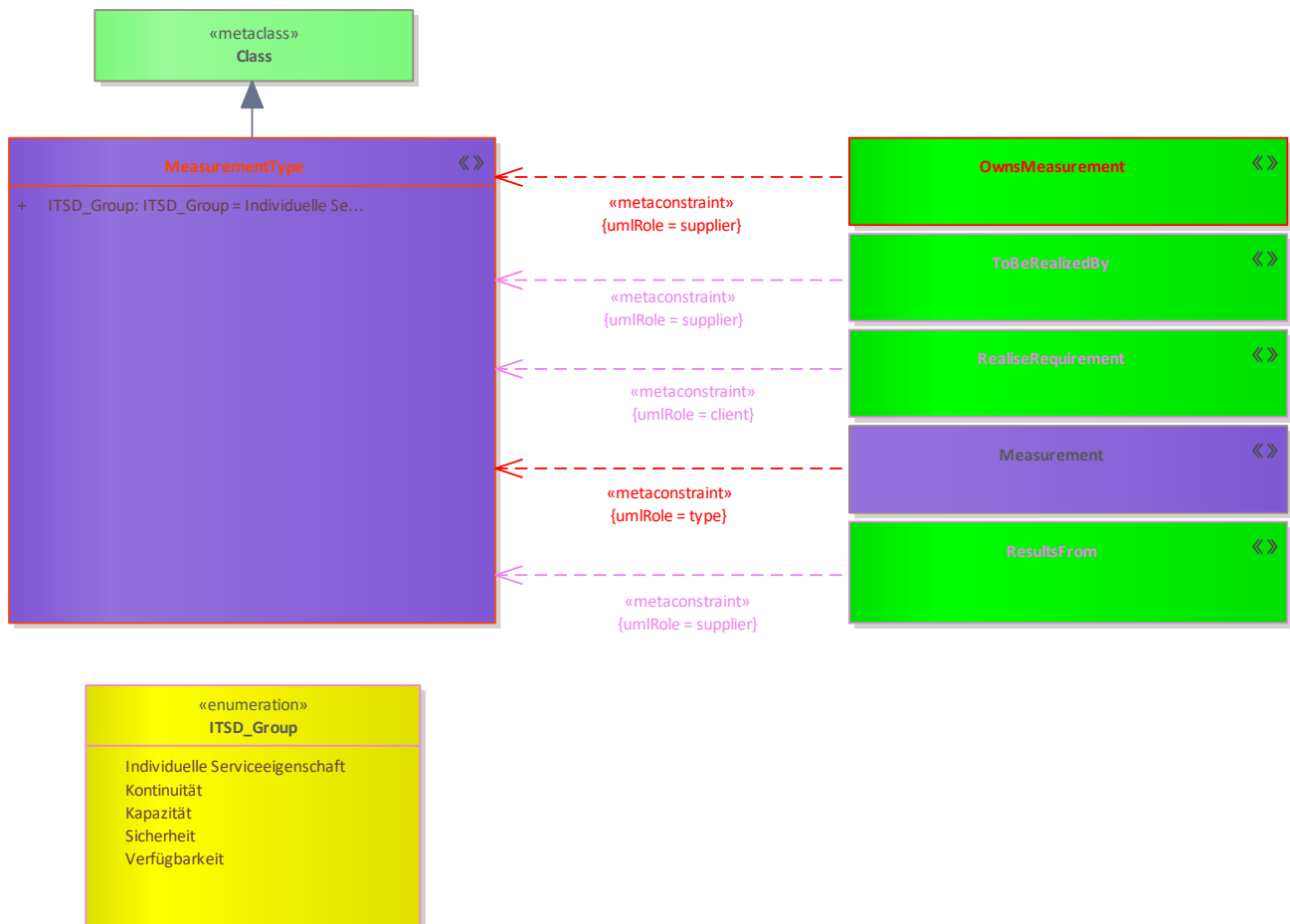


Figure 198: MeasurementType

Elements in Diagram

Name	Definition
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
OwnsMeasurement	A relationship that expresses which measurement or measurement type an element owns.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
ITSD_Group	Individuelle Serviceeigenschaft, Kontinuität, Kapazität, Sicherheit, Verfügbarkeit

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C7 - Performance Parameters](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [Rr - Requirement Realization](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S8 - Service Policy](#)

3.143 Metadata

Definition

A comment that can be applied to any element in the architecture. The attributes associated with this element details the relationship between the element and its related `dublinCoreElement`, `metaDataScheme`, `category` and `name`. This allows the element to be referenced using the Semantic Web.

Meta Model

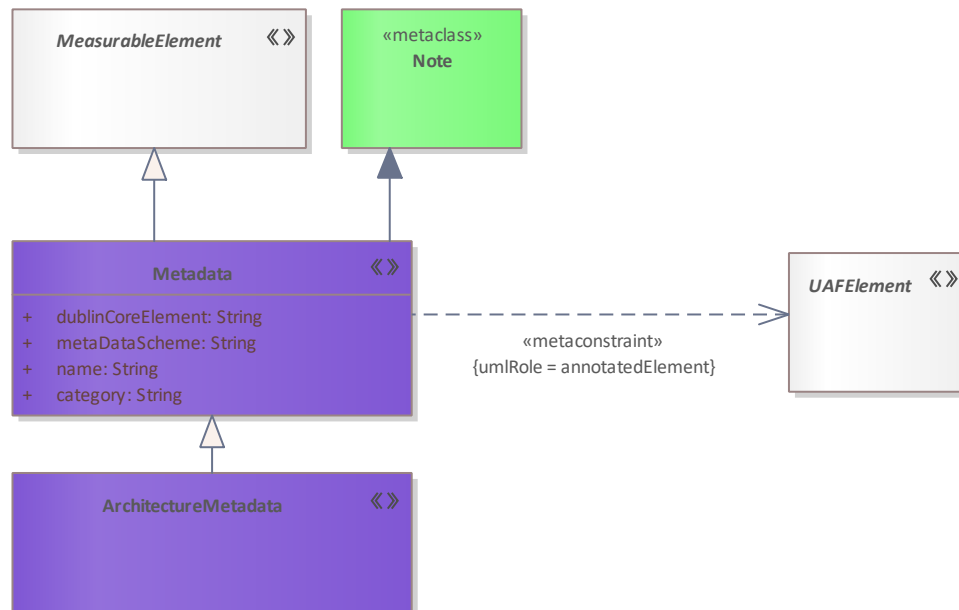


Figure 199: Metadata

Elements in Diagram

Name	Definition
ArchitectureMetadata	Information associated with an <code>ArchitecturalDescription</code> , that supplements the standard set of tags used to summarize the Architecture. It states things like what methodology was used, notation, etc.
MeasurableElement	Abstract type, grouping elements that can be measured by applying <code>MeasurementSets</code> to them.
Metadata	A comment that can be applied to any element in the architecture. The attributes associated with this element details the relationship between the element and its related <code>dublinCoreElement</code> , <code>metaDataScheme</code> , <code>category</code> and <code>name</code> . This allows the element to be referenced using the Semantic Web.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
<code>dublinCoreElement</code>	String
<code>metaDataScheme</code>	String
<code>name</code>	String
<code>category</code>	String
<code>URI</code>	String

Relevant Viewpoints

3.144 MilestoneDependency

Definition

A tuple between two ActualProjectMilestones that denotes one ActualProjectMilestone follows from another.

Meta Model

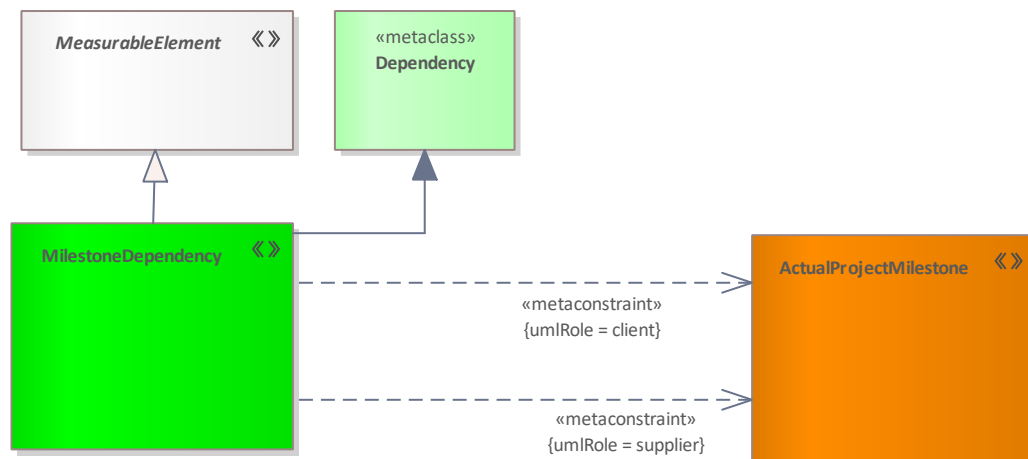


Figure 200: MilestoneDependency

Elements in Diagram

Name	Definition
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
MilestoneDependency	A tuple between two ActualProjectMilestones that denotes one ActualProjectMilestone follows from another.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.145 NaturalResource

Definition

Type of physical resource that occurs in nature.

Meta Model

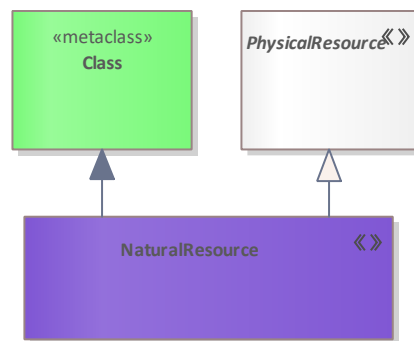


Figure 201: NaturalResource

Elements in Diagram

Name	Definition
NaturalResource	Type of physical resource that occurs in nature.
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)

3.146 NeedsModificationOf

Definition

Relation stats that a project makes adjustments to a resource.

Meta Model

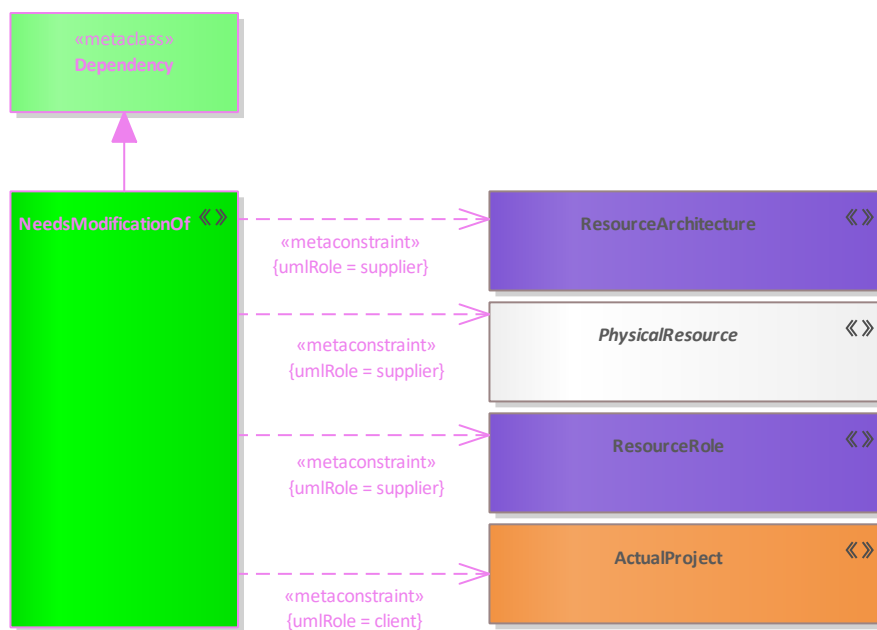


Figure 202: NeedsModificationOf

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
NeedsModificationOf	Relation stats that a project makes adjustments to a resource.
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.

Tagged Values

Relevant Viewpoints

- [P2 - Resource Structure](#)

3.147 NeedsResource

Definition

Relation stats that a project needs a resource.

Meta Model

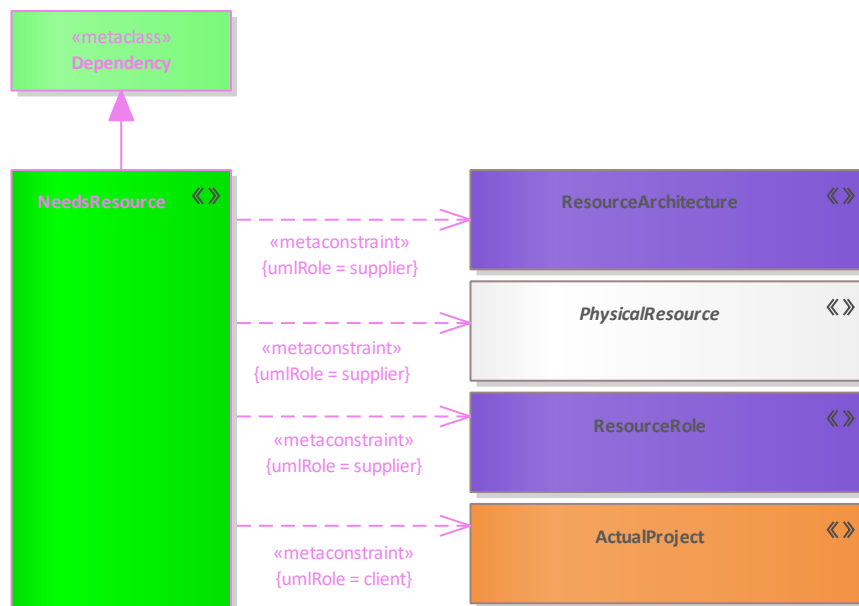


Figure 203: NeedsResource

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
NeedsResource	Relation stats that a project needs a resource.
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.

Tagged Values

Relevant Viewpoints

- [P2 - Resource Structure](#)

3.148 NeedsService

Definition

A relation that expresses that a project needs a service

Meta Model

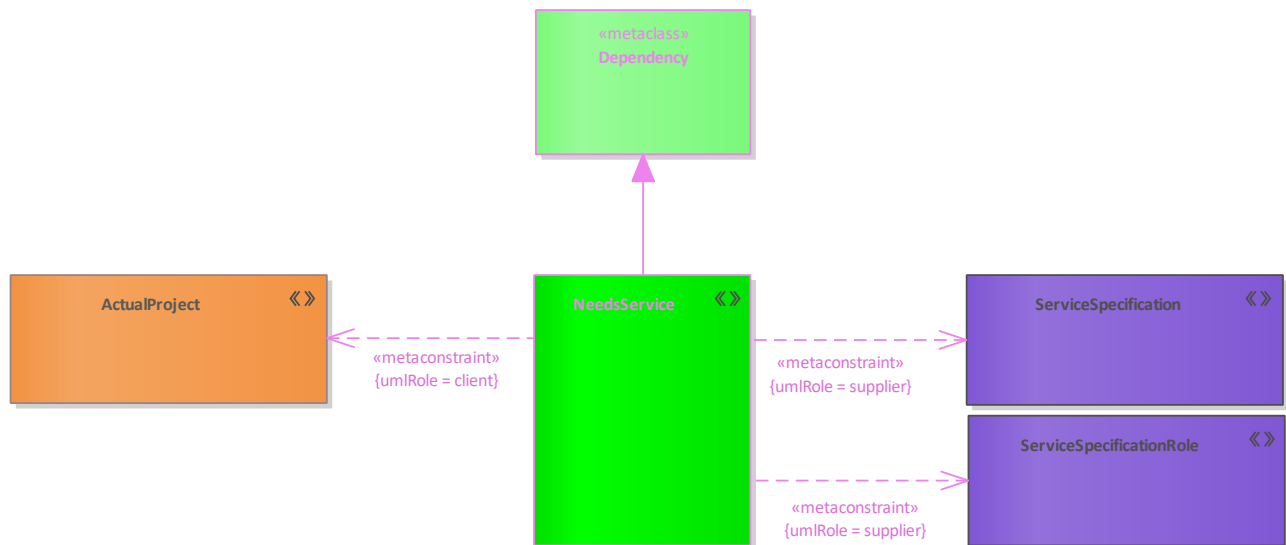


Figure 204: NeedsService

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
NeedsService	A relation that expresses that a project needs a service
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

Tagged Values

Relevant Viewpoints

- [Sr - Service Roadmap](#)

3.149 NonfunctionalRequirement

Definition

The element represents a non-functional requirement (how should the system / software be able to do something?).

Meta Model

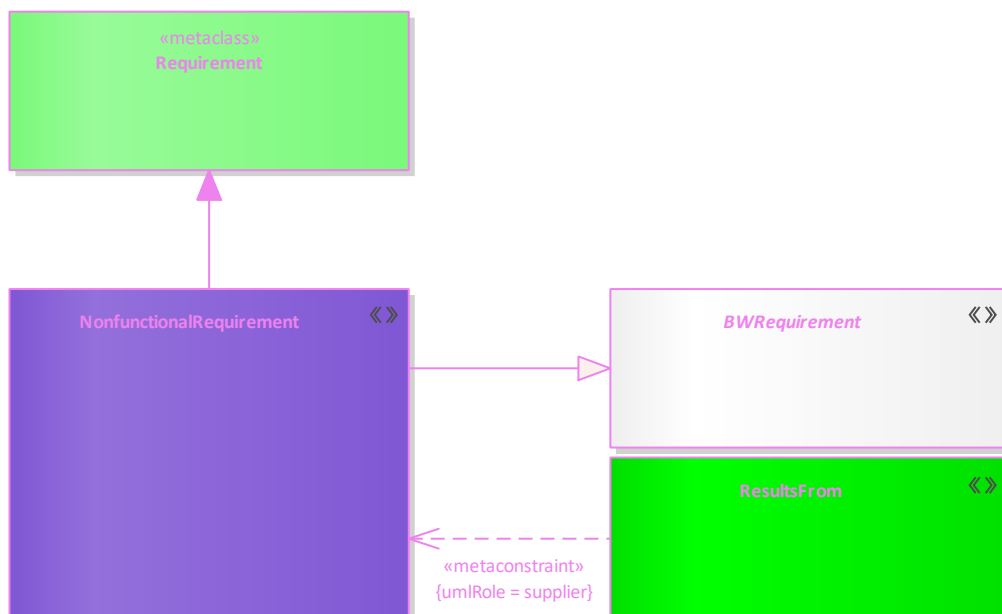


Figure 205: NonfunctionalRequirement

Elements in Diagram

Name	Definition
BWRequirement	Abstract base class for requirements.
NonfunctionalRequirement	The element represents a non-functional requirement (how should the system / software be able to do something?).
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.

Tagged Values

Tag Name	Valid Values
Uuid	String
Afo_ID	String
AG_ID	String
Akteur	String
Anforderungsart	String
Ansprechpartner	String
Detailstufe	int
Freitext	String
Gewicht (absolut)	float
Kategorie	String
Kritikalität	String
Markierung	boolean
Objectid	String
Object und Ergänzungen	String
Operative Bewertung	String
Phasen	String

Position	int
Projektrolle	String
Prozesswort	String
QS_Status	String
Rang	int
Singular	boolean
Status	String
Subjekt	String
Text	String
Titelsperre	boolean
Bezug	String
Verbindlichkeit	String
Hinweis	String
Zu	boolean
Priorität Vergabe	String
Regelungen	String
Vererbung	String
Nachweisart	String
Bemerkung	String
Anforderung manuell	boolean
Aktivität	String
Qualität	String
Randbedingung	String

Relevant Viewpoints

- [R2 - Requirement Catalogue](#)
- [R3 - Requirement Dependencies](#)
- [R7 - Requirement Derivation](#)

3.150 OperationalActivity

Definition

An Activity that captures a logical process, specified independently of how the process is carried out.

Meta Model

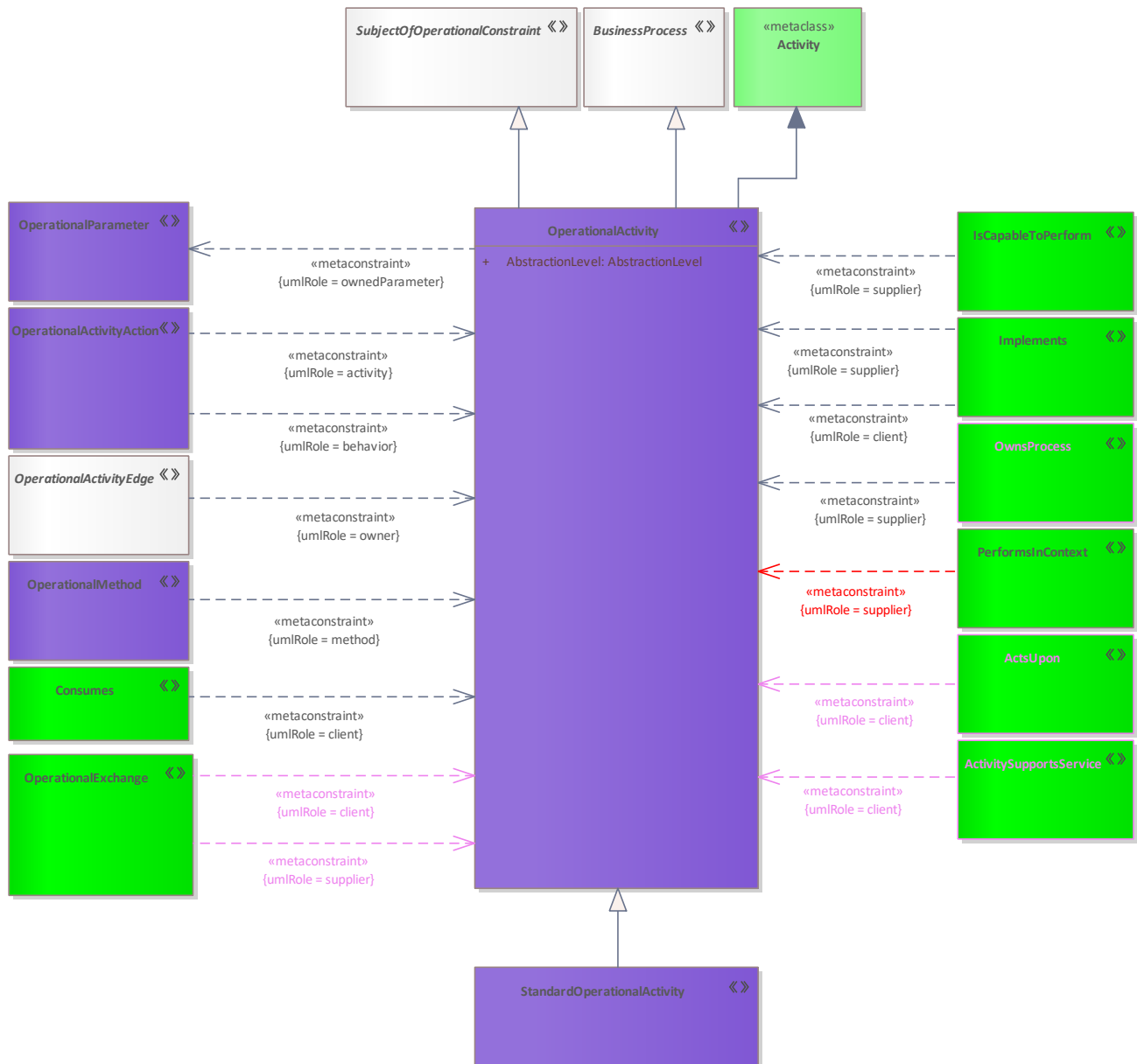


Figure 206: OperationalActivity

Elements in Diagram

Name	Definition
ActivitySupportsService	Relation states that a process is necessary for the implementation of a service.
ActsUpon	Asserts that something (subject) is acted upon by an OperationalActivity (activity).
BusinessProcess	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
Consumes	A tuple that asserts that a service in someway contributes or assists in the execution of an OperationalActivity.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.

Name	Definition
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalActivityEdge	A tuple that shows the flow of Resources (objects/information) between OperationalActivityActions.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalMethod	behavioral feature of a OperationalPerformer whose behavior is specified in an OperationalActivity.
OperationalParameter	A type that represents inputs and outputs of an OperationalActivity. It is typed by an OperationalExchangeItem.
OwnsProcess	A dependency relationship denoting that an ActualOrganizationResource owns an OperationalActivity.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
StandardOperationalActivity	A sub-type of OperationalActivity that is a standard operating procedure.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L1 - Node Types](#)
- [L4 - Logical Activities](#)

3.151 OperationalActivityAction

Definition

A call of an OperationalActivity in the context of another OperationalActivity.

Meta Model

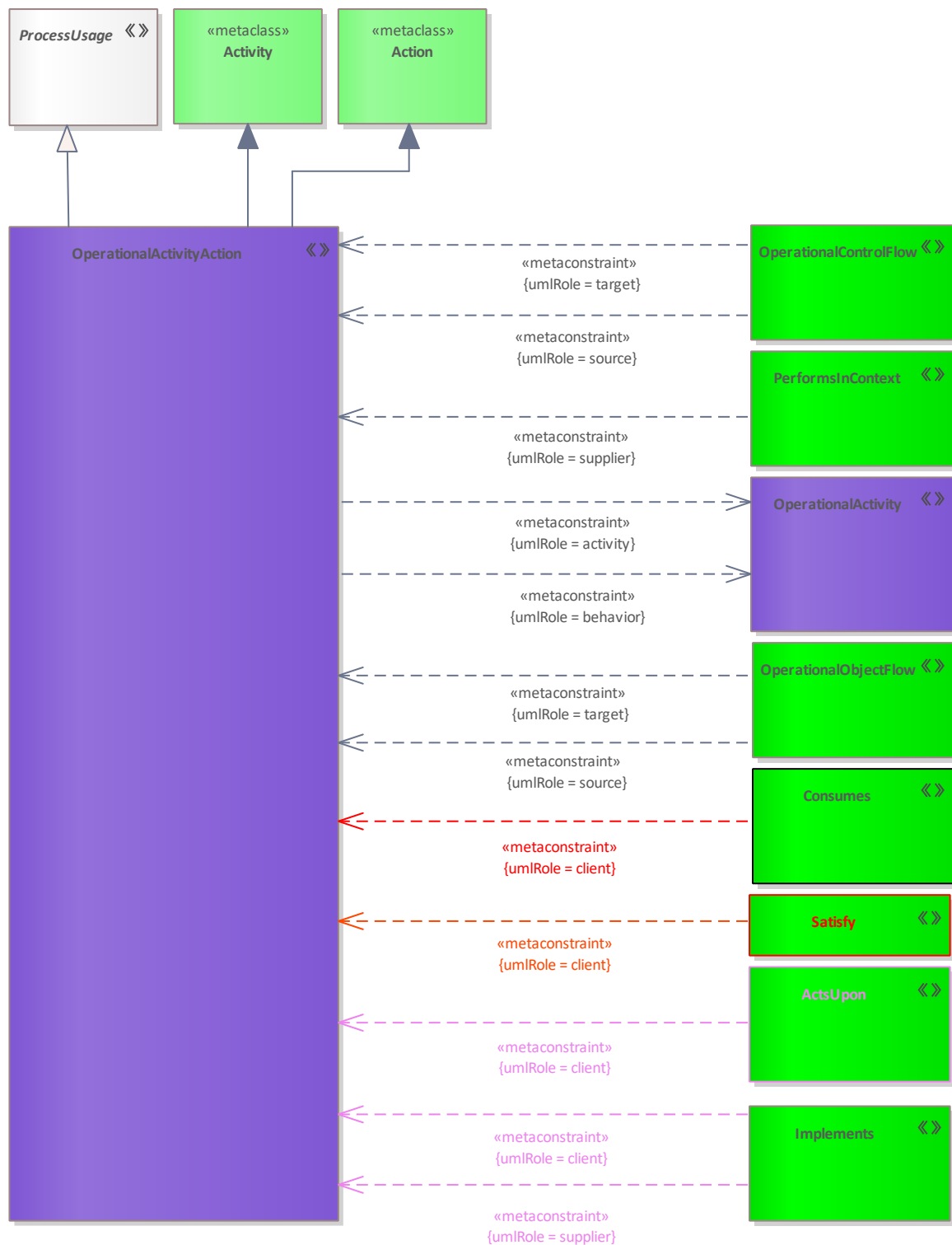


Figure 207: OperationalActivityAction

Elements in Diagram

Name	Definition
ActsUpon	Asserts that something (subject) is acted upon by an OperationalActivity (activity).

Name	Definition
Consumes	A tuple that asserts that a service in someway contributes or assists in the execution of an OperationalActivity.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalControlFlow	An ActivityEdge that shows the flow of control between OperationalActivityActions.
OperationalObjectFlow	An ActivityEdge that shows the flow of Resources (objects/information) between OperationalActivityActions.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
ProcessUsage	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer or Role.
Satisfy	This relation states that an constraint affects an element.

Tagged Values

Tag Name	Valid Values
_image	
URI	String

Relevant Viewpoints

- [L1 - Node Types](#)
- [L4 - Logical Activities](#)

3.152 OperationalActivityEdge

Definition

A tuple that shows the flow of Resources (objects/information) between OperationalActivityActions.

Meta Model

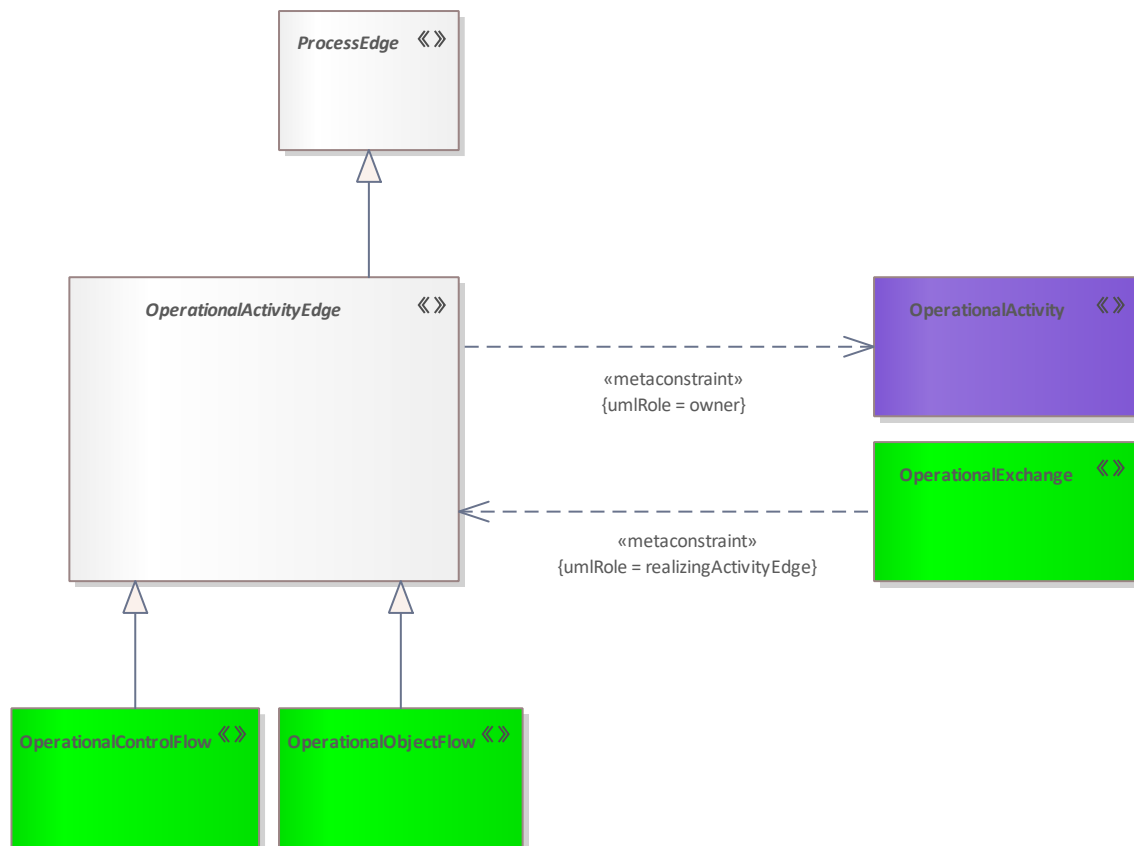


Figure 208: OperationalActivityEdge

Elements in Diagram

Name	Definition
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalActivityEdge	A tuple that shows the flow of Resources (objects/information) between OperationalActivityActions.
OperationalControlFlow	An ActivityEdge that shows the flow of control between OperationalActivityActions.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalObjectFlow	An ActivityEdge that shows the flow of Resources (objects/information) between OperationalActivityActions.
ProcessEdge	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

Elements in Diagram

Name	Definition
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
Desirer	Abstract type used to group architecture elements that might desire a particular effect.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalArchitecture	A type used to denote a model of the Architecture, described from the Operational perspective.
OperationalAsset	An abstract element used to group the elements of OperationalAgent and InformationElement allowing them to own InformationRoles.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalMethod	behavioral feature of a OperationalPerformer whose behavior is specified in an OperationalActivity.
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
OperationalPort	An interaction point for an OperationalAgent through which it can interact with the outside environment and which is defined by an OperationalInterface.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
OperationalStateDescription	A state machine describing the behavior of a OperationalPerformer, depicting how the OperationalPerformer responds to various events and the actions.
ServiceDependency	Relationship that is a dependency of a service on a service, operational node or resource.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.154 OperationalArchitecture

Definition

A type used to denote a model of the Architecture, described from the Operational perspective.

Meta Model

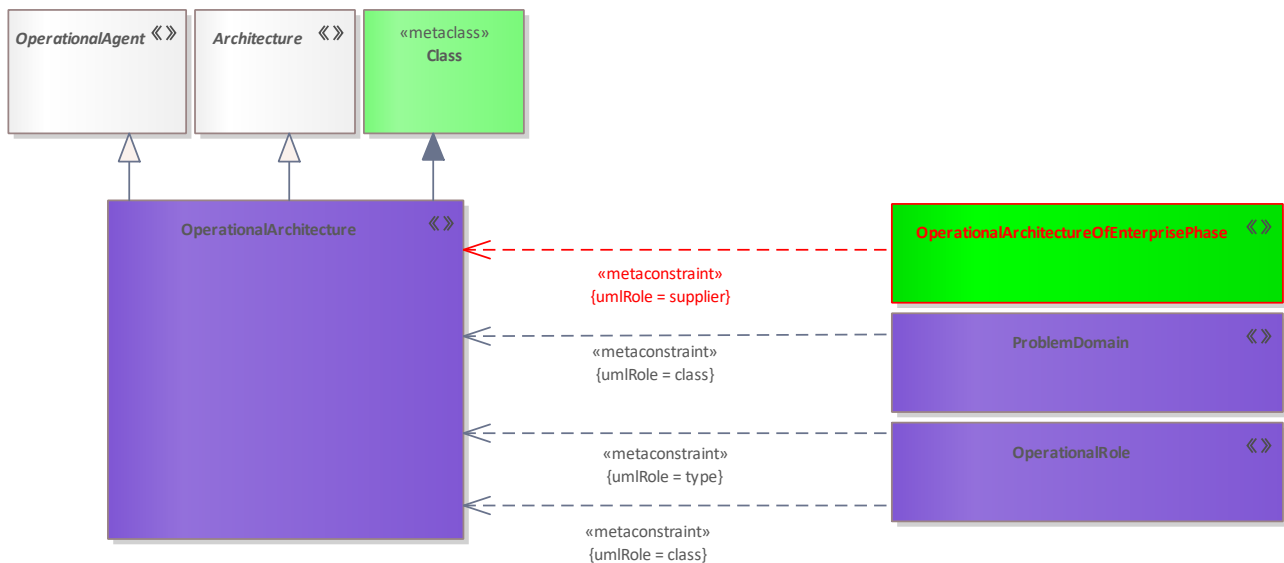


Figure 210: OperationalArchitecture

Elements in Diagram

Name	Definition
Architecture	An abstract type that represents a generic architecture. Subtypes are OperationalArchitecture and ResourceArchitecture.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalArchitecture	A type used to denote a model of the Architecture, described from the Operational perspective.
OperationalArchitectureOfEnterprisePhase	Relationship that says that in a actual enterprise phase an operational architecture is valid.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
ProblemDomain	A property associated with a logical architecture, used to specify the scope of the problem.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [C2 - Enterprise Vision](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L5 - Logical States](#)

3.155 OperationalArchitectureOfEnterprisePhase

Definition

Relationship that says that in a actual enterprisephase an operational architecture is valid.

Meta Model

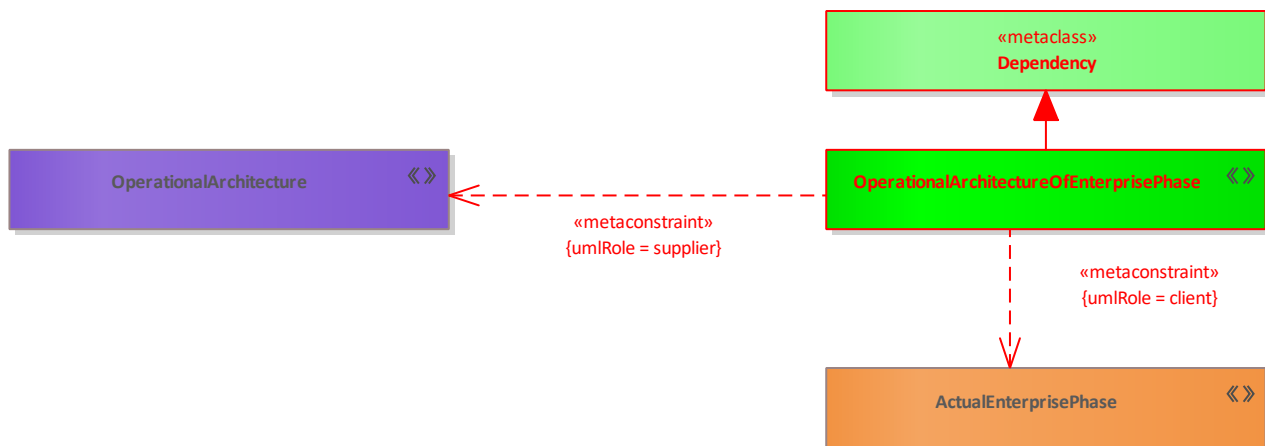


Figure 211: OperationalArchitectureOfEnterprisePhase

Elements in Diagram

Name	Definition
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
OperationalArchitecture	A type used to denote a model of the Architecture, described from the Operational perspective.
OperationalArchitectureOfEnterprisePhase	Relationship that says that in a actual enterprisephase an operational architecture is valid.

Tagged Values

Relevant Viewpoints

- [C2 - Enterprise Vision](#)

3.156 OperationalAsset

Definition

An abstract element used to group the elements of OperationalAgent and InformationElement allowing them to own InformationRoles.

Meta Model

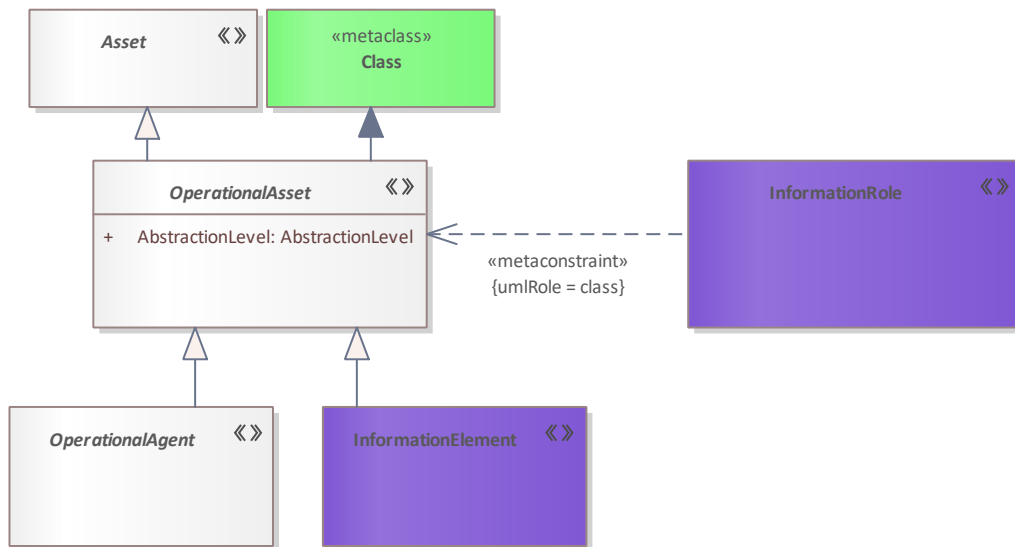


Figure 212: OperationalAsset

Elements in Diagram

Name	Definition
Asset	Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.
InformationElement	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable to perform (see IsCapableToPerform).
InformationRole	A usage of InformationElement that exists in the context of an OperationalAsset. It also allows the representation of the whole-part aggregation of InformationElements.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalAsset	An abstract element used to group the elements of OperationalAgent and InformationElement allowing them to own InformationRoles.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.157 OperationalConnector

Definition

A Connector that goes between OperationalRoles representing a need to exchange Resources. It can carry a number of OperationalExchanges.

Meta Model

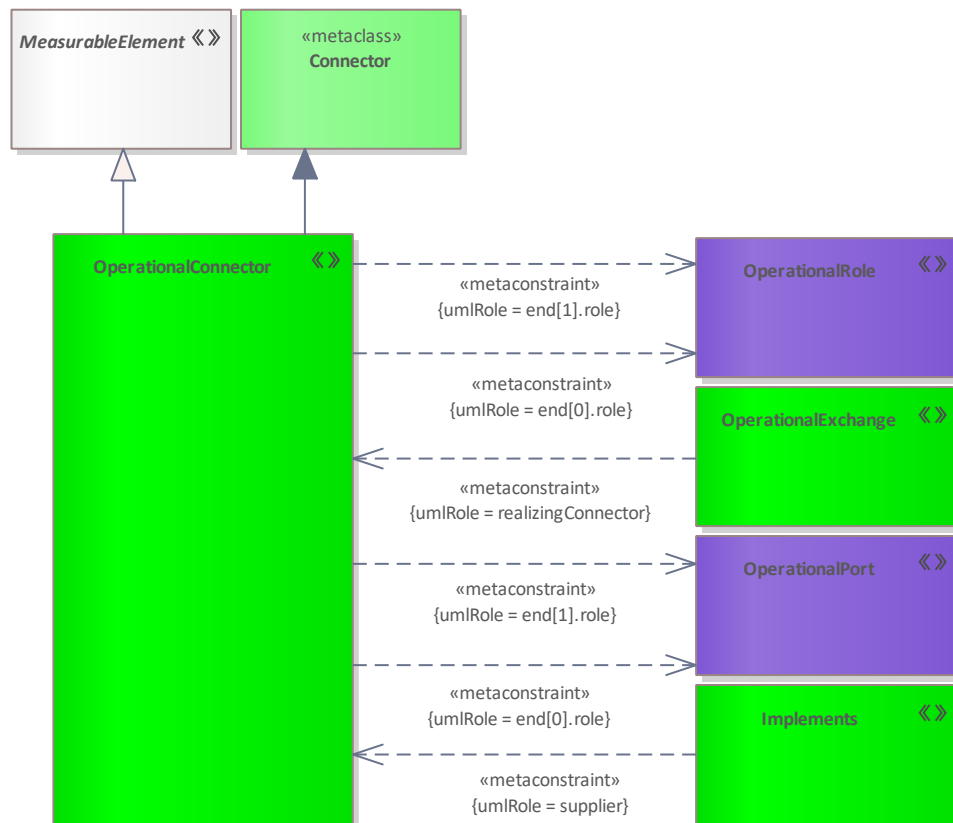


Figure 213: OperationalConnector

Elements in Diagram

Name	Definition
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalConnector	A Connector that goes between OperationalRoles representing a need to exchange Resources. It can carry a number of OperationalExchanges.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalPort	An interaction point for an OperationalAgent through which it can interact with the outside environment and which is defined by an OperationalInterface.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)

3.158 OperationalConstraint

Definition

A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.

Meta Model

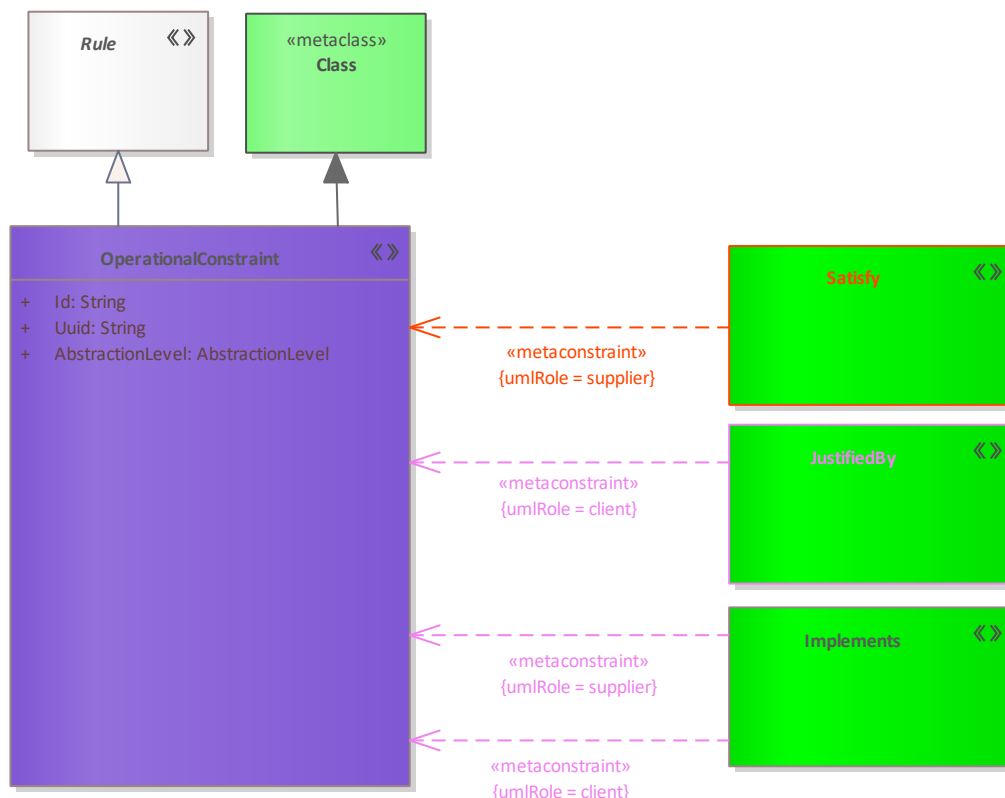


Figure 214: OperationalConstraint

Elements in Diagram

Name	Definition
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
Rule	An abstract type for all types of constraint (i.e. an OperationalConstraint could detail the rules of accountancy best practice).
Satisfy	This relation states that an constraint affects an element.

Tagged Values

Tag Name	Valid Values
Id	String
Uuid	String
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
ruleKind	StructuralAssertion, ActionAssertion, Derivation, Contract, Constraint, Guidance, SecurityPolicy, Caveat
URI	String

Relevant Viewpoints

- [C8 - Planning Assumption](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P8 - Resource Constraints](#)
- [R7 - Requirement Derivation](#)
- [S8 - Service Policy](#)

3.159 OperationalControlFlow

Definition

An ActivityEdge that shows the flow of control between OperationalActivityActions.

Meta Model

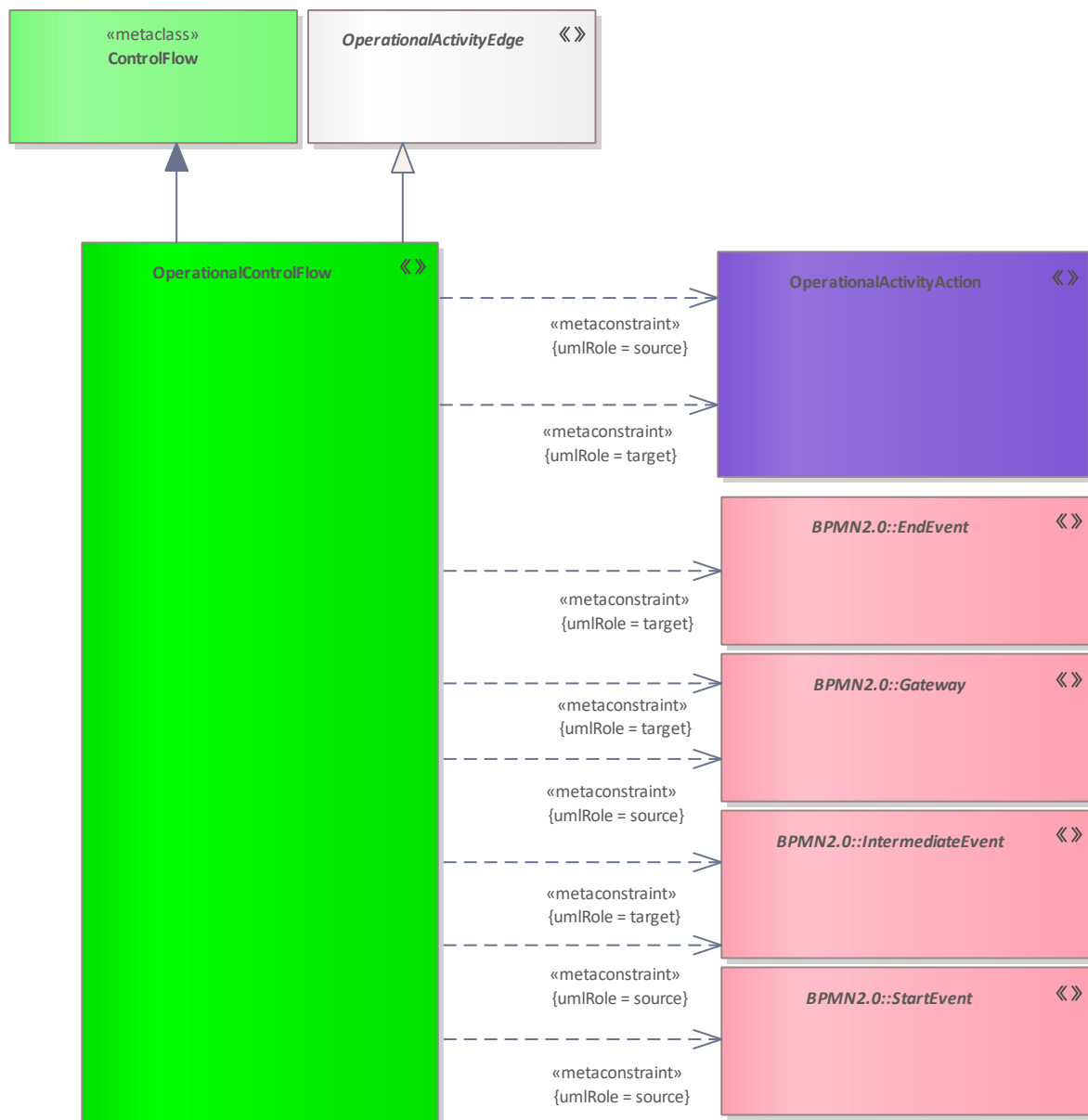


Figure 215: OperationalControlFlow

Elements in Diagram

Name	Definition
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalActivityEdge	A tuple that shows the flow of Resources (objects/information) between OperationalActivityActions.
OperationalControlFlow	An ActivityEdge that shows the flow of control between OperationalActivityActions.

Tagged Values

Tag Name	Valid Values
_image	

URI	String
-----	--------

Relevant Viewpoints

3.160 OperationalExchange

Definition

Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).

Meta Model

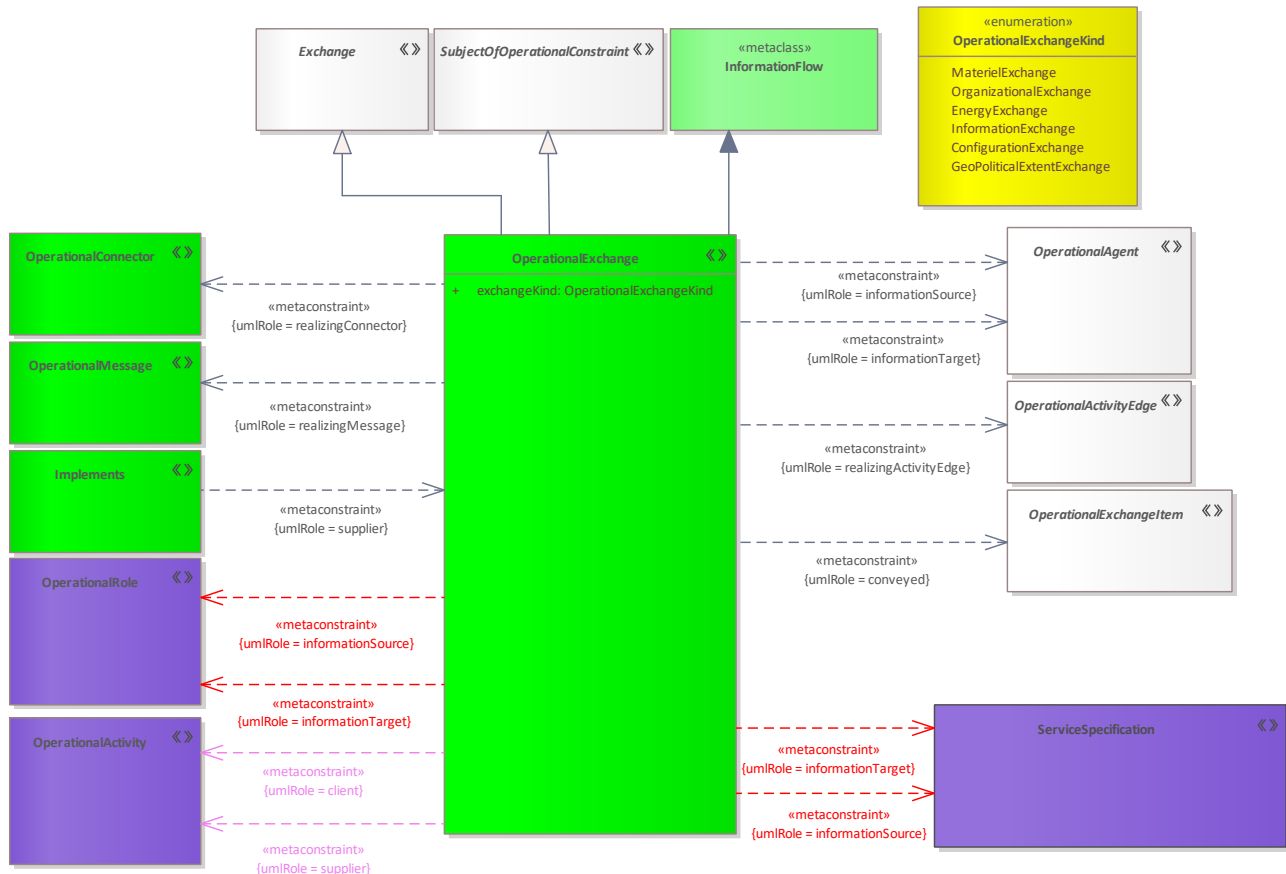


Figure 216: OperationalExchange

Elements in Diagram

Name	Definition
Exchange	Abstract tuple, grouping OperationalExchanges and ResourceExchanges that exchange Resources.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalActivityEdge	A tuple that shows the flow of Resources (objects/information) between OperationalActivityActions.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalConnector	A Connector that goes between OperationalRoles representing a need to exchange Resources. It can carry a number of OperationalExchanges.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
OperationalMessage	Message for use in an Operational Event-Trace which carries any of the subtypes of OperationalExchange.

Name	Definition
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.

Tagged Values

Tag Name	Valid Values
exchangeKind	MaterielExchange, OrganizationalExchange, EnergyExchange, InformationExchange, ConfigurationExchange, GeoPoliticalExtentExchange
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)

3.161 OperationalExchangeItem

Definition

An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.

Meta Model

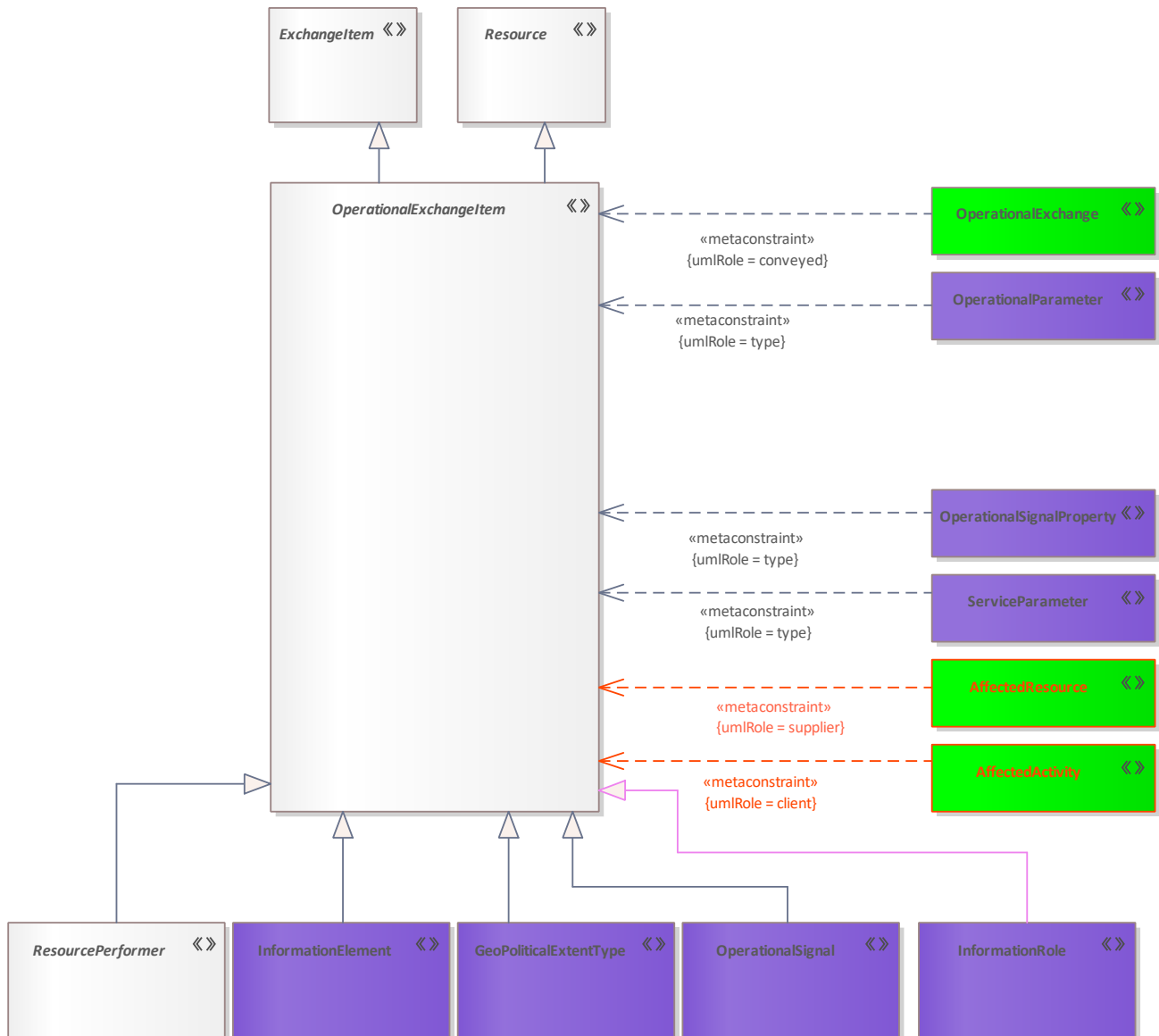


Figure 217: OperationalExchangeItem

Elements in Diagram

Name	Definition
AffectedActivity	A relationship that expresses which resource is affected by a operational activity.
AffectedResource	A relationship that expresses which operational activity is affected by a resource.
ExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between Assets and conveyed by an Exchange.
GeoPoliticalExtentType	A geospatial extent whose boundaries are defined by declaration or agreement by political parties.
InformationElement	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable to perform (see IsCapableToPerform).

Name	Definition
InformationRole	A usage of InformationElement that exists in the context of an OperationalAsset. It also allows the representation of the whole-part aggregation of InformationElements.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
OperationalParameter	A type that represents inputs and outputs of an OperationalActivity. It is typed by an OperationalExchangeItem.
OperationalSignal	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable of performing (see IsCapableToPerform).
OperationalSignalProperty	A property of an OperationalSignal typed by OperationalExchangeItem. It enables OperationalExchangeItem e.g. InformationElement to be passed as arguments of the OperationalSignal.
Resource	Abstract element grouping for all elements that can be conveyed by an Exchange.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceParameter	A type that represents inputs and outputs of a ServiceFunction, represents inputs and outputs of a ServiceSpecification.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.162 OperationalInterface

Definition

A declaration that specifies a contract between the OperationalPerformer it is related to, and any other OperationalPerformers it can interact with.

Meta Model

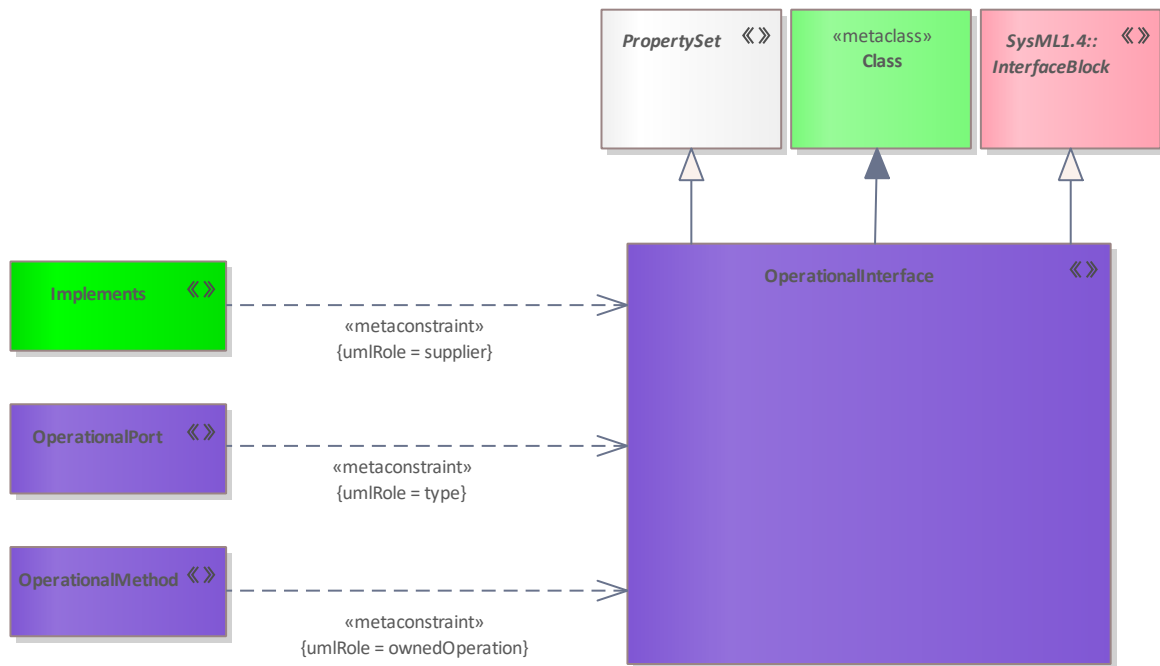


Figure 218: OperationalInterface

Elements in Diagram

Name	Definition
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
OperationalInterface	A declaration that specifies a contract between the OperationalPerformer it is related to, and any other OperationalPerformers it can interact with.
OperationalMethod	behavioral feature of a OperationalPerformer whose behavior is specified in an OperationalActivity.
OperationalPort	An interaction point for an OperationalAgent through which it can interact with the outside environment and which is defined by an OperationalInterface.
PropertySet	An abstract type grouping architectural elements that can own Measurements.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)

3.163 OperationalMessage

Definition

Message for use in an Operational Event-Trace which carries any of the subtypes of OperationalExchange.

Meta Model

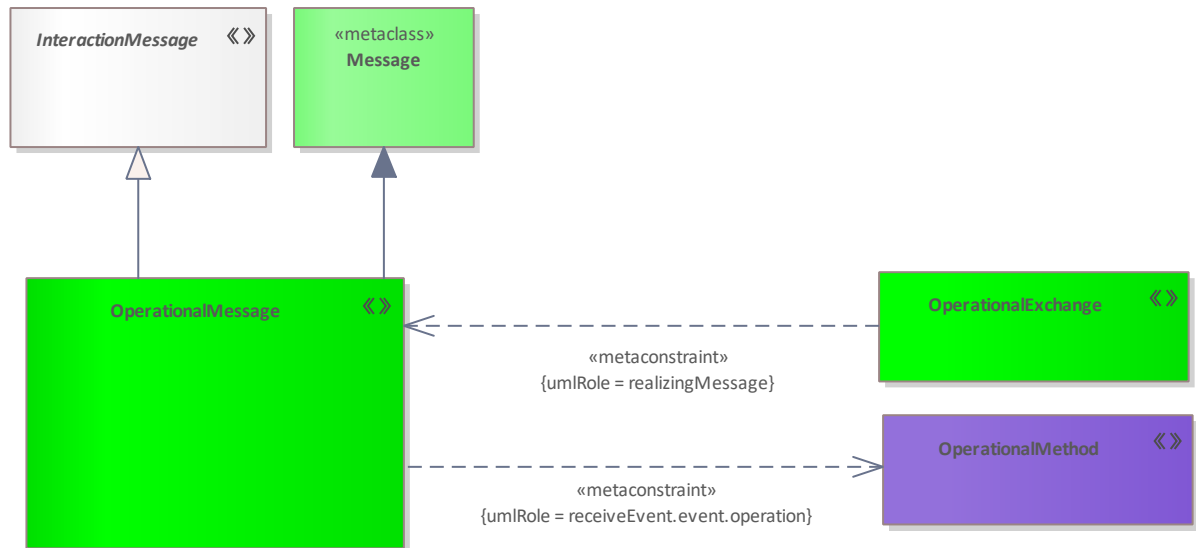


Figure 219: OperationalMessage

Elements in Diagram

Name	Definition
InteractionMessage	An abstract type that groups several types of messages used in the InteractionScenario.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalMessage	Message for use in an Operational Event-Trace which carries any of the subtypes of OperationalExchange.
OperationalMethod	behavioral feature of a OperationalPerformer whose behavior is specified in an OperationalActivity.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L6 - Logical Sequence](#)
- [S6 - Service Interactions](#)

3.164 OperationalMessageFlow

Definition

A ProcessMessageFlow that shows the flow of message between OperationalActivityActions of different ActivityPartitions like Pools.

Meta Model

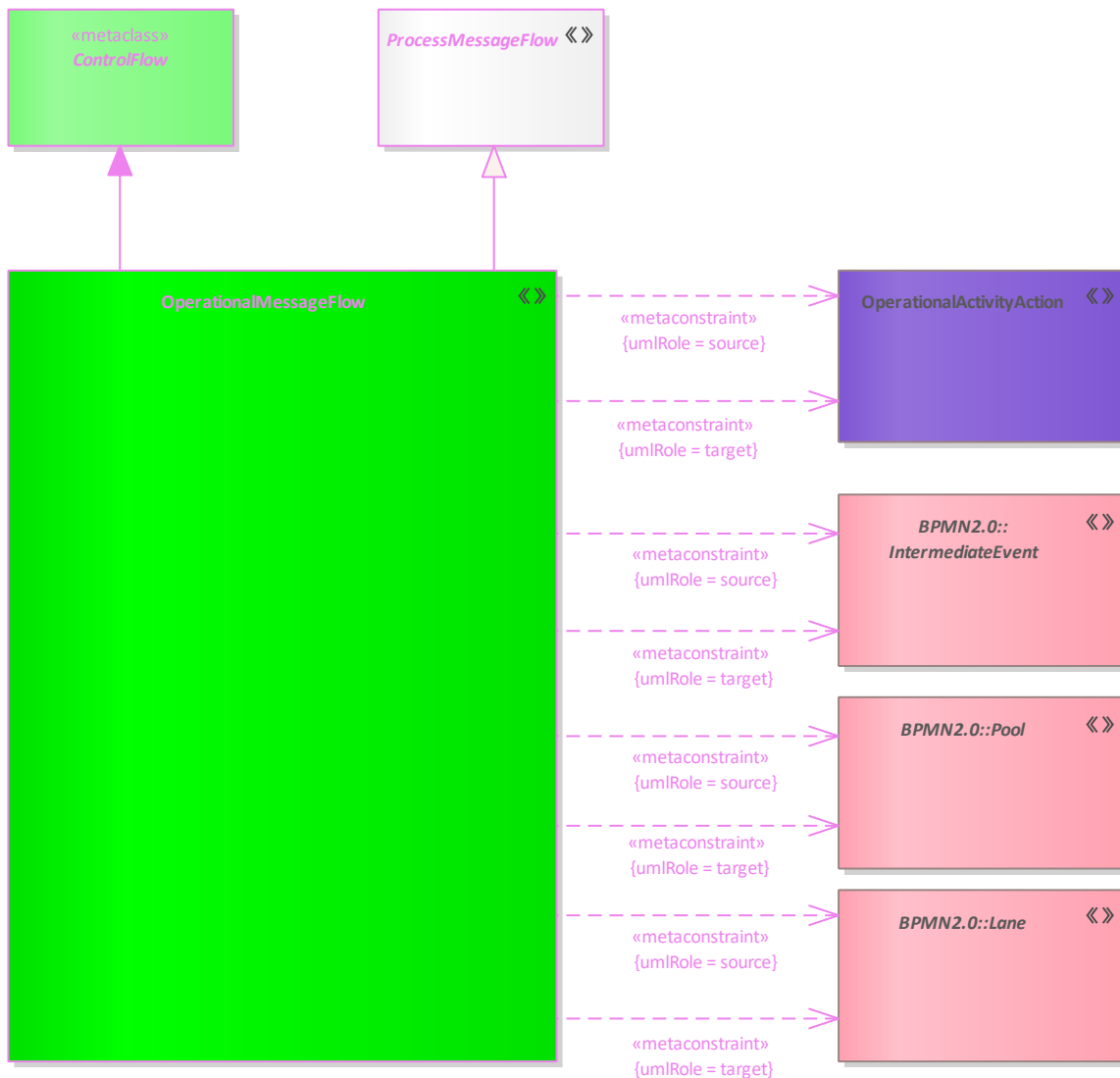


Figure 220: OperationalMessageFlow

Elements in Diagram

Name	Definition
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalMessageFlow	A ProcessMessageFlow that shows the flow of message between OperationalActivityActions of different ActivityPartitions like Pools.
ProcessMessageFlow	A tuple that shows the flow of message between different ActivityPartitions like Pools.

Tagged Values

Tag Name	Valid Values
_image	

Relevant Viewpoints

3.165 OperationalMethod

Definition

behavioral feature of a OperationalPerformer whose behavior is specified in an OperationalActivity.

Meta Model

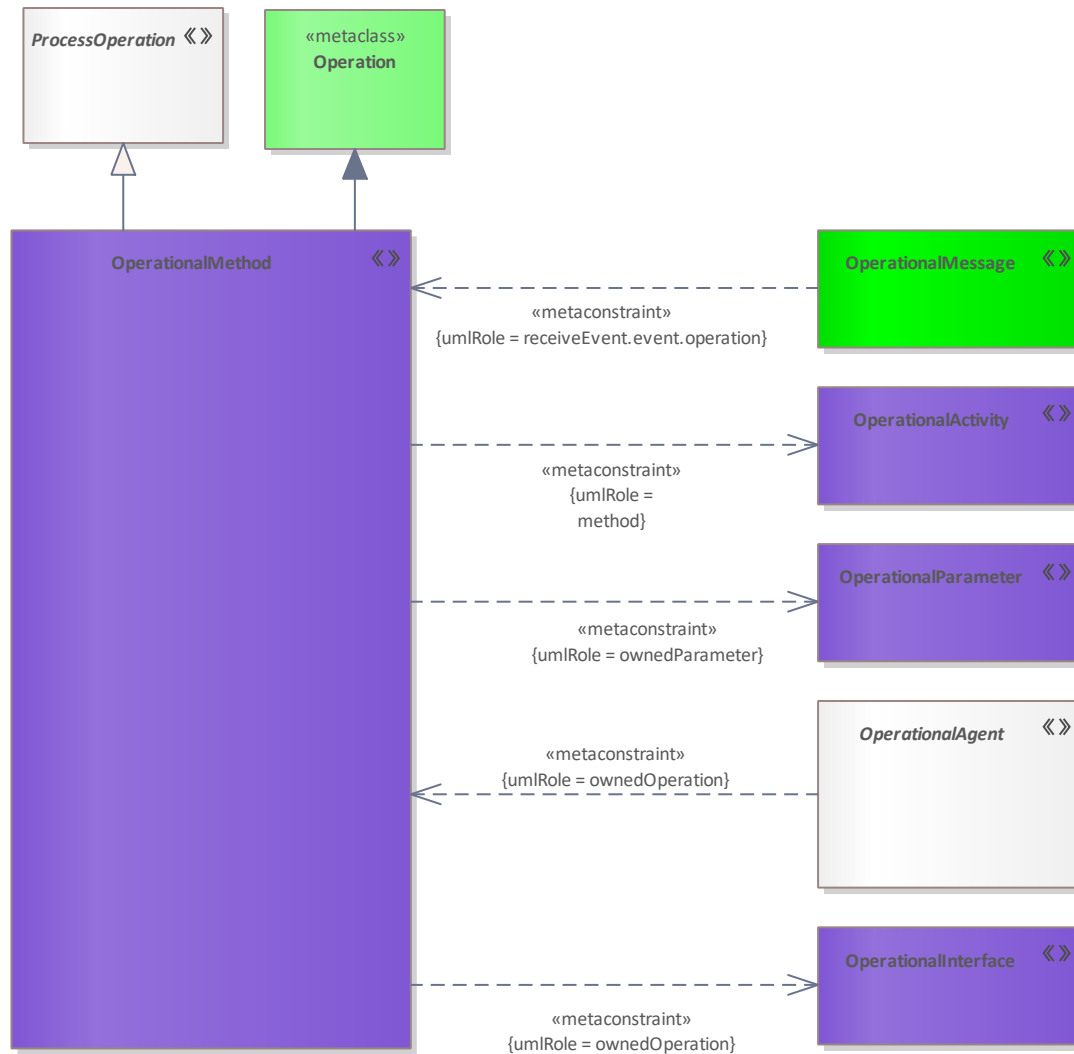


Figure 221: OperationalMethod

Elements in Diagram

Name	Definition
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalInterface	A declaration that specifies a contract between the OperationalPerformer it is related to, and any other OperationalPerformers it can interact with.
OperationalMessage	Message for use in an Operational Event-Trace which carries any of the subtypes of OperationalExchange.
OperationalMethod	behavioral feature of a OperationalPerformer whose behavior is specified in an OperationalActivity.
OperationalParameter	A type that represents inputs and outputs of an OperationalActivity. It is typed by an OperationalExchangeItem.
ProcessOperation	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.166 OperationalObjectFlow

Definition

An ActivityEdge that shows the flow of Resources (objects/information) between OperationalActivityActions.

Meta Model

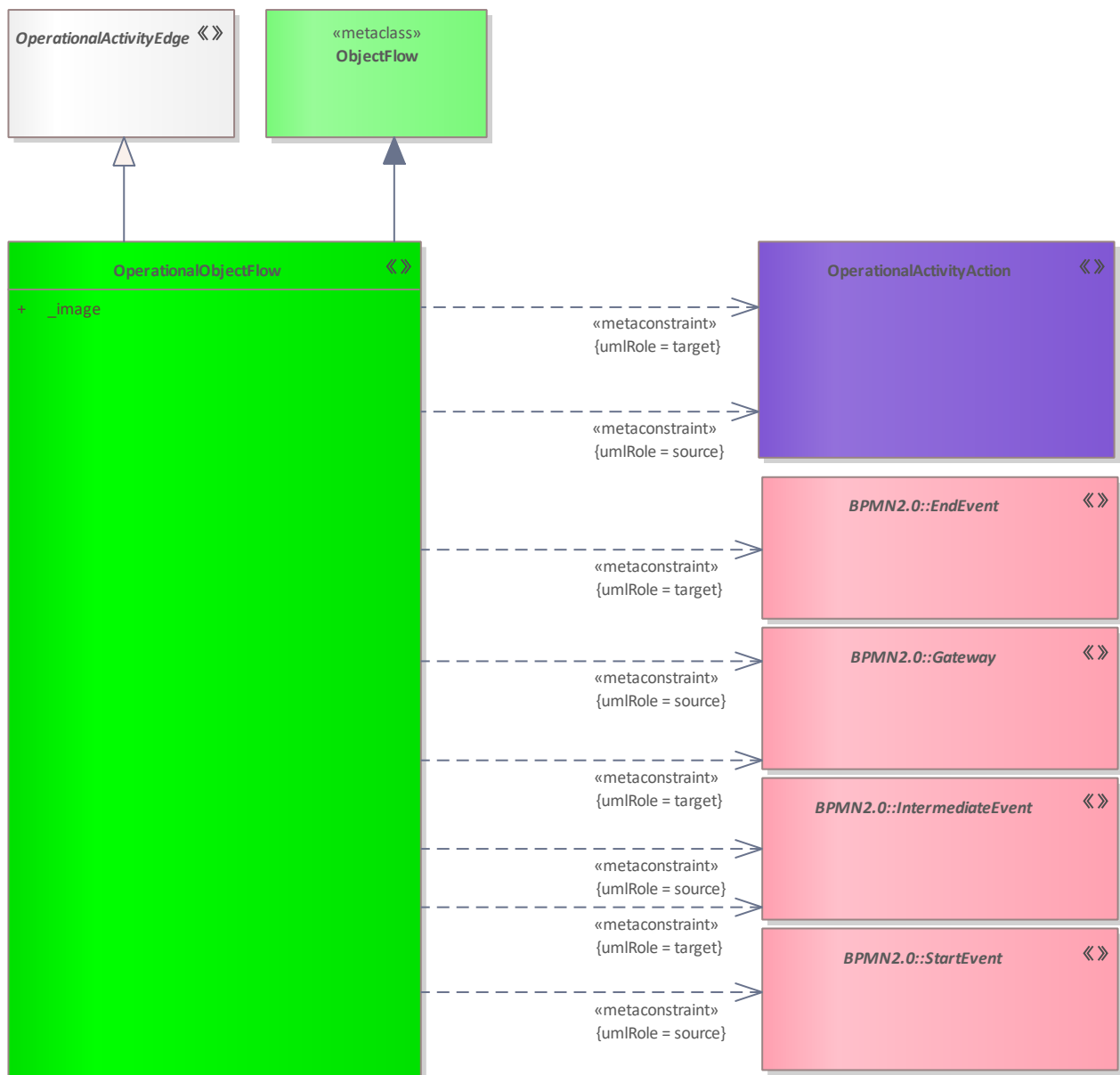


Figure 222: OperationalObjectFlow

Elements in Diagram

Name	Definition
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalActivityEdge	A tuple that shows the flow of Resources (objects/information) between OperationalActivityActions.
OperationalObjectFlow	An ActivityEdge that shows the flow of Resources (objects/information) between OperationalActivityActions.

Tagged Values

Tag Name	Valid Values
_image	

URI	String
-----	--------

Relevant Viewpoints

3.167 OperationalParameter

Definition

A type that represents inputs and outputs of an OperationalActivity. It is typed by an OperationalExchangeItem.

Meta Model

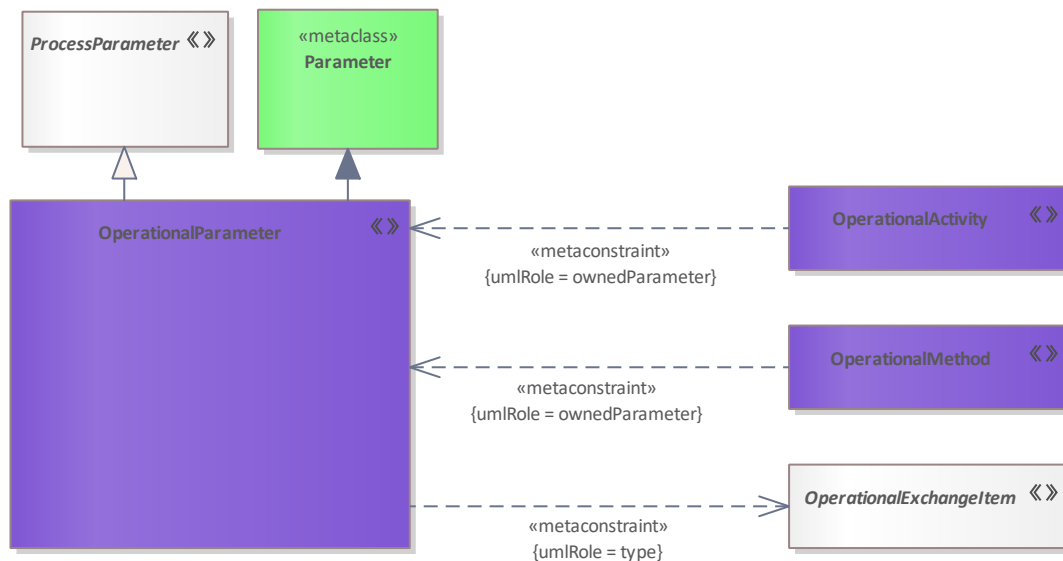


Figure 223: OperationalParameter

Elements in Diagram

Name	Definition
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
OperationalMethod	behavioral feature of a OperationalPerformer whose behavior is specified in an OperationalActivity.
OperationalParameter	A type that represents inputs and outputs of an OperationalActivity. It is typed by an OperationalExchangeItem.
ProcessParameter	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.168 OperationalPerformer

Definition

A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.

Meta Model

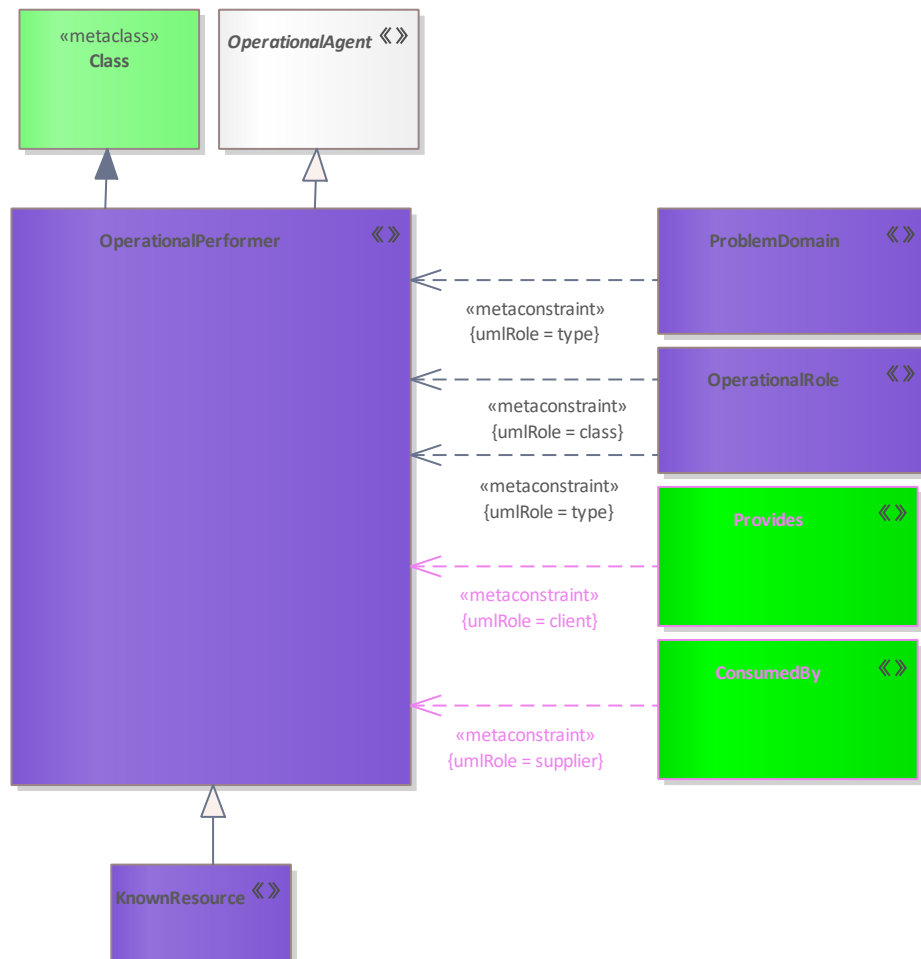


Figure 224: OperationalPerformer

Elements in Diagram

Name	Definition
ConsumedBy	Asserts that a service is consumed by a node. It is not required to know what provides the service.
KnownResource	Asserts that a known ResourcePerformer constrains the implementation of the OperationalPerformer that plays the role in the LogicalArchitecture.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
ProblemDomain	A property associated with a logical architecture, used to specify the scope of the problem.
Provides	Asserts that a operational agent provides a service.

Tagged Values

Tag Name	Valid Values
Nationality	UN, NATO-PfP, NATO, DEU, MN, EU, TCN, NLD, National, Unknown, not set
SizeIndicator	Theatre, Armygroup, Army, Corps, Command, Division, Brigade, Regiment, Battalion, Company, Echelon, Platoon, Section, Squad, Team, Unknown, not set
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L5 - Logical States](#)
- [S2 - Service Structure](#)

3.169 OperationalPort

Definition

An interaction point for an `OperationalAgent` through which it can interact with the outside environment and which is defined by an `OperationalInterface`.

Meta Model

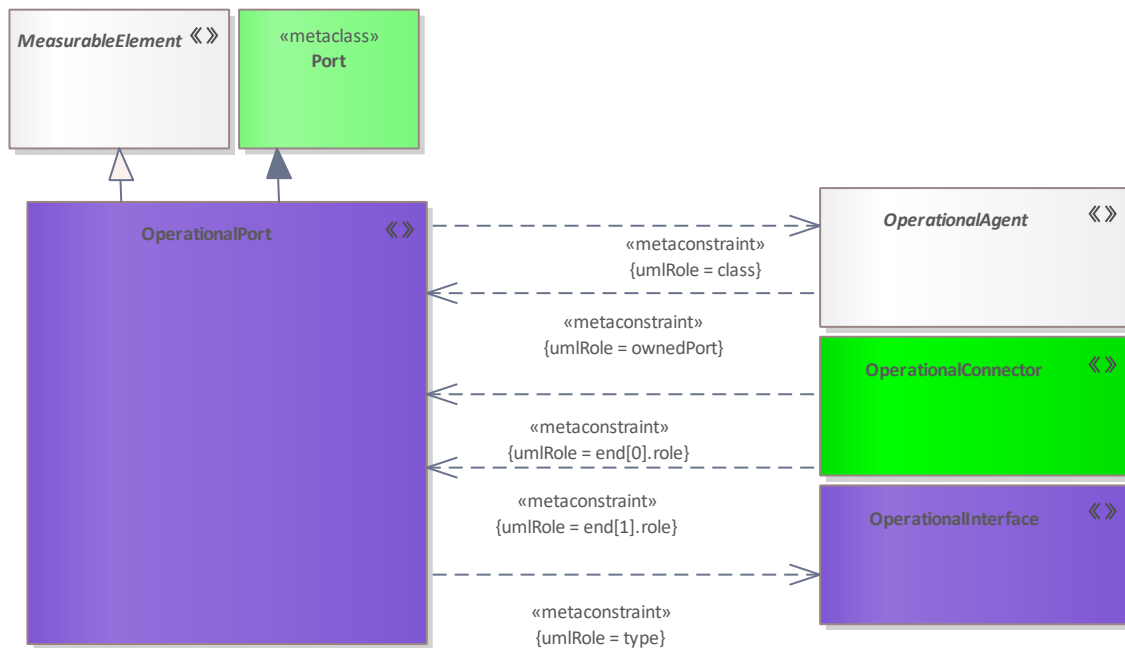


Figure 225: OperationalPort

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalConnector	A Connector that goes between OperationalRoles representing a need to exchange Resources. It can carry a number of OperationalExchanges.
OperationalInterface	A declaration that specifies a contract between the OperationalPerformer it is related to, and any other OperationalPerformers it can interact with.
OperationalPort	An interaction point for an OperationalAgent through which it can interact with the outside environment and which is defined by an OperationalInterface.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)

3.170 OperationalRole

Definition

Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.

Meta Model

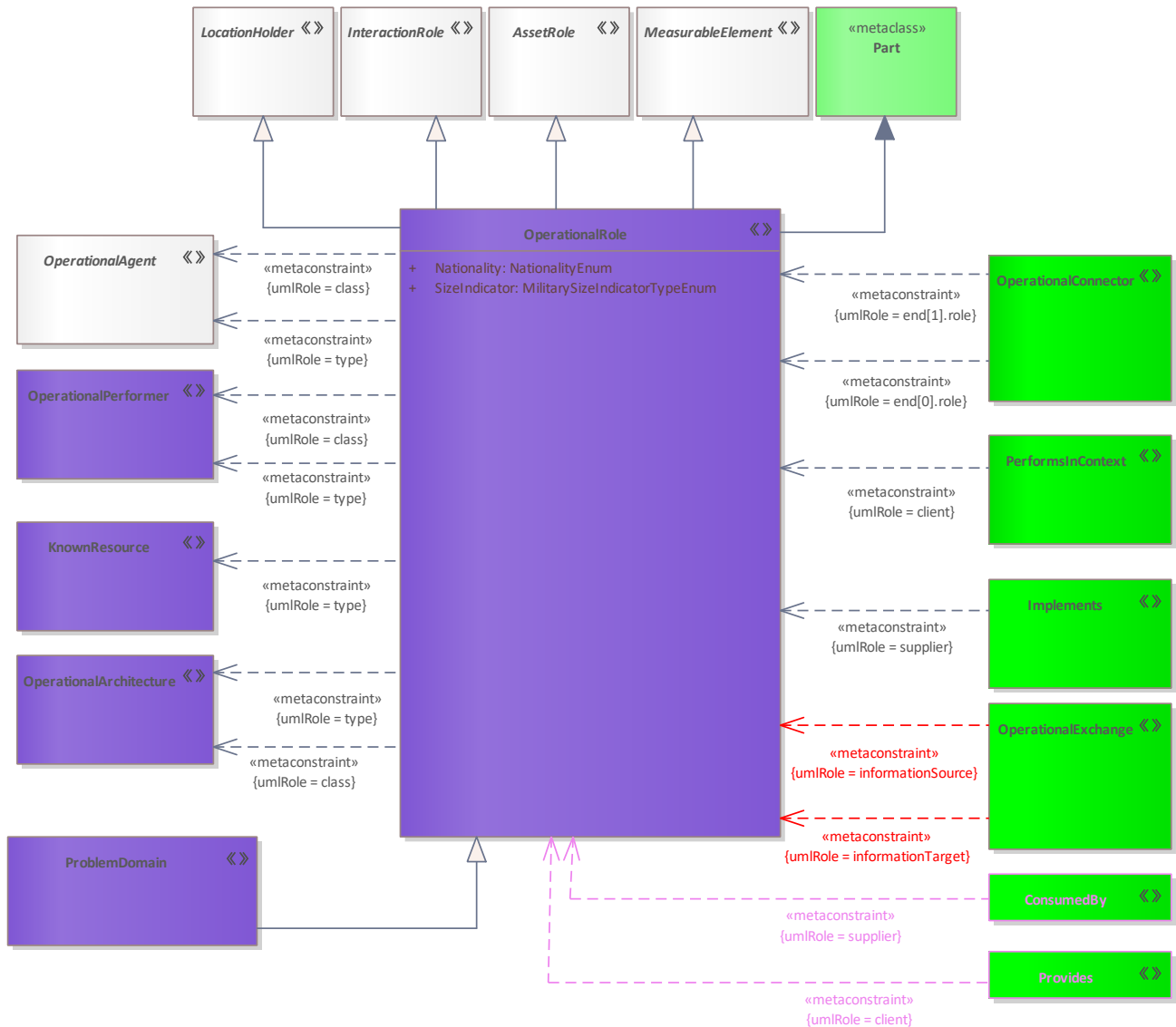


Figure 226: OperationalRole

Elements in Diagram

Name	Definition
AssetRole	AssetRole as applied to Security views, an abstract element that indicates the type of elements that can be considered as a subject for security analysis in the particular context (currently no security viewpoints in the framework).
ConsumedBy	Asserts that a service is consumed by a node. It is not required to know what provides the service.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
InteractionRole	An abstract type that represents an individual participant in the InteractionScenario.

Name	Definition
KnownResource	Asserts that a known ResourcePerformer constrains the implementation of the OperationalPerformer that plays the role in the LogicalArchitecture.
LocationHolder	Abstract type, used to group elements that are allowed to be associated with a Location.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalArchitecture	A type used to denote a model of the Architecture, described from the Operational perspective.
OperationalConnector	A Connector that goes between OperationalRoles representing a need to exchange Resources. It can carry a number of OperationalExchanges.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
ProblemDomain	A property associated with a logical architecture, used to specify the scope of the problem.
Provides	Asserts that a operational agent provides a service.

Tagged Values

Tag Name	Valid Values
Nationality	UN, NATO-PfP, NATO, DEU, MN, EU, TCN, NLD, National, Unknown, not set
SizeIndicator	Theatre, Armygroup, Army, Corps, Command, Division, Brigade, Regiment, Battalion, Company, Echelon, Platoon, Section, Squad, Team, Unknown, not set
URI	String

Relevant Viewpoints

- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L6 - Logical Sequence](#)
- [S6 - Service Interactions](#)

3.171 OperationalSignal

Definition

An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable of performing (see IsCapableToPerform).

Meta Model

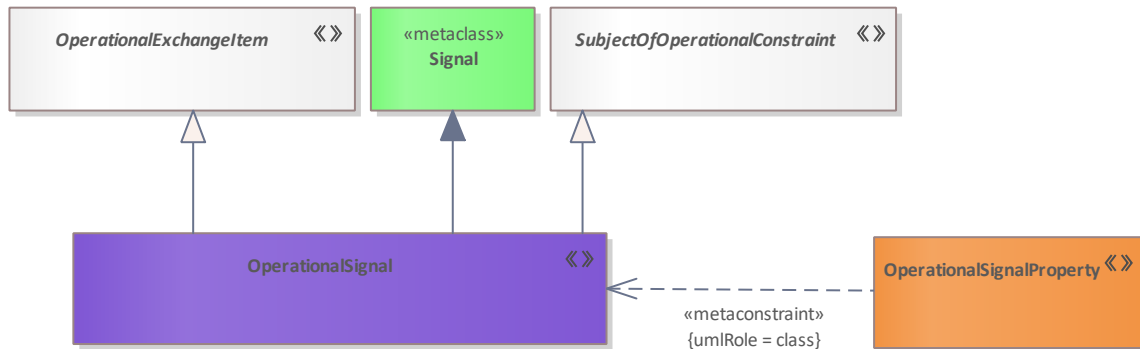


Figure 227: OperationalSignal

Elements in Diagram

Name	Definition
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
OperationalSignal	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable of performing (see IsCapableToPerform).
OperationalSignalProperty	A property of an OperationalSignal typed by OperationalExchangeItem. It enables OperationalExchangeItem e.g. InformationElement to be passed as arguments of the OperationalSignal.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.

Tagged Values

Tag Name	Valid Values
URI	String
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)

3.172 OperationalSignalProperty

Definition

A property of an OperationalSignal typed by OperationalExchangeItem. It enables OperationalExchangeItem e.g. InformationElement to be passed as arguments of the OperationalSignal.

Meta Model

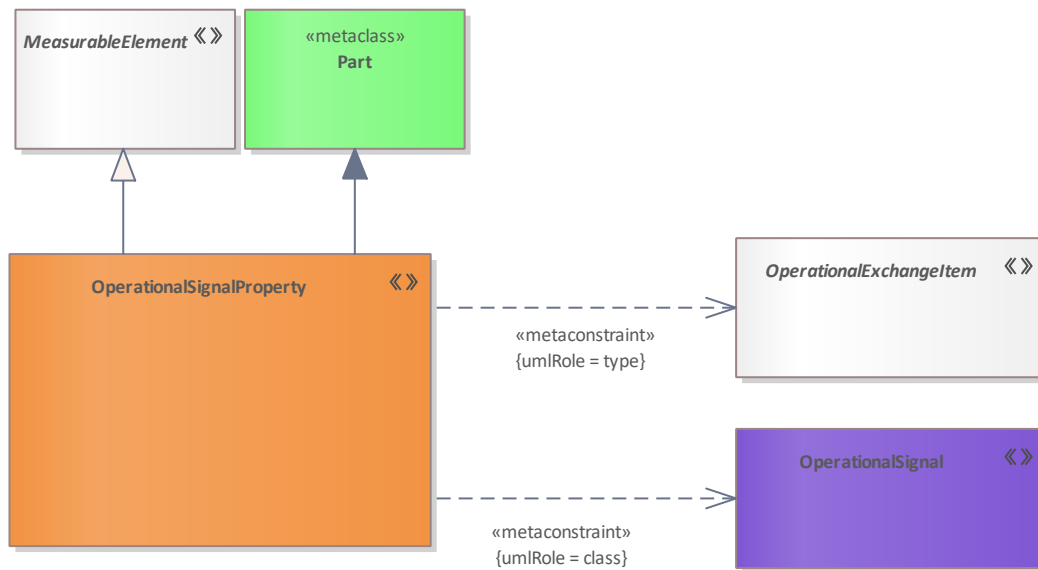


Figure 228: OperationalSignalProperty

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
OperationalSignal	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable of performing (see IsCapableToPerform).
OperationalSignalProperty	A property of an OperationalSignal typed by OperationalExchangeItem. It enables OperationalExchangeItem e.g. InformationElement to be passed as arguments of the OperationalSignal.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.173 OperationalStateDescription

Definition

A state machine describing the behavior of a OperationalPerformer, depicting how the OperationalPerformer responds to various events and the actions.

Meta Model

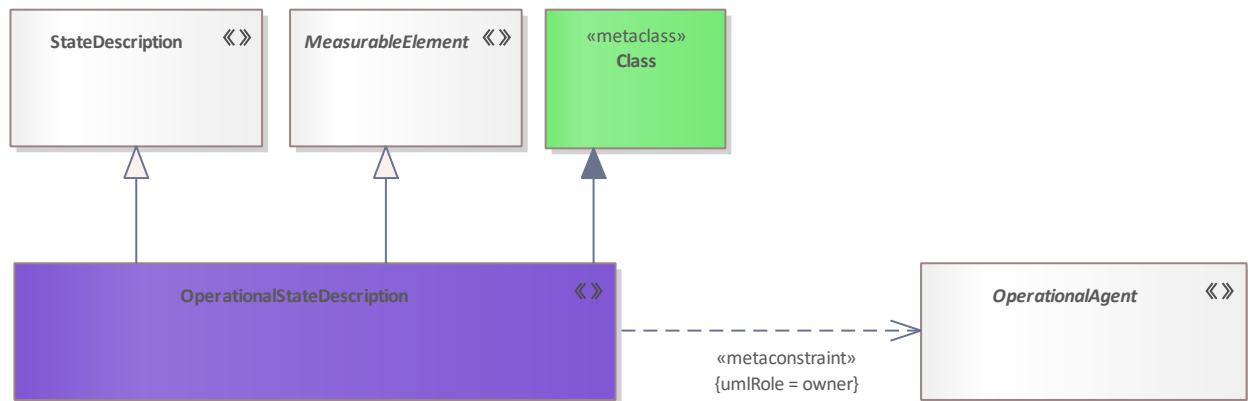


Figure 229: OperationalStateDescription

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalStateDescription	A state machine describing the behavior of a OperationalPerformer, depicting how the OperationalPerformer responds to various events and the actions.
StateDescription	An abstract type that represents a state machine (i.e. an OperationalStateDescription or ResourceStateDescription), depicting how the Asset responds to various events and the actions.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L5 - Logical States](#)

3.174 Organization

Definition

A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.

Meta Model

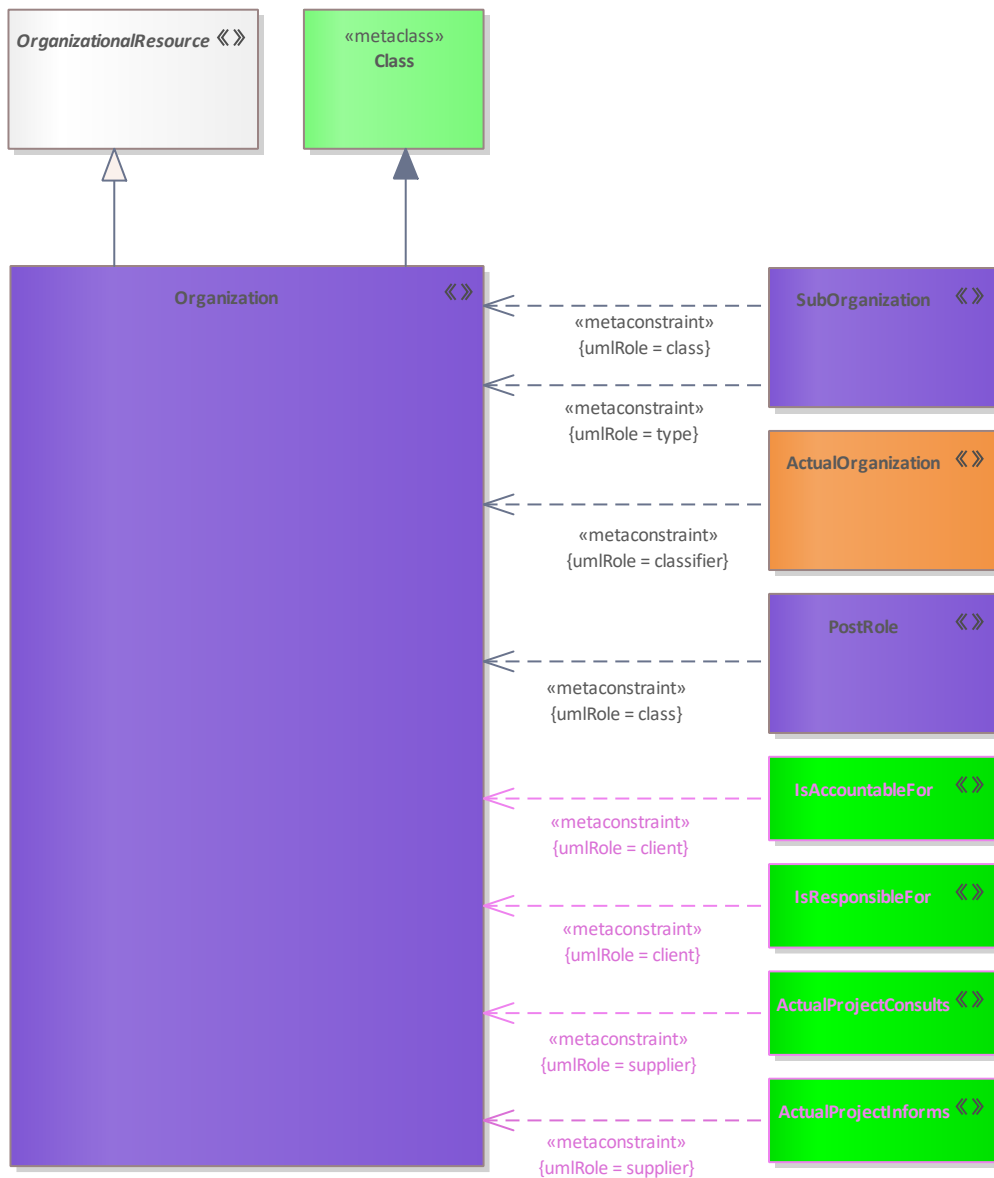


Figure 230: Organization

Elements in Diagram

Name	Definition
ActualOrganization	An actual formal or informal organizational unit, e.g. "Driving and Vehicle Licensing Agency", "UAF team Alpha".
ActualProjectConsults	A relation that expresses that a project consults an OrganizationalResource.
ActualProjectInforms	A relation that expresses that a project informs an OrganizationalResource.
IsAccountableFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project in the context of an approval.
IsResponsibleFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.

Name	Definition
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
PostRole	A usage of a post in the context of another OrganizationalResource. Creates a whole-part relationship.
SubOrganization	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).

Tagged Values

Tag Name	Valid Values
URI	String
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R

Relevant Viewpoints

- [A2 - Architecture Products](#)
- [C5 - Effects](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)

3.175 OrganizationalResource

Definition

An abstract type for Organization, Person Post and Responsibility.

Meta Model

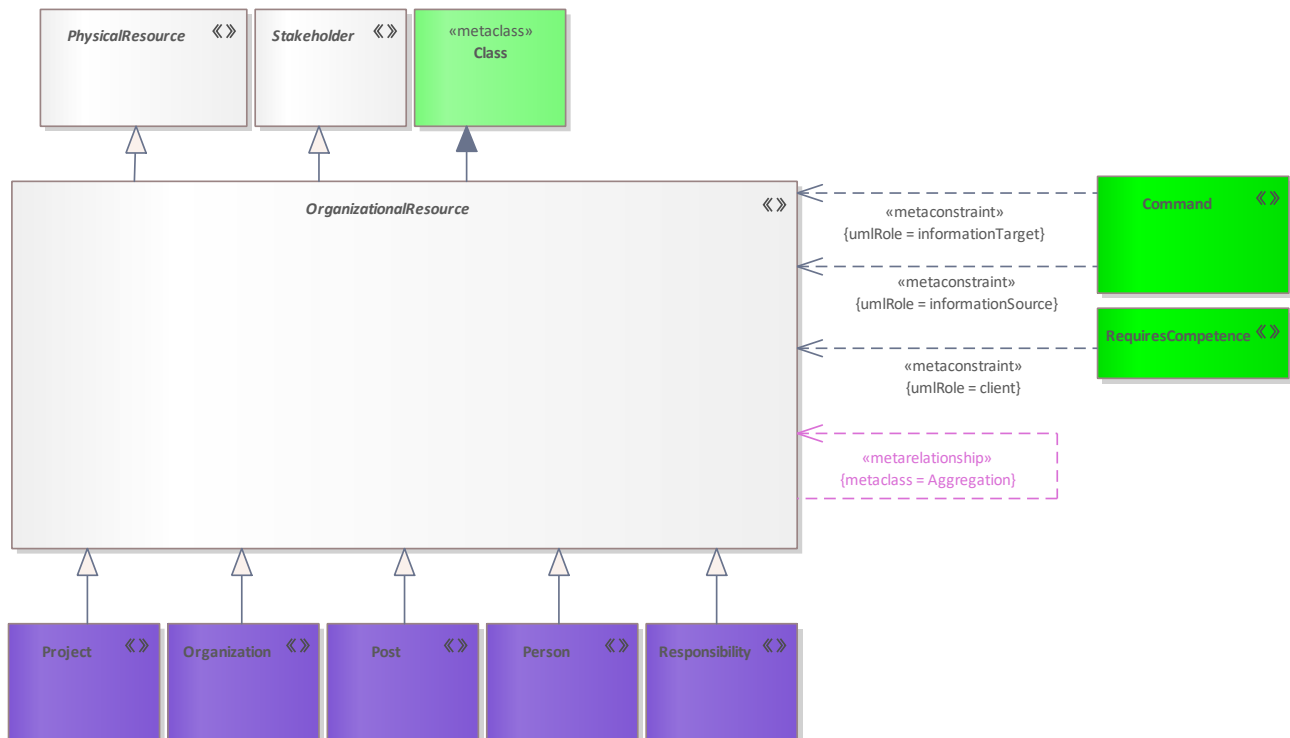


Figure 231: OrganizationalResource

Elements in Diagram

Name	Definition
Command	A type of ResourceExchange that asserts that one OrganizationalResource commands another.
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
Person	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).
Post	A type of job title or position that a person can fill (e.g. Lawyer, Solution Architect, Machine Operator or Chief Executive Officer).
Project	A type that describes types of time-limited endeavours that are required to meet one or more Capability needs.
RequiresCompetence	A tuple that asserts that an ActualOrganizationalResource is required to have a specific set of Competencies.
Responsibility	The type of duty required of a Person or Organization.
Stakeholder	individual, team, organization, or classes thereof, having an interest in an EnterprisePhase [ISO/IEC/IEEE 42010:2011].

Tagged Values

Tag Name	Valid Values
URI	String
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R

Relevant Viewpoints

3.176 OriginatesFrom

Definition

Relation that derives an element in the architectural model from a reference (Reference, DocumentReference, SMEReference).

Meta Model

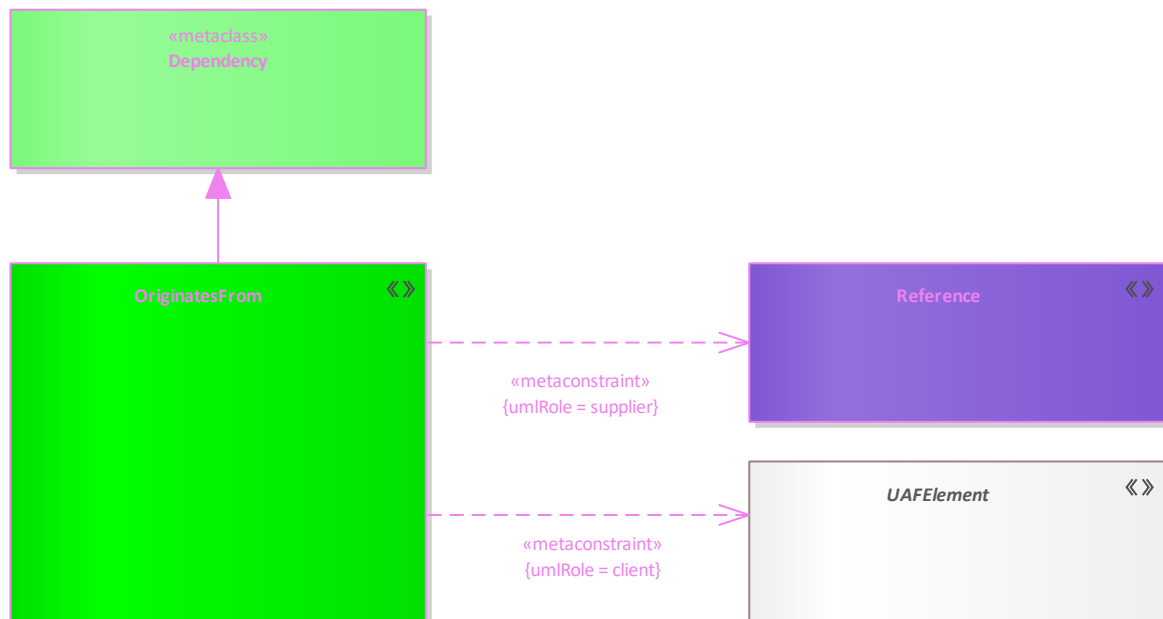


Figure 232: OriginatesFrom

Elements in Diagram

Name	Definition
OriginatesFrom	Relation that derives an element in the architectural model from a reference (Reference, DocumentReference, SMEReference).
Reference	Element describes all types of references.
UAFAElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)

- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R7 - Requirement Derivation](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)

3.177 OwnedMilestone

Definition

Relationship that expresses that actual project has a actual milestone.

Meta Model

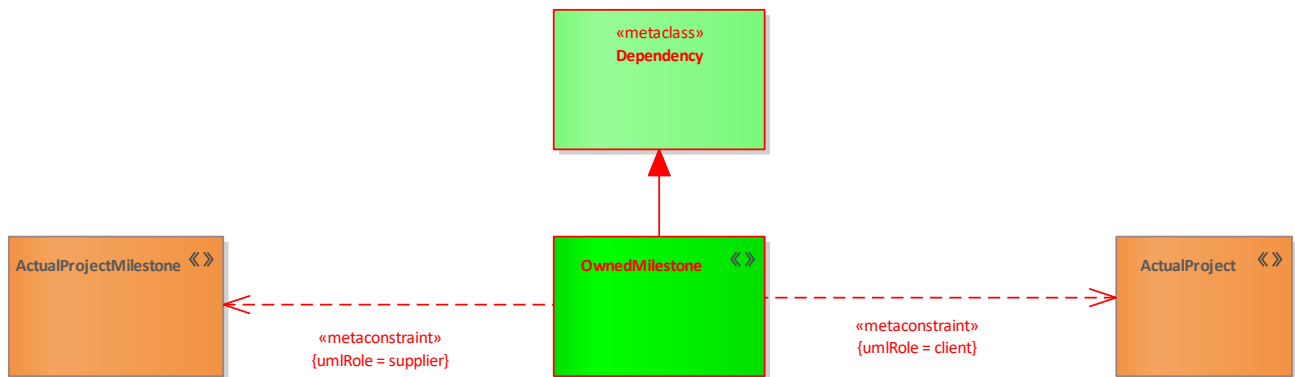


Figure 233: OwnedMilestone

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
OwnedMilestone	Relationship that expresses that actual project has a actual milestone.

Tagged Values

Relevant Viewpoints

- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.178 OwnsActualMeasurementSet

Definition

A relationship that expresses which actual measurement set an element owns.

Meta Model

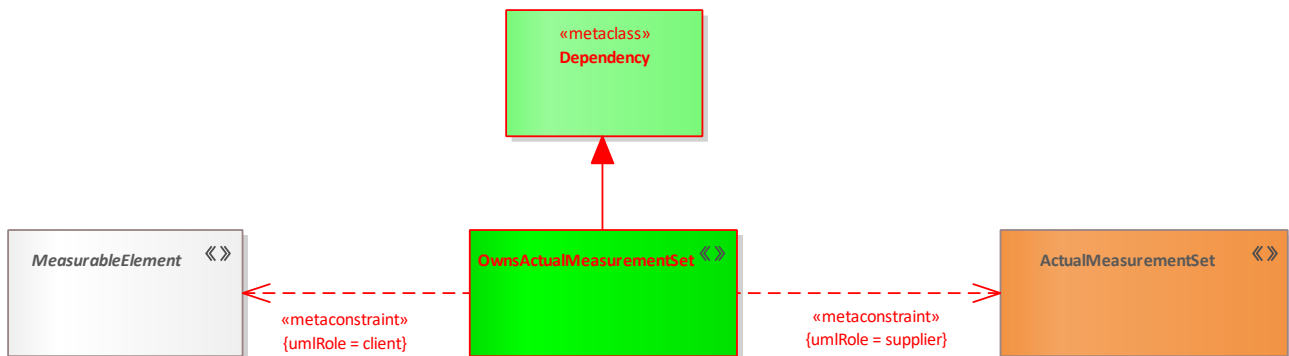


Figure 234: OwnsActualMeasurementSet

Elements in Diagram

Name	Definition
ActualMeasurementSet	A set of ActualMeasurements.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OwnsActualMeasurementSet	A relationship that expresses which actual measurement set an element owns.

Tagged Values

Relevant Viewpoints

3.179 OwnsMeasurement

Definition

A relationship that expresses which measurement or measurement type an element owns.

Meta Model

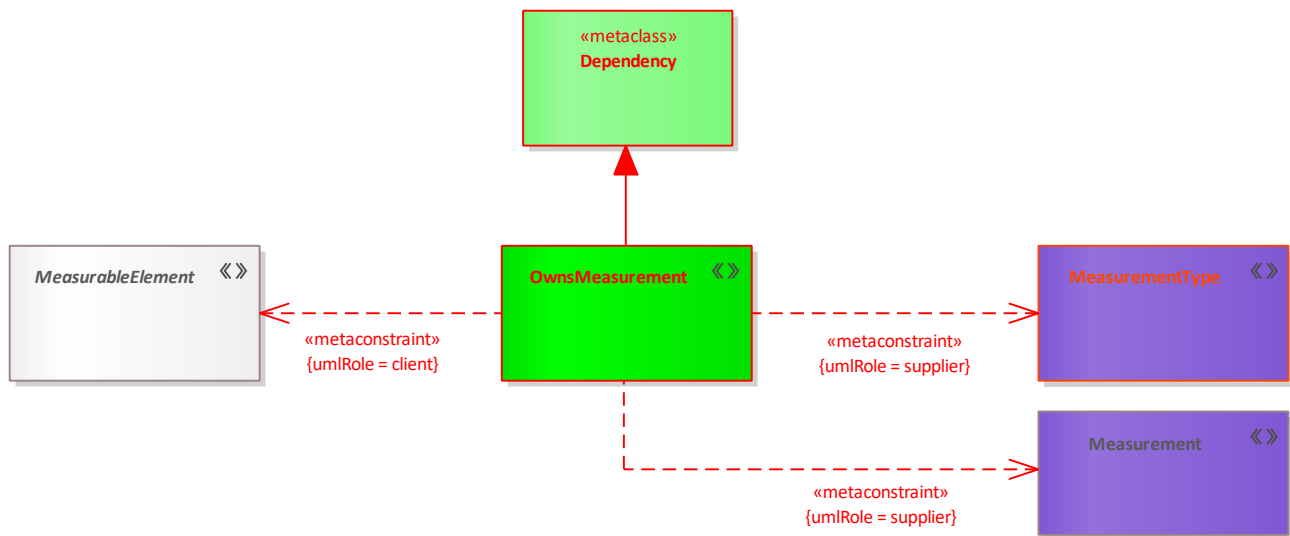


Figure 235: OwnsMeasurement

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
OwnsMeasurement	A relationship that expresses which measurement or measurement type an element owns.

Tagged Values

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C7 - Performance Parameters](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S8 - Service Policy](#)

3.180 OwnsProcess

Definition

A dependency relationship denoting that an ActualOrganizationResource owns an OperationalActivity.

Meta Model

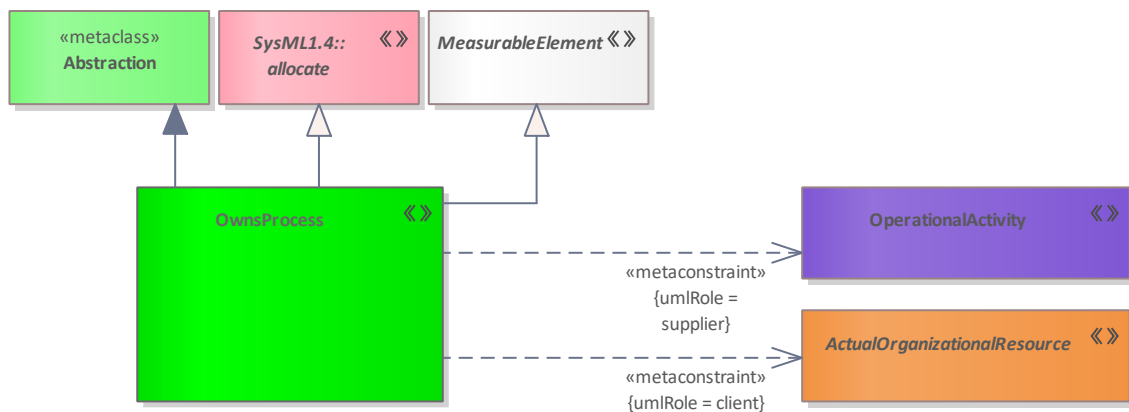


Figure 236: OwnsProcess

Elements in Diagram

Name	Definition
ActualOrganizationalResource	Abstract element for an ActualOrganization, ActualPerson or ActualPost.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OwnsProcess	A dependency relationship denoting that an ActualOrganizationResource owns an OperationalActivity.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.181 PaperForm

Definition

Form is a digitized or digitizable document, for example a scanned document.

Meta Model

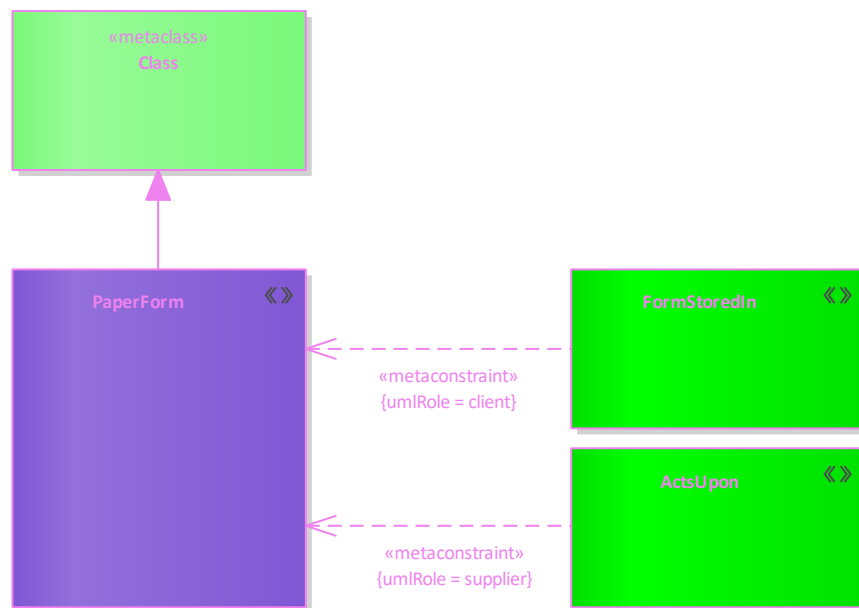


Figure 237: PaperForm

Elements in Diagram

Name	Definition
ActsUpon	Asserts that something (subject) is acted upon by an OperationalActivity (activity).
FormStoredIn	Relation states that a digital form is stored in software.
PaperForm	Form is a digitized or digitizable document, for example a scanned document.

Tagged Values

Relevant Viewpoints

- [L4 - Logical Activities](#)
- [P1- Resource Types](#)

3.182 PartOfCatalogue

Definition

This relation states that a category (RequirementCategory) belongs to a requirements catalog (RequirementCatalogue).

Meta Model

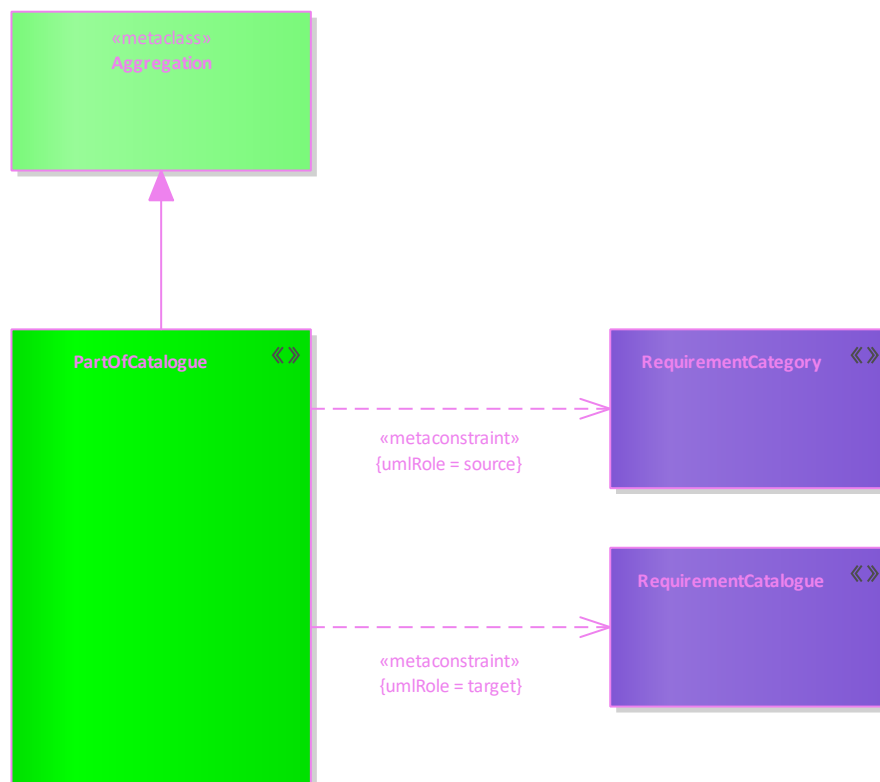


Figure 238: PartOfCatalogue

Elements in Diagram

Name	Definition
PartOfCatalogue	This relation states that a category (RequirementCategory) belongs to a requirements catalog (RequirementCatalogue).
RequirementCatalogue	Element represents a catalog of requirements, which consists of different categories (RequirementCategory) of functional and non-functional requirements.
RequirementCategory	Element represents a category of a catalog of requirements.

Tagged Values

Relevant Viewpoints

- [R2 - Requirement Catalogue](#)

3.183 PartOfCategory

Definition

This relation states that his functional or non-functional requirement belongs to a category (RequirementCategory) of the requirements catalog.

Meta Model

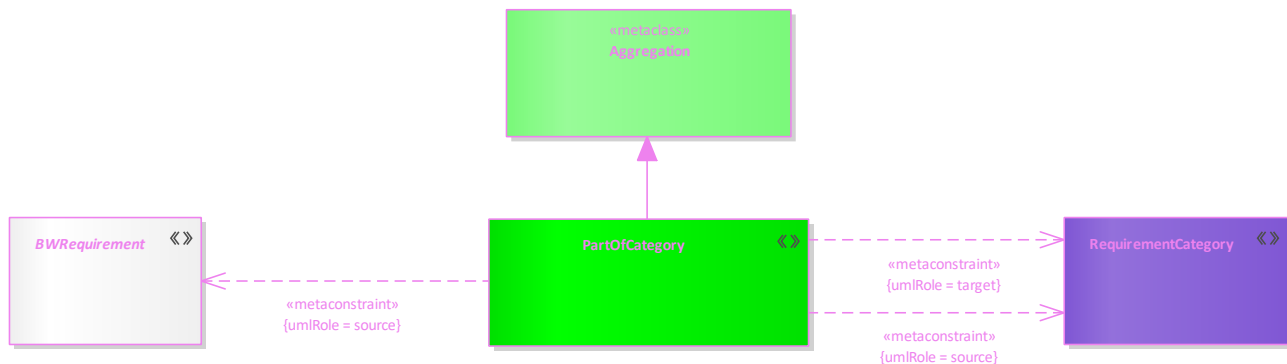


Figure 239: PartOfCategory

Elements in Diagram

Name	Definition
BWRRequirement	Abstract base class for requirements.
PartOfCategory	This relation states that his functional or non-functional requirement belongs to a category (RequirementCategory) of the requirements catalog.
RequirementCategory	Element represents a category of a catalog of requirements.

Tagged Values

Relevant Viewpoints

- [R2 - Requirement Catalogue](#)

3.184 PerformsInContext

Definition

A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.

Meta Model

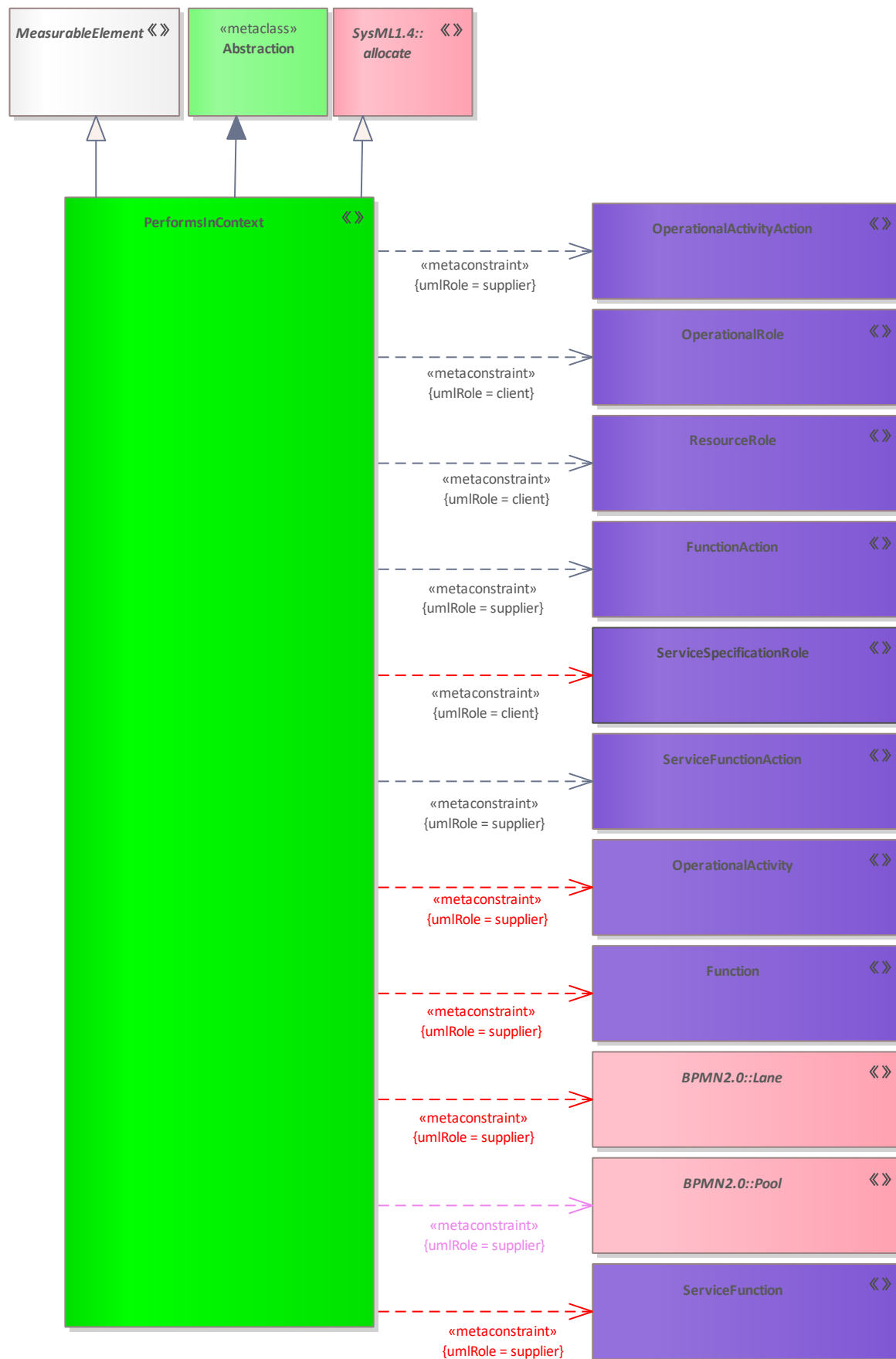


Figure 240: PerformerInContext

Elements in Diagram

Name	Definition
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.

Name	Definition
FunctionAction	A call of a Function indicating that the Function is performed by a ResourceRole in a specific context.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceFunctionAction	A call of a ServiceFunction in the context of another ServiceFunction.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [P4 - Resource Functions](#)
- [S4 - Service Functions](#)

3.185 Person

Definition

A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).

Meta Model

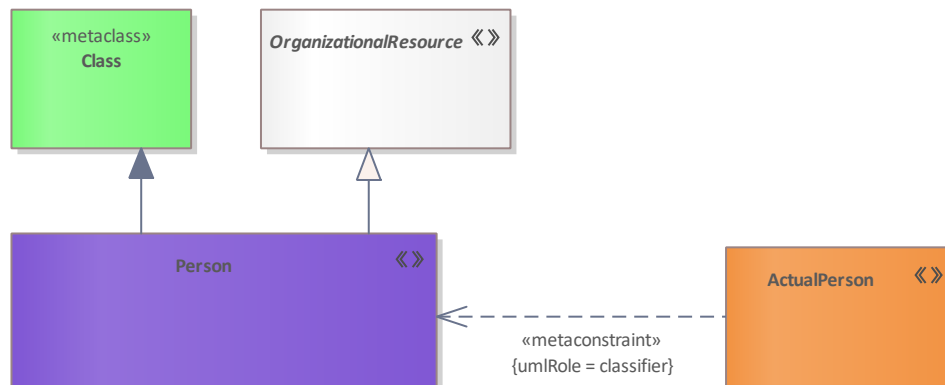


Figure 241: Person

Elements in Diagram

Name	Definition
ActualPerson	An individual human being.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
Person	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).

Tagged Values

Tag Name	Valid Values
URI	String
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R

Relevant Viewpoints

- [A2 - Architecture Products](#)
- [C5 - Effects](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)

3.186 PhysicalArchitectureOfEnterprisePhase

Definition

A relationship that expresses that an actual enterprise phase has resource architectures.

Meta Model

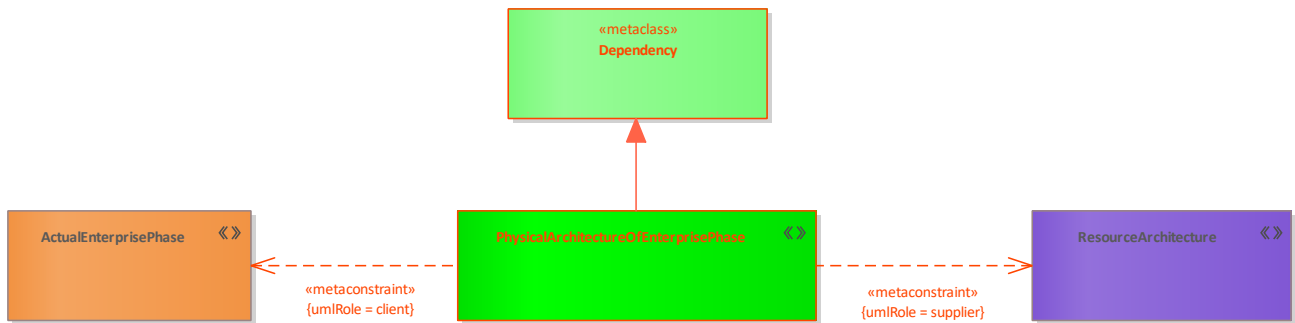


Figure 242: PhysicalArchitectureOfEnterprisePhase

Elements in Diagram

Name	Definition
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
PhysicalArchitectureOfEnterprisePhase	A relationship that expresses that an actual enterprise phase has resource architectures.
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.

Tagged Values

Relevant Viewpoints

- [C2 - Enterprise Vision](#)

3.187 PhysicalLocation

Definition

A relationship that expresses that a location holder operates in an actual location.

Meta Model

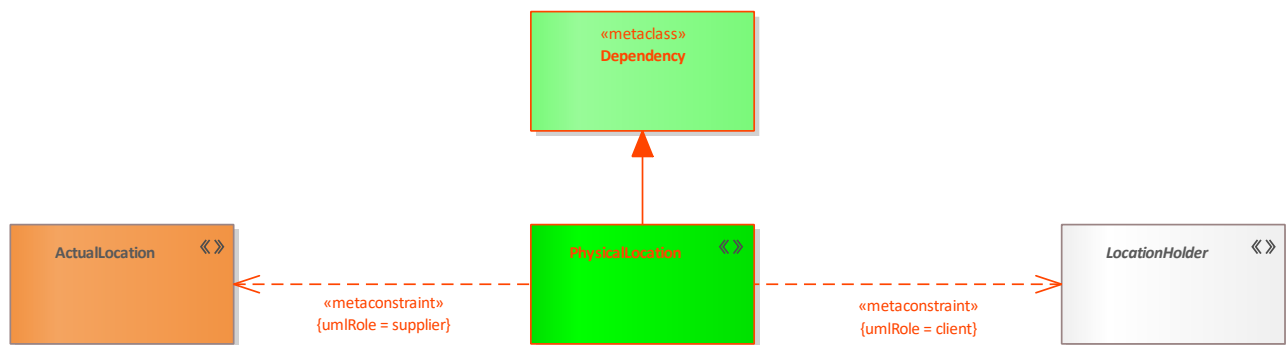


Figure 243: PhysicalLocation

Elements in Diagram

Name	Definition
ActualLocation	The ActualState that describes a physical location, for example using text to provide an address, Geo-coordinates, etc.
LocationHolder	Abstract type, used to group elements that are allowed to be associated with a Location.
PhysicalLocation	A relationship that expresses that a location holder operates in an actual location.

Tagged Values

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [P2 - Resource Structure](#)

3.188 PhysicalResource

Definition

An abstract type defining physical resources (i.e. `OrganizationalResource`, `ResourceArtifact` and `NaturalResource`).

Meta Model

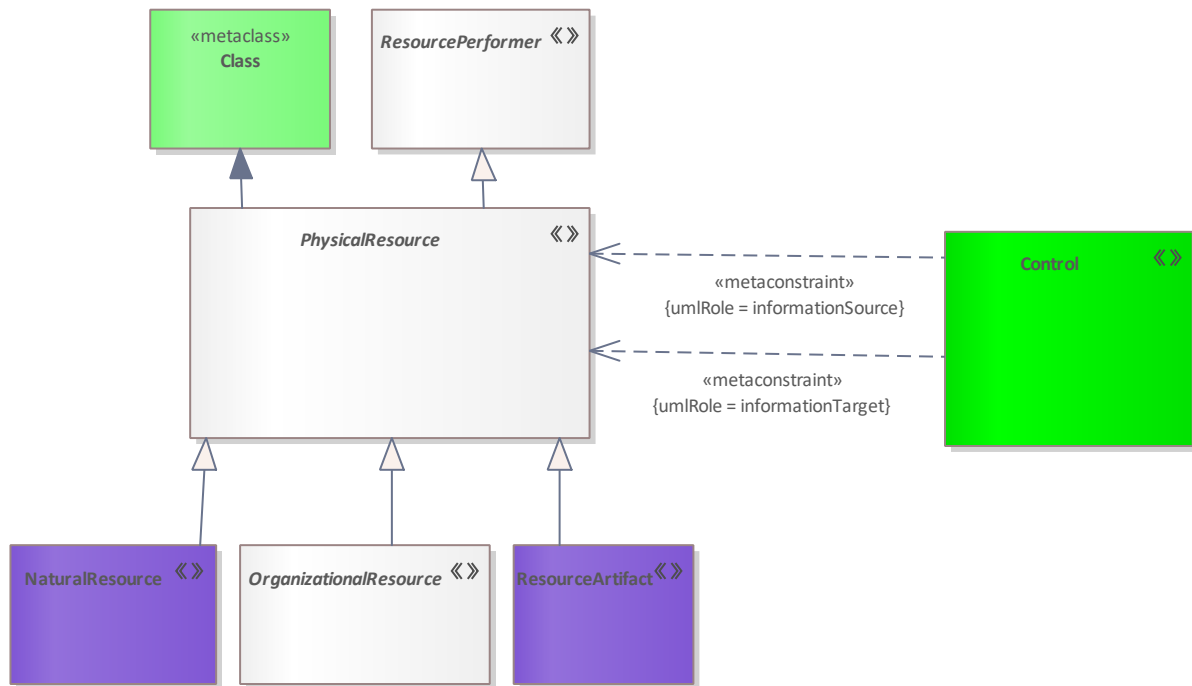


Figure 244: PhysicalResource

Elements in Diagram

Name	Definition
Control	A type of <code>ResourceExchange</code> that asserts that one <code>PhysicalResource</code> controls another <code>PhysicalResource</code> (i.e. the driver of a vehicle controlling the vehicle speed or direction).
NaturalResource	Type of physical resource that occurs in nature.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
PhysicalResource	An abstract type defining physical resources (i.e. <code>OrganizationalResource</code> , <code>ResourceArtifact</code> and <code>NaturalResource</code>).
ResourceArtifact	A type of man-made object that contains no human beings (i.e. satellite, radio, petrol, gasoline, etc.).
ResourcePerformer	An abstract type grouping elements that can be the subject of a <code>SecurityConstraint</code> (there are currently no security viewpoints in the NAF).

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.189 Post

Definition

A type of job title or position that a person can fill (e.g. Lawyer, Solution Architect, Machine Operator or Chief Executive Officer).

Meta Model

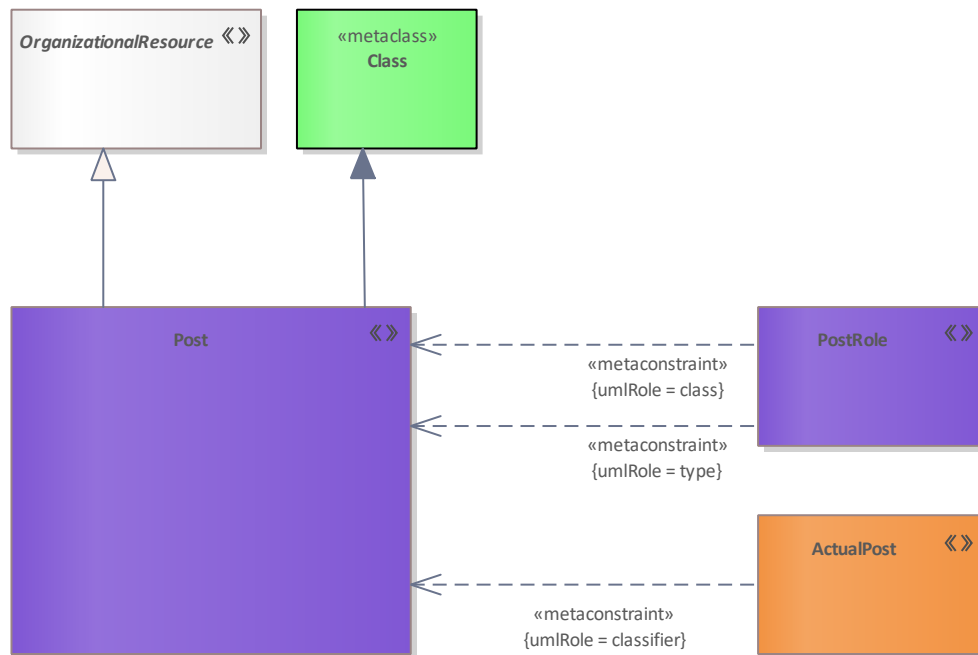


Figure 245: Post

Elements in Diagram

Name	Definition
ActualPost	An actual, specific post, an instance of a Post "type" - e.g., "President of the United States of America." where the Post would be president.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
Post	A type of job title or position that a person can fill (e.g. Lawyer, Solution Architect, Machine Operator or Chief Executive Officer).
PostRole	A usage of a post in the context of another OrganizationalResource. Creates a whole-part relationship.

Tagged Values

Tag Name	Valid Values
URI	String
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R

Relevant Viewpoints

- [A2 - Architecture Products](#)
- [C5 - Effects](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)

3.190 PostRole

Definition

A usage of a post in the context of another OrganizationalResource. Creates a whole-part relationship.

Meta Model

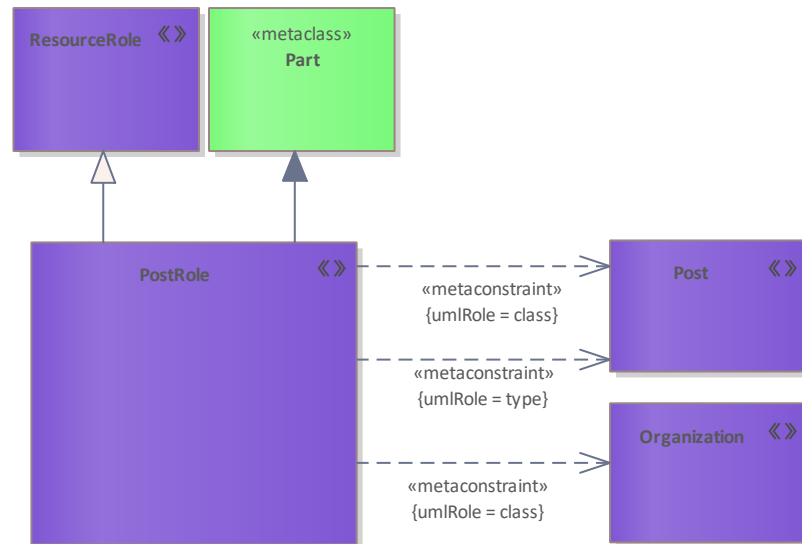


Figure 246: PostRole

Elements in Diagram

Name	Definition
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
Post	A type of job title or position that a person can fill (e.g. Lawyer, Solution Architect, Machine Operator or Chief Executive Officer).
PostRole	A usage of a post in the context of another OrganizationalResource. Creates a whole-part relationship.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.

Tagged Values

Tag Name	Valid Values
roleKind	Part, Component, Used Configuration, Used Physical Architecture, Human Resource, Platform, System, Sub Organisation, Post Role, Responsibility Role, Equipment, Sub System Part, Hosted Software, Artifact Component, Natural Resource Component, Other
Virtualization level	vollständige Virtualisierung, Paravirtualisierung, Betriebssystemvirtualisierung, nicht virtualisiert, keine Relevanz, not set
Virtualization location	Bare Metal, Hosted, keine Virtualisierung, keine Relevanz, not set
SecurityDomain	String
IT security accreditation	akkreditiert VS-NfD, akkreditiert Geheim, konform VS-NfD, konform Geheim, nicht akkreditiert, keine Relevanz, not set
Programming language	ABAP, Java, PHP, C++, C#, Python, keine Relevanz, not set
x86 processor architecture	Ja, Nein, begründete Abweichung, keine Relevanz, not set
URI	String

Relevant Viewpoints

- [L3 - Node Interaction](#)
- [P2 - Resource Structure](#)

3.191 ProblemDomain

Definition

A property associated with a logical architecture, used to specify the scope of the problem.

Meta Model

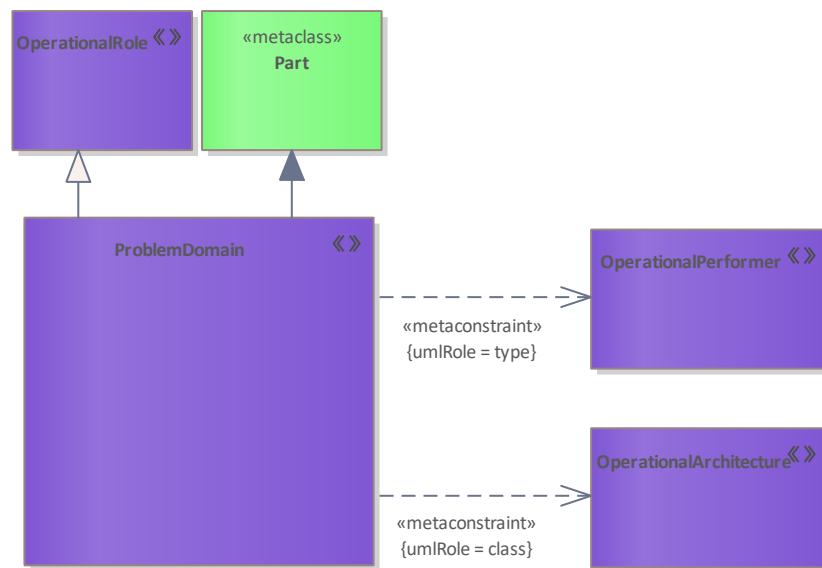


Figure 247: ProblemDomain

Elements in Diagram

Name	Definition
OperationalArchitecture	A type used to denote a model of the Architecture, described from the Operational perspective.
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
ProblemDomain	A property associated with a logical architecture, used to specify the scope of the problem.

Tagged Values

Tag Name	Valid Values
Nationality	UN, NATO-PfP, NATO, DEU, MN, EU, TCN, NLD, National, Unknown, not set
SizeIndicator	Theatre, Armygroup, Army, Corps, Command, Division, Brigade, Regiment, Battalion, Company, Echelon, Platoon, Section, Squad, Team, Unknown, not set
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)

3.192 ProcessEdge

Definition

An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.

Meta Model

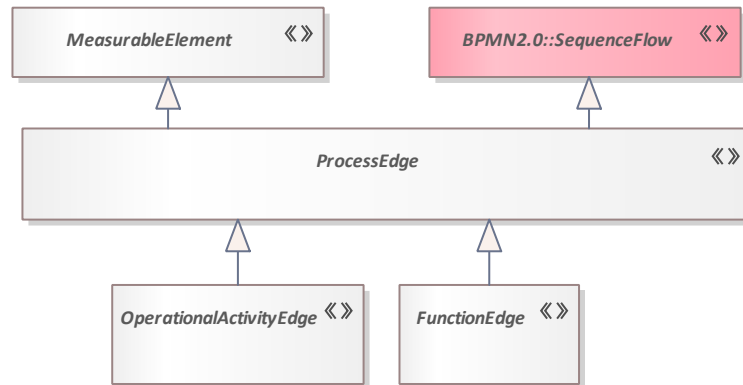


Figure 248: ProcessEdge

Elements in Diagram

Name	Definition
FunctionEdge	A tuple that shows the flow of Resources (objects/data) between FunctionActions.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalActivityEdge	A tuple that shows the flow of Resources (objects/information) between OperationalActivityActions.
ProcessEdge	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.193 ProcessGeneralization

Definition

A ProcessGeneralization is a taxonomic relationship between a more general Process and a more specific Process.

Meta Model

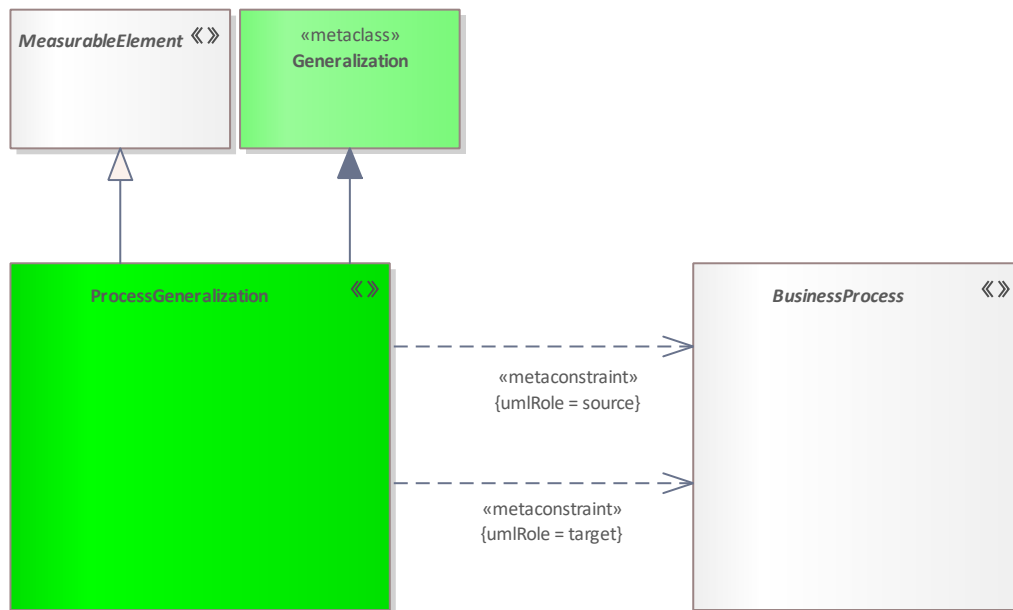


Figure 249: ProcessGeneralization

Elements in Diagram

Name	Definition
BusinessProcess	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ProcessGeneralization	A ProcessGeneralization is a taxonomic relationship between a more general Process and a more specific Process.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L4 - Logical Activities](#)

3.194 ProcessMessageFlow

Definition

A tuple that shows the flow of message between different ActivityPartitions like Pools.

Meta Model

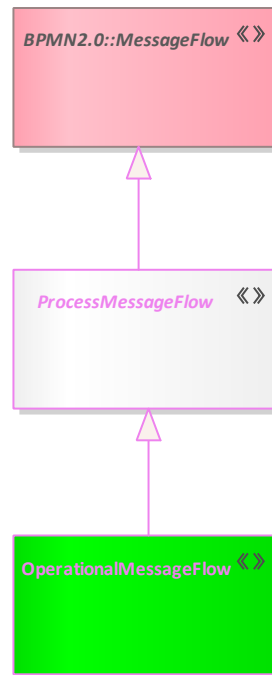


Figure 250: ProcessMessageFlow

Elements in Diagram

Name	Definition
OperationalMessageFlow	A ProcessMessageFlow that shows the flow of message between OperationalActivityActions of different ActivityPartitions like Pools.
ProcessMessageFlow	A tuple that shows the flow of message between different ActivityPartitions like Pools.

Tagged Values

Relevant Viewpoints

3.195 ProcessOperation

Definition

An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.

Meta Model

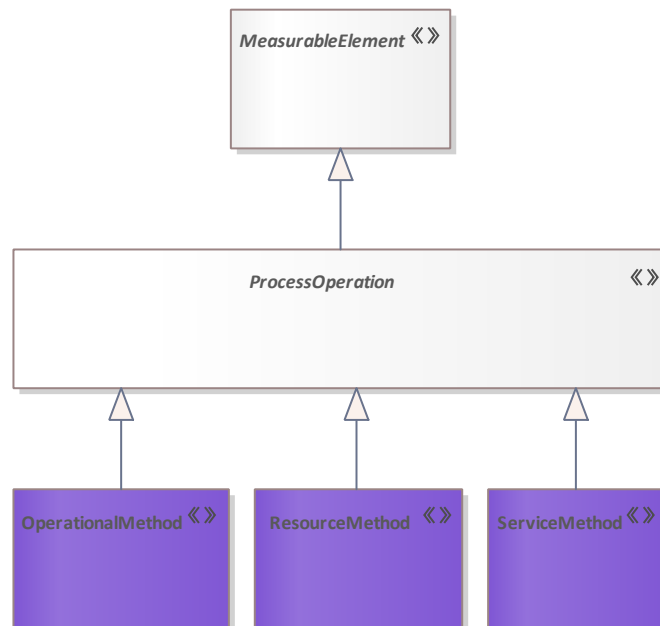


Figure 251: ProcessOperation

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalMethod	behavioral feature of a OperationalPerformer whose behavior is specified in an OperationalActivity.
ProcessOperation	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
ResourceMethod	A behavioral feature of a ResourcePerformer whose behavior is specified in a Function.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.196 ProcessParameter

Definition

An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.

Meta Model

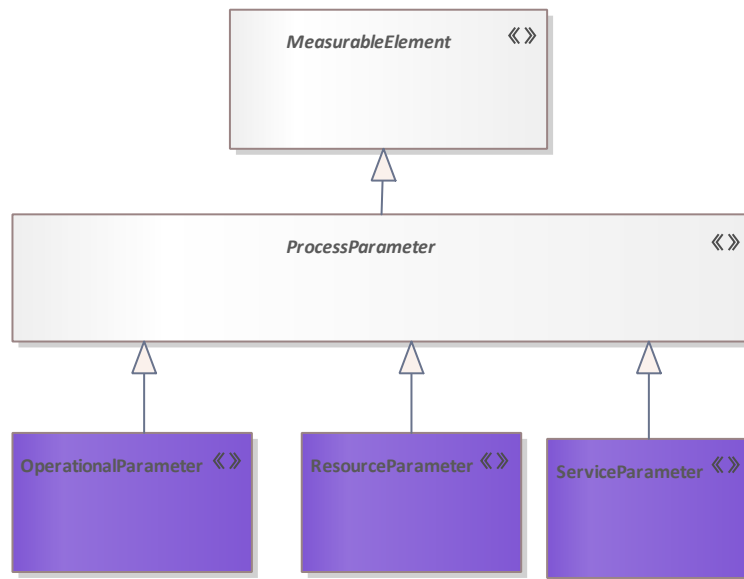


Figure 252: ProcessParameter

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalParameter	A type that represents inputs and outputs of an OperationalActivity. It is typed by an OperationalExchangeItem.
ProcessParameter	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
ResourceParameter	A type that represents inputs and outputs of an Function. It is typed by a ResourceInteractionItem.
ServiceParameter	A type that represents inputs and outputs of a ServiceFunction, represents inputs and outputs of a ServiceSpecification.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.197 ProcessUsage

Definition

An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer or Role.

Meta Model

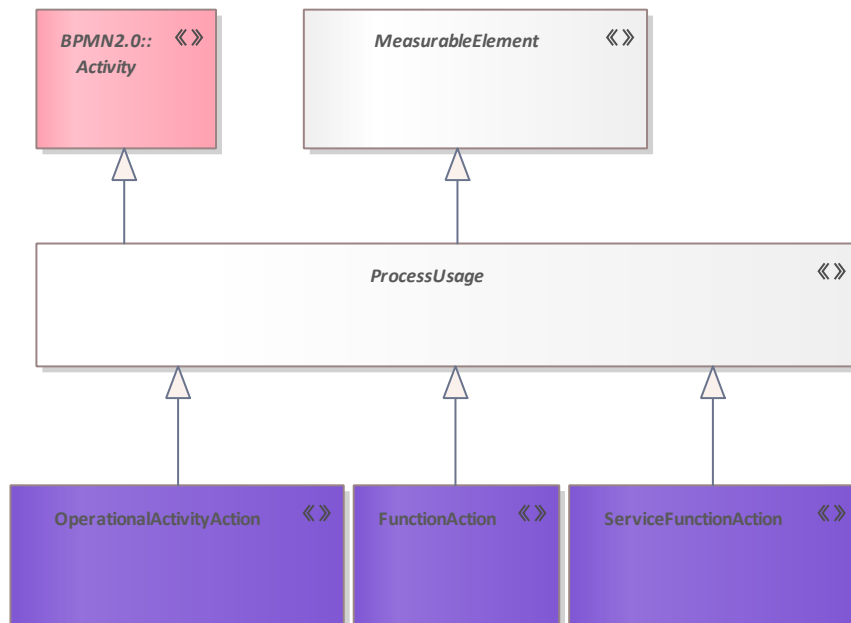


Figure 253: ProcessUsage

Elements in Diagram

Name	Definition
FunctionAction	A call of a Function indicating that the Function is performed by a ResourceRole in a specific context.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
ProcessUsage	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer or Role.
ServiceFunctionAction	A call of a ServiceFunction in the context of another ServiceFunction.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.198 Project

Definition

A type that describes types of time-limited endeavours that are required to meet one or more Capability needs.

Meta Model

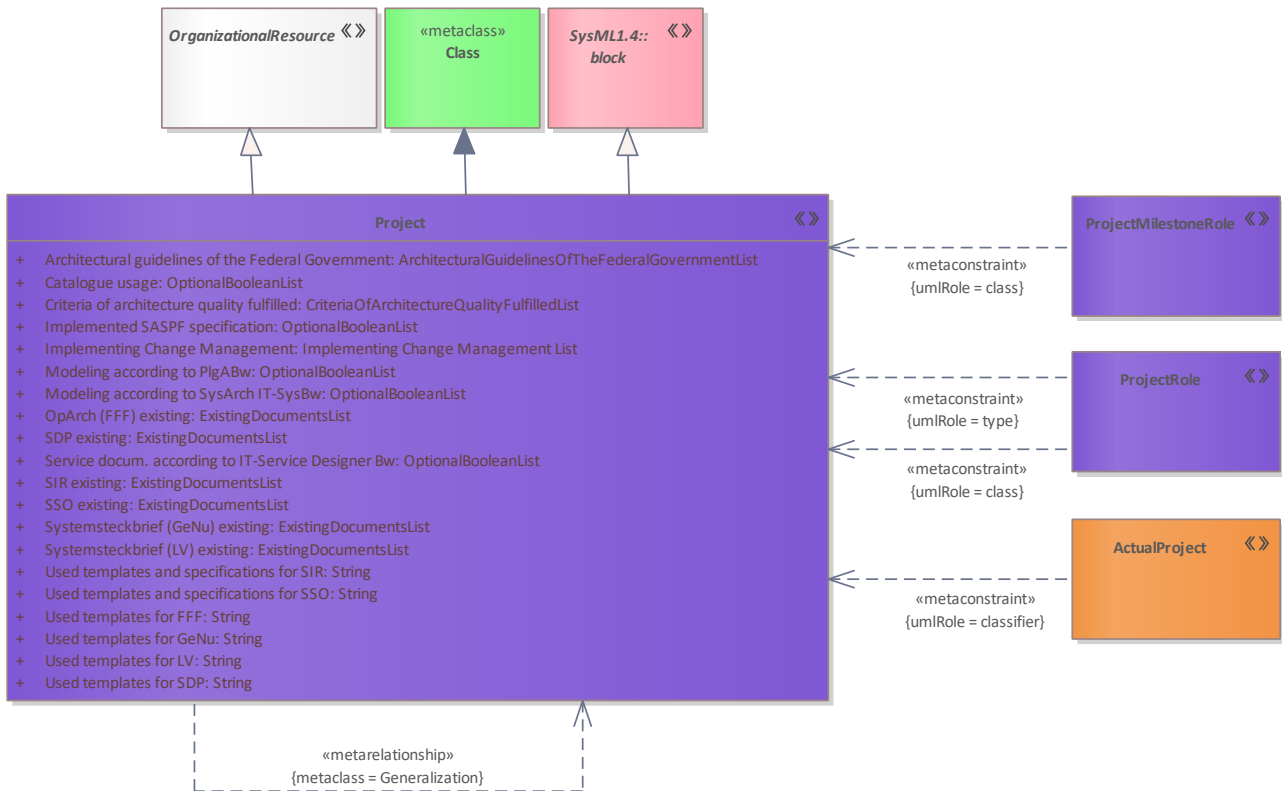


Figure 254: Project

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
Project	A type that describes types of time-limited endeavours that are required to meet one or more Capability needs.
ProjectMilestoneRole	The role played by a ProjectMilestone in the context of a Project.
ProjectRole	Usage of a Project in the context of another Project. Creates a whole-part relationship.

Tagged Values

Tag Name	Valid Values
Architectural guidelines of the Federal Government	berücksichtigt, nicht berücksichtigt, teilweise berücksichtigt, keine Relevanz, not set
Catalogue usage	Ja, Nein, keine Relevanz, not set
Criteria of architecture quality fulfilled	Ja, Teilweise, Nein, keine Relevanz, not set
Implemented SASPF specification	Ja, Nein, keine Relevanz, not set
Implementing Change Management	CPM, RfC bei I1.4, Changeprozess SASPF, kein, keine Relevanz, not set
Modeling according to PlgABw	Ja, Nein, keine Relevanz, not set
Modeling according to SysArch IT-SysBw	Ja, Nein, keine Relevanz, not set

OpArch (FFF) existing	zu erstellen, Ja (gemäß Vorgaben), Ja (methodische Mängel), Ja (inhaltliche Mängel), Ja (methodische & inhaltliche Mängel), Nein, keine Relevanz, not set
SDP existing	zu erstellen, Ja (gemäß Vorgaben), Ja (methodische Mängel), Ja (inhaltliche Mängel), Ja (methodische & inhaltliche Mängel), Nein, keine Relevanz, not set
Service docum. according to IT-Service Designer Bw	Ja, Nein, keine Relevanz, not set
SIR existing	zu erstellen, Ja (gemäß Vorgaben), Ja (methodische Mängel), Ja (inhaltliche Mängel), Ja (methodische & inhaltliche Mängel), Nein, keine Relevanz, not set
SSO existing	zu erstellen, Ja (gemäß Vorgaben), Ja (methodische Mängel), Ja (inhaltliche Mängel), Ja (methodische & inhaltliche Mängel), Nein, keine Relevanz, not set
Systemsteckbrief (GeNu) existing	zu erstellen, Ja (gemäß Vorgaben), Ja (methodische Mängel), Ja (inhaltliche Mängel), Ja (methodische & inhaltliche Mängel), Nein, keine Relevanz, not set
Systemsteckbrief (LV) existing	zu erstellen, Ja (gemäß Vorgaben), Ja (methodische Mängel), Ja (inhaltliche Mängel), Ja (methodische & inhaltliche Mängel), Nein, keine Relevanz, not set
Used templates and specifications for SIR	String
Used templates and specifications for SSO	String
Used templates for FFF	String
Used templates for GeNu	String
Used templates for LV	String
Used templates for SDP	String
URI	String
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R

Relevant Viewpoints

- [Cr - Capability Roadmap](#)
- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.199 ProjectMilestone

Definition

A type of event in a Project by which progress is measured.

Meta Model

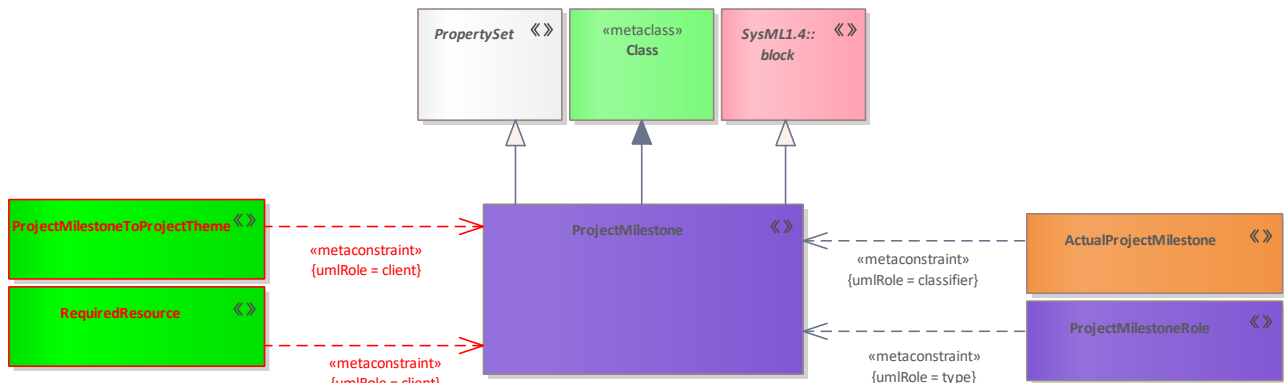


Figure 255: ProjectMilestone

Elements in Diagram

Name	Definition
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
ProjectMilestone	A type of event in a Project by which progress is measured.
ProjectMilestoneRole	The role played by a ProjectMilestone in the context of a Project.
ProjectMilestoneToProjectTheme	A relationship that expresses which project theme is handled by which project milestone.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
RequiredResource	Relationship that indicates which resources a project milestone requires

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.200 ProjectMilestoneRole

Definition

The role played by a ProjectMilestone in the context of a Project.

Meta Model

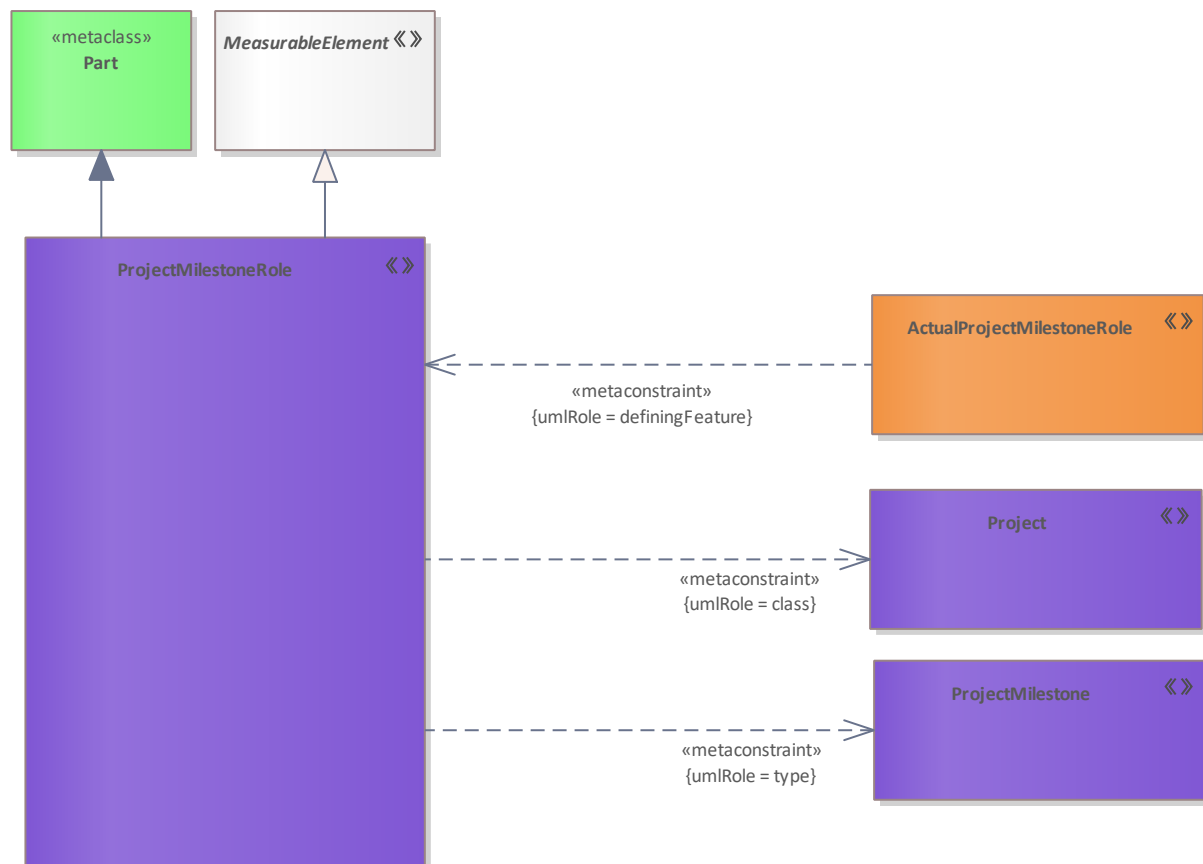


Figure 256: ProjectMilestoneRole

Elements in Diagram

Name	Definition
ActualProjectMilestoneRole	An ActualProjectMilestone that is applied to a ProjectMilestoneRole.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Project	A type that describes types of time-limited endeavours that are required to meet one or more Capability needs.
ProjectMilestone	A type of event in a Project by which progress is measured.
ProjectMilestoneRole	The role played by a ProjectMilestone in the context of a Project.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.201 ProjectMilestoneToProjectTheme

Definition

A relationship that expresses which project theme is handled by which project milestone.

Meta Model

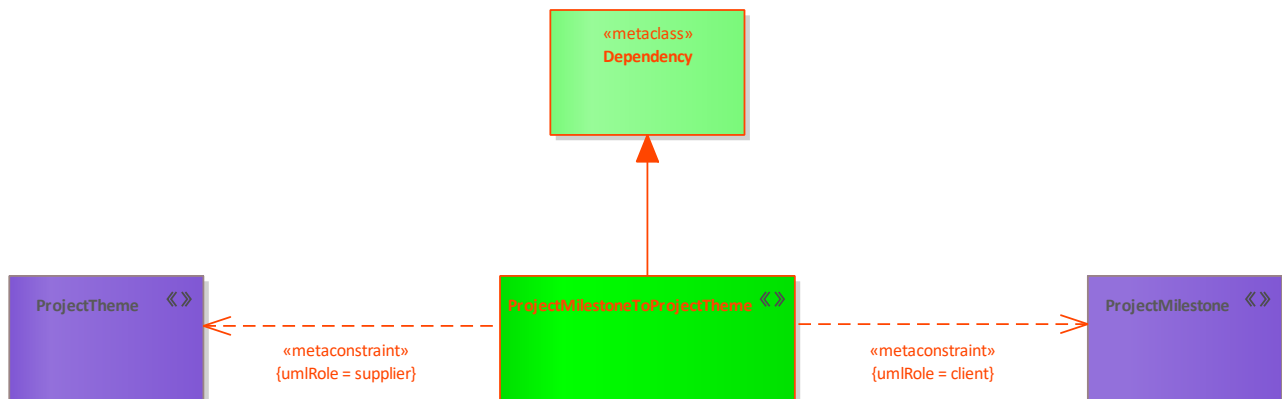


Figure 257: ProjectMilestoneToProjectTheme

Elements in Diagram

Name	Definition
ProjectMilestone	A type of event in a Project by which progress is measured.
ProjectMilestoneToProjectTheme	A relationship that expresses which project theme is handled by which project milestone.
ProjectTheme	A property of a ProjectMilestone that captures an aspect by which the progress of ActualProjects may be measured.

Tagged Values

Relevant Viewpoints

- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.202 ProjectProvidesFunction

Definition

Relation stats that a project realizes a function.

Meta Model

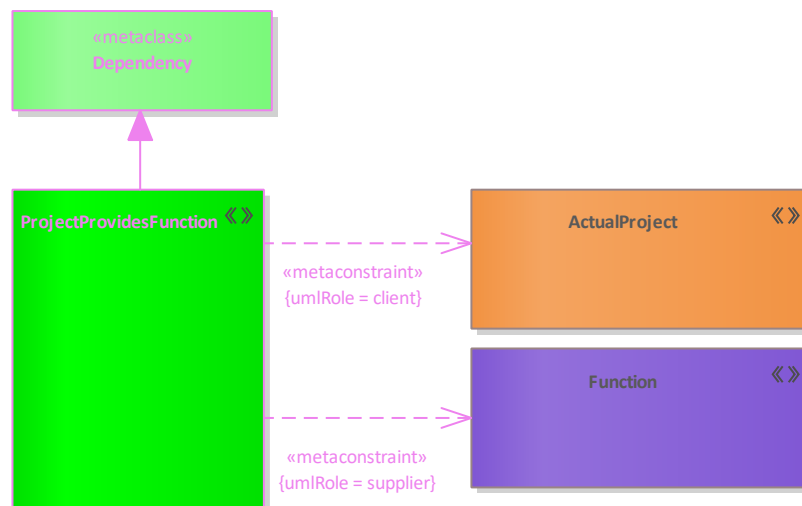


Figure 258: ProjectProvidesFunction

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
ProjectProvidesFunction	Relation stats that a project realizes a function.

Tagged Values

Relevant Viewpoints

- [P2 - Resource Structure](#)

3.203 ProjectRole

Definition

Usage of a Project in the context of another Project. Creates a whole-part relationship.

Meta Model

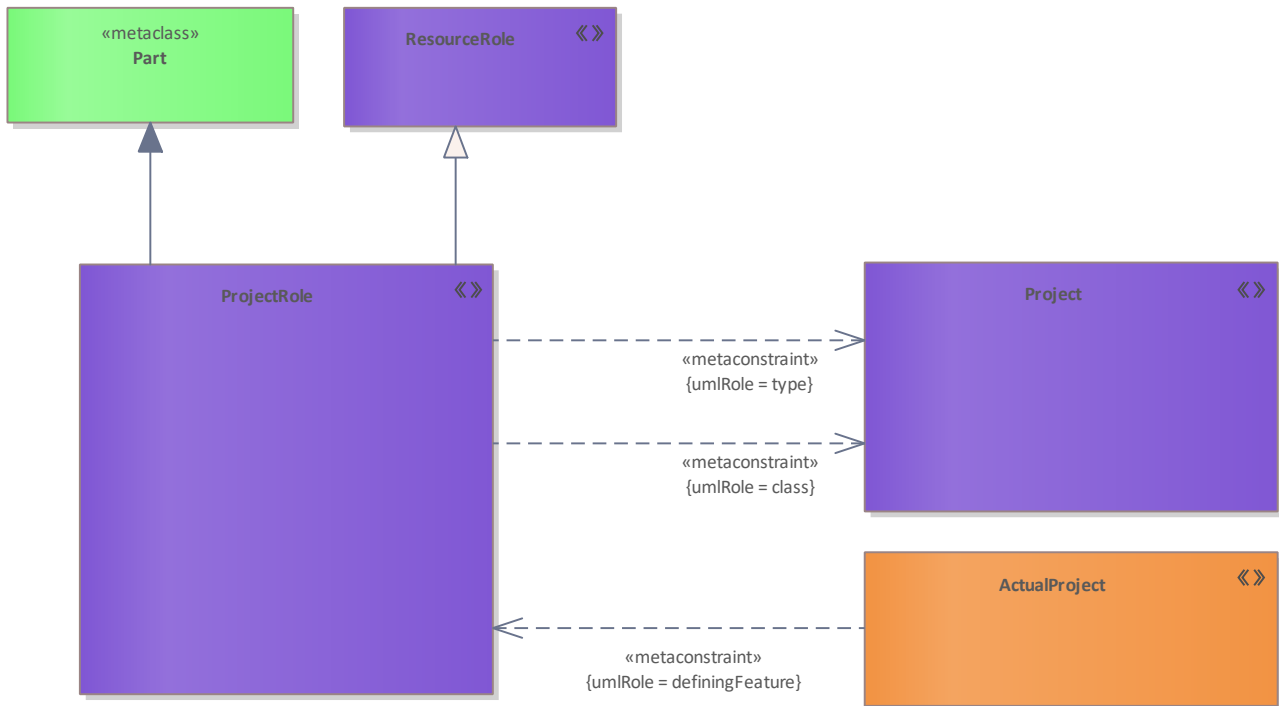


Figure 259: ProjectRole

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
Project	A type that describes types of time-limited endeavours that are required to meet one or more Capability needs.
ProjectRole	Usage of a Project in the context of another Project. Creates a whole-part relationship.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.

Tagged Values

Tag Name	Valid Values
roleKind	Part, Component, Used Configuration, Used Physical Architecture, Human Resource, Platform, System, Sub Organisation, Post Role, Responsibility Role, Equipment, Sub System Part, Hosted Software, Artifact Component, Natural Resource Component, Other
Virtualization level	vollständige Virtualisierung, Paravirtualisierung, Betriebssystemvirtualisierung, nicht virtualisiert, keine Relevanz, not set
Virtualization location	Bare Metal, Hosted, keine Virtualisierung, keine Relevanz, not set
SecurityDomain	String
IT security accreditation	akkreditiert VS-NfD, akkreditiert Geheim, konform VS-NfD, konform Geheim, nicht akkreditiert, keine Relevanz, not set

Programming language	ABAP, Java, PHP, C++, C#, Python, keine Relevanz, not set
x86 processor architecture	Ja, Nein, begründete Abweichung, keine Relevanz, not set
URI	String

Relevant Viewpoints

3.204 ProjectSequence

Definition

A tuple between two ActualProjects that denotes one ActualProject cannot start before the previous ActualProject is finished.

Meta Model

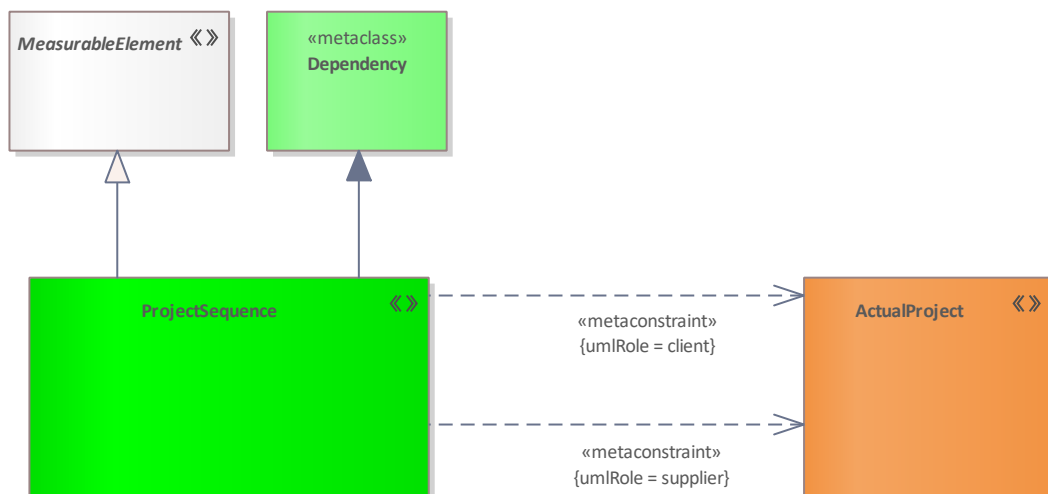


Figure 260: ProjectSequence

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ProjectSequence	A tuple between two ActualProjects that denotes one ActualProject cannot start before the previous ActualProject is finished.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.205 ProjectStatus

Definition

The status (i.e. level of progress) of a ProjectTheme for an ActualProject at the time of the ActualProjectMilestone.

Meta Model

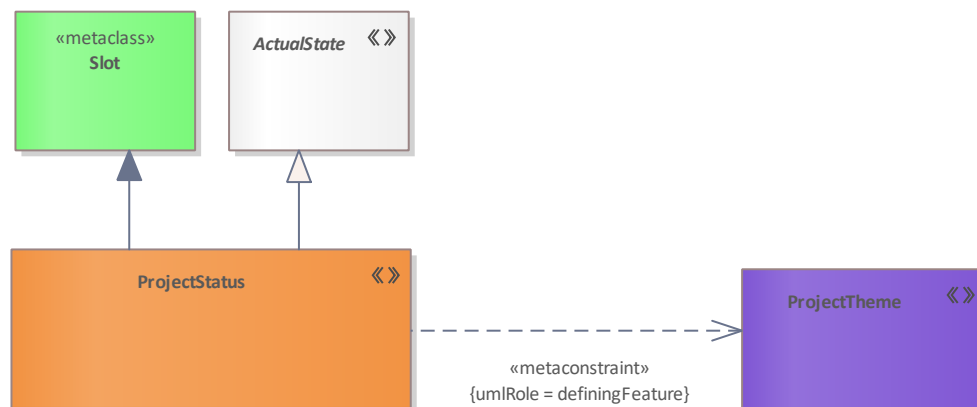


Figure 261: ProjectStatus

Elements in Diagram

Name	Definition
ActualState	Abstract element that applies temporal extent to a set of elements realized as Instance Specifications.
ProjectStatus	The status (i.e. level of progress) of a ProjectTheme for an ActualProject at the time of the ActualProjectMilestone.
ProjectTheme	A property of a ProjectMilestone that captures an aspect by which the progress of ActualProjects may be measured.

Tagged Values

Tag Name	Valid Values
endDate	endDate
startDate	startDate
URI	String

Relevant Viewpoints

3.206 ProjectSupportActivity

Definition

Relation stats that a project supports an activity.

Meta Model

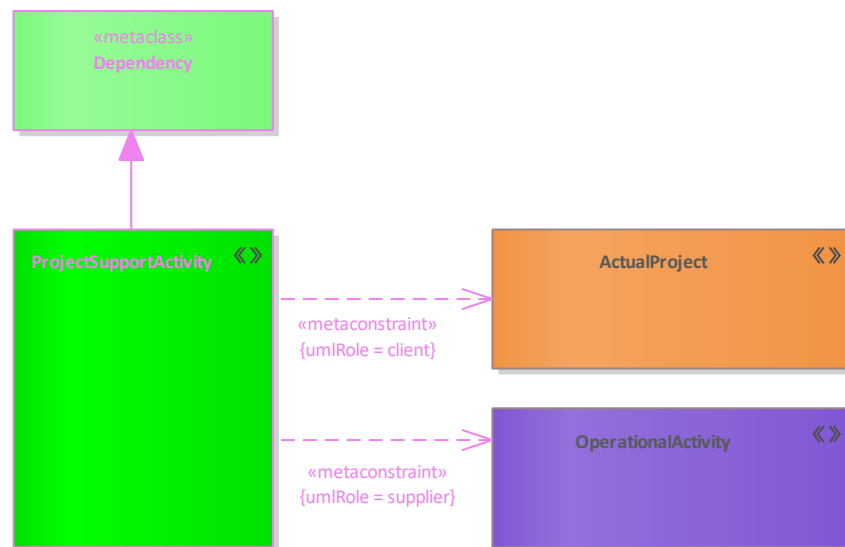


Figure 262: ProjectSupportActivity

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
ProjectSupportActivity	Relation stats that a project supports an activity.

Tagged Values

Relevant Viewpoints

- [P2 - Resource Structure](#)

3.207 ProjectTheme

Definition

A property of a ProjectMilestone that captures an aspect by which the progress of ActualProjects may be measured.

Meta Model

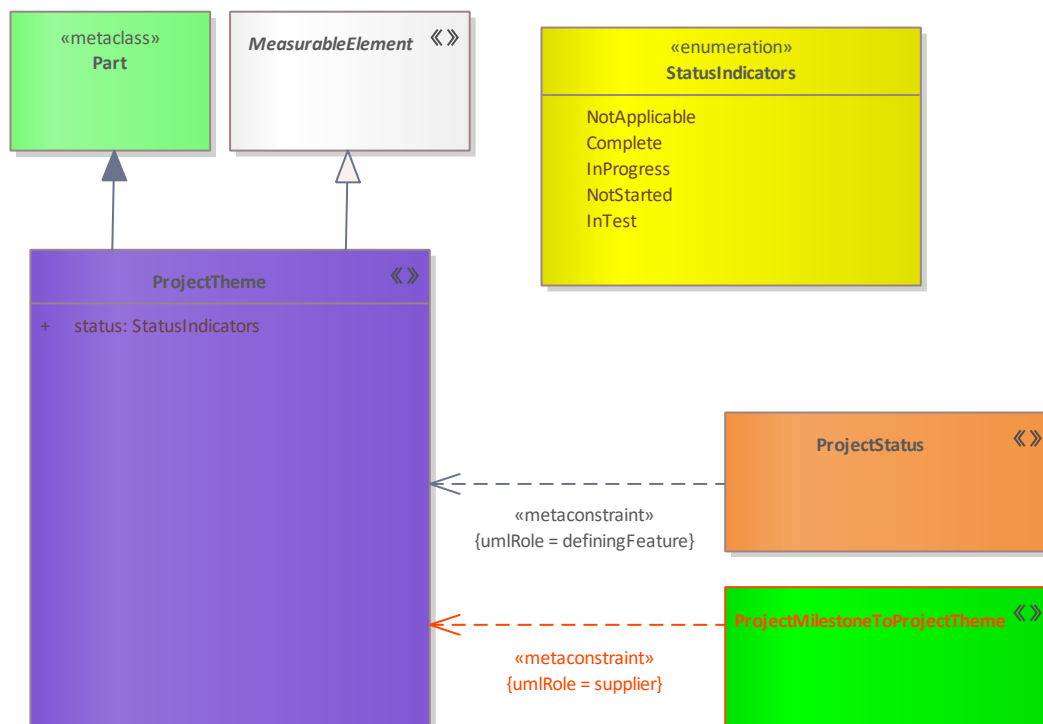


Figure 263: ProjectTheme

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ProjectMilestoneToProjectTheme	A relationship that expresses which project theme is handled by which project milestone.
ProjectStatus	The status (i.e. level of progress) of a ProjectTheme for an ActualProject at the time of the ActualProjectMilestone.
ProjectTheme	A property of a ProjectMilestone that captures an aspect by which the progress of ActualProjects may be measured.

Tagged Values

Tag Name	Valid Values
status	NotApplicable, Complete, InProgress, NotStarted, InTest
URI	String

Relevant Viewpoints

- [Lr - Lines of Development](#)

3.208 PropertySet

Definition

An abstract type grouping architectural elements that can own Measurements.

Meta Model

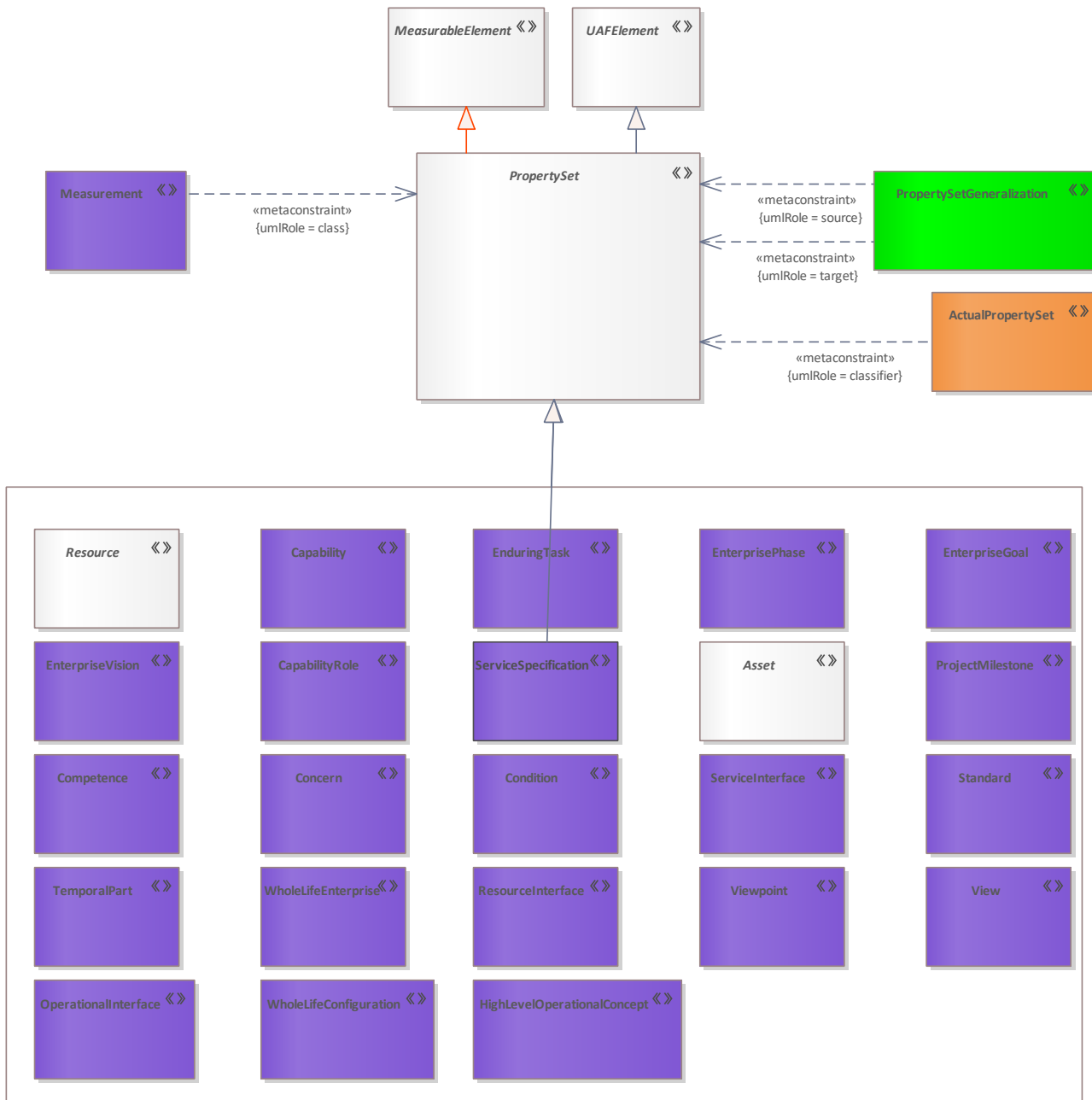


Figure 264: PropertySet

Elements in Diagram

Name	Definition
ActualPropertySet	A set or collection of Actual properties.
Asset	Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
CapabilityRole	A high level specification of the enterprise's ability to execute a specified course of action.
Competence	A specific set of abilities defined by knowledge, skills and aptitude.

Name	Definition
Concern	Interest in an EnterprisePhase (EnterprisePhase is synonym for System in ISO 42010) relevant to one or more of its stakeholders.
Condition	A type that defines the Location, Environment and/or GeoPoliticalExtent.
EnduringTask	A type of template behavior recognized by an enterprise as being essential to achieving its goals - i.e. a template for a strategic specification of what the enterprise does.
EnterpriseGoal	A statement about a state or condition of the enterprise to be brought about or sustained through appropriate Means. An EnterpriseGoal amplifies an EnterpriseVision that is, it indicates what must be satisfied on a continuing basis to effectively attain the EnterpriseVision.
EnterprisePhase	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.
EnterpriseVision	A Vision describes the future state of the enterprise, without regard to how it is to be achieved.
HighLevelOperationalConcept	Describes the Resources and Locations required to meet an operational scenario from an integrated systems point of view. It is used to communicate overall quantitative and qualitative system characteristics to stakeholders
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
OperationalInterface	A declaration that specifies a contract between the OperationalPerformer it is related to, and any other OperationalPerformers it can interact with.
ProjectMilestone	A type of event in a Project by which progress is measured.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
Resource	Abstract element grouping for all elements that can be conveyed by an Exchange.
ResourceInterface	A declaration that specifies a contract between the ResourcePerformers it is related to and any other ResourcePerformers it can interact with. It is also intended to be an implementation of a specification of an Interface in the Business and/or Service layer.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.
TemporalPart	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.
View	An architecture view expresses the architecture of the system-of-interest in accordance with an architecture viewpoint (or simply, viewpoint). [ISO/IEC/IEEE 42010:2011(E)].
Viewpoint	An architecture viewpoint frames (to formulate or construct in a particular style or language) one or more concerns. A concern can be framed by more than one viewpoint. [ISO/IEC/IEEE 42010:2011(E)].
WholeLifeConfiguration	A set of VersionedElements.
WholeLifeEnterprise	A WholeLifeEnterprise is a purposeful endeavor of any size involving people, organizations and supporting systems. It is made up of TemporalParts and StructuralParts.

Tagged Values

Tag Name	Valid Values
----------	--------------

URI	String
-----	--------

Relevant Viewpoints

3.209 PropertySetGeneralization

Definition

A PropertySetGeneralization is a taxonomic relationship between a more general PropertySet and a more specific PropertySet.

Meta Model

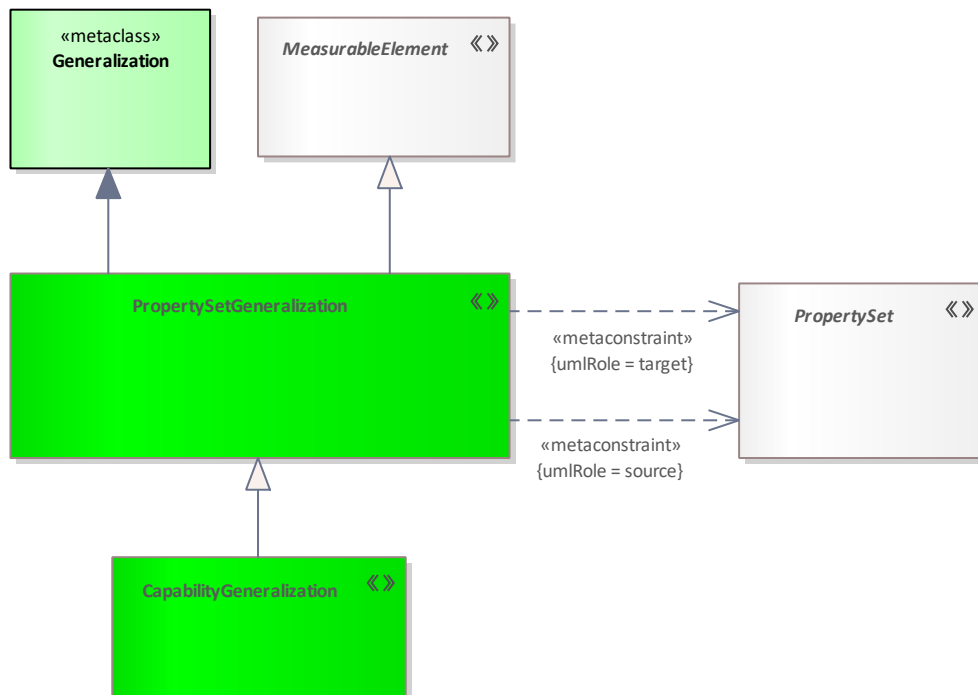


Figure 265: PropertySetGeneralisation

Elements in Diagram

Name	Definition
CapabilityGeneralization	A CapabilityGeneralization is a taxonomic relationship between a more general Capability and a more specific Capability.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
PropertySet	An abstract type grouping architectural elements that can own Measurements.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L1 - Node Types](#)
- [P1- Resource Types](#)

3.210 Protocol

Definition

A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.

Meta Model

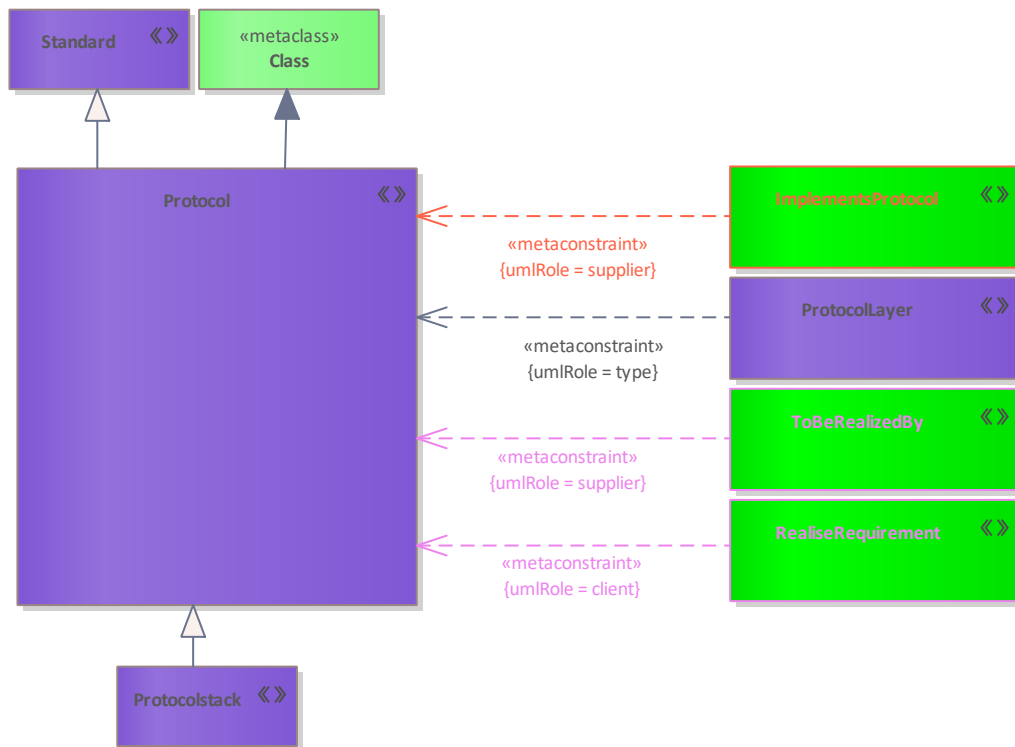


Figure 266: Protocol

Elements in Diagram

Name	Definition
ImplementsProtocol	A relationship that expresses which protocol implements an architectural element.
Protocol	A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.
ProtocolLayer	Usage of a Protocol in the context of another Protocol. Creates a whole-part relationship.
Protocolstack	A sub type of Protocol that contains the ProtocolLayers, defining a complete stack.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
mandatedDate	mandatedDate
retiredDate	retiredDate
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [A8 - Standards](#)
- [P3 - Resource Connectivity](#)
- [Rr - Requirement Realization](#)

3.211 ProtocolImplementation

Definition

An abstract type grouping architectural elements that can implement Protocols.

Meta Model

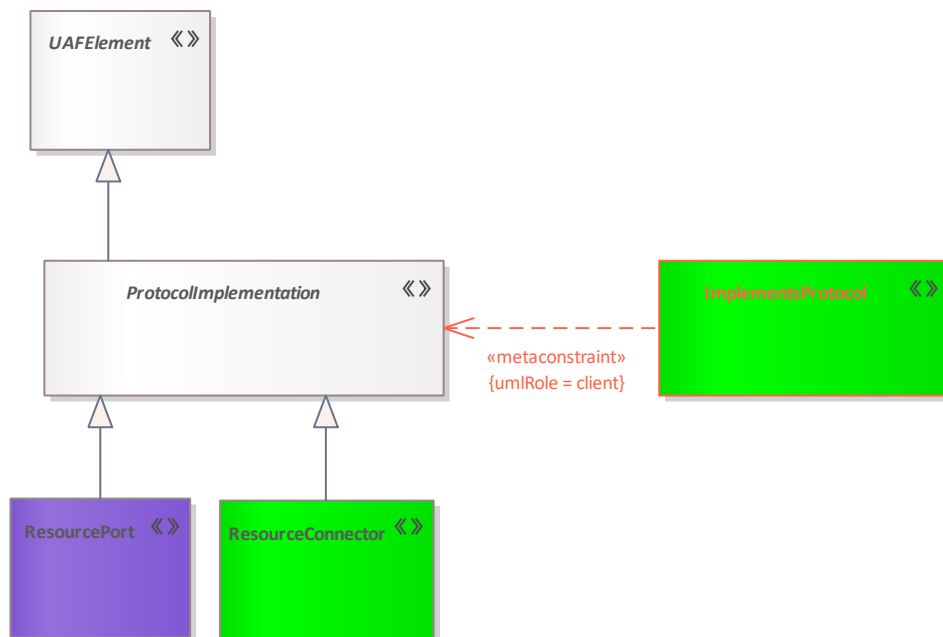


Figure 267: ProtocolImplementation

Elements in Diagram

Name	Definition
ImplementsProtocol	A relationship that expresses which protocol implements an architectural element.
ProtocolImplementation	An abstract type grouping architectural elements that can implement Protocols.
ResourceConnector	A channel for exchange between two ResourceRoles.
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.212 ProtocolLayer

Definition

Usage of a Protocol in the context of another Protocol. Creates a whole-part relationship.

Meta Model

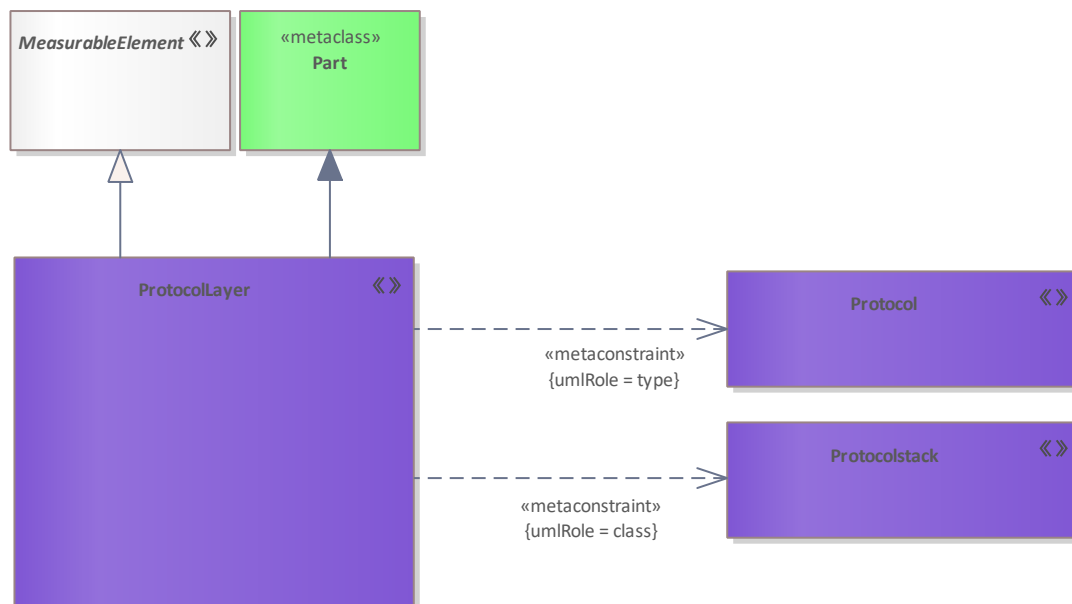


Figure 268: ProtocolLayer

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Protocol	A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.
ProtocolLayer	Usage of a Protocol in the context of another Protocol. Creates a whole-part relationship.
Protocolstack	A sub type of Protocol that contains the ProtocolLayers, defining a complete stack.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [A8 - Standards](#)
- [P3 - Resource Connectivity](#)

3.213 Protocolstack

Definition

A sub type of Protocol that contains the ProtocolLayers, defining a complete stack.

Meta Model

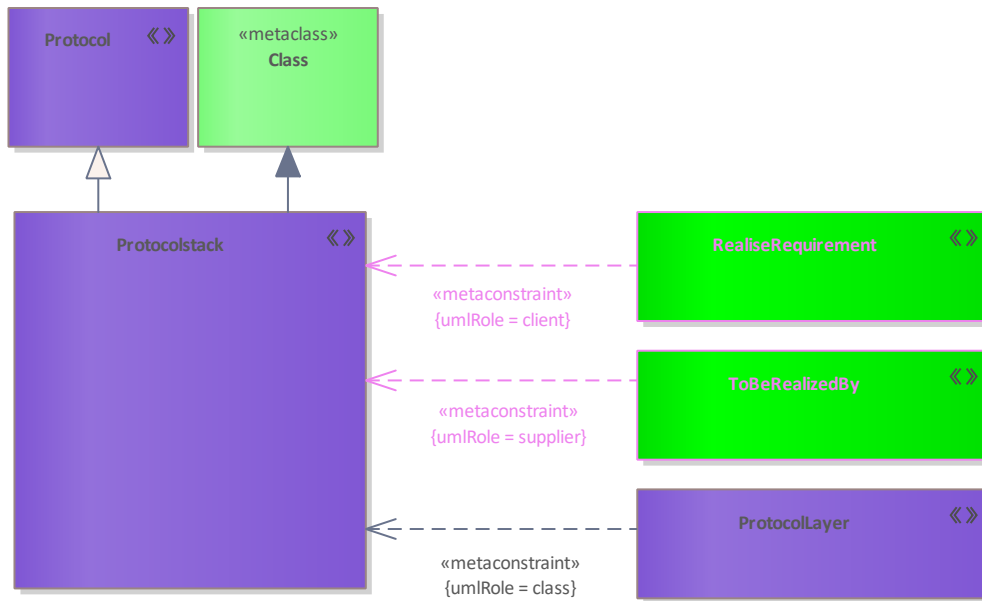


Figure 269: Protocolstack

Elements in Diagram

Name	Definition
Protocol	A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.
ProtocolLayer	Usage of a Protocol in the context of another Protocol. Creates a whole-part relationship.
Protocolstack	A sub type of Protocol that contains the ProtocolLayers, defining a complete stack.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
mandatedDate	mandatedDate
retiredDate	retiredDate
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [A8 - Standards](#)
- [P3 - Resource Connectivity](#)
- [Rr - Requirement Realization](#)

3.214 ProvidedServiceLevel

Definition

A sub type of ActualService that details a specific service level delivered by the provider.

Meta Model

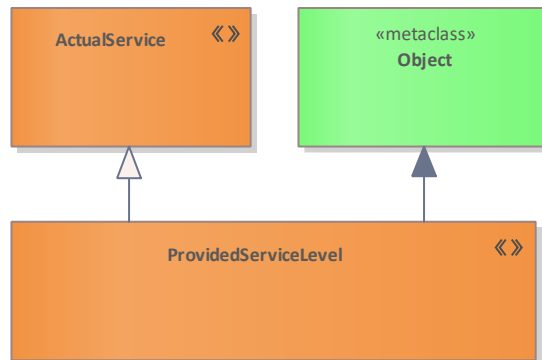


Figure 270: ProvidedServiceLevel

Elements in Diagram

Name	Definition
ActualService	An individual ServiceSpecification.
ProvidedServiceLevel	A sub type of ActualService that details a specific service level delivered by the provider.

Tagged Values

Tag Name	Valid Values
URI	String
endDate	endDate
startDate	startDate

Relevant Viewpoints

- [P1- Resource Types](#)
- [Sr - Service Roadmap](#)

3.215 Provides

Definition

Asserts that a operational agent provides a service.

Meta Model

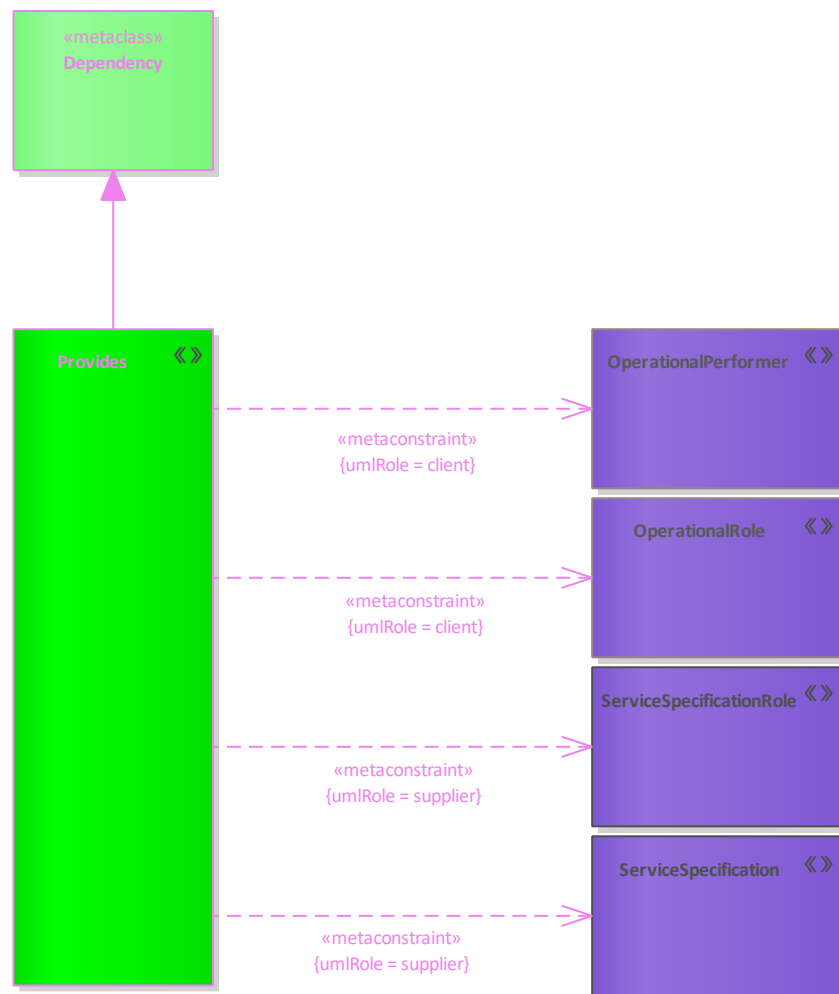


Figure 271: Provides

Elements in Diagram

Name	Definition
OperationalPerformer	A logical entity that IsCapableToPerform OperationalActivities which produce, consume and process Resources.
OperationalRole	Usage of a OperationalPerformer or OperationalArchitecture in the context of another OperationalPerformer or OperationalArchitecture. Creates a whole-part relationship.
Provides	Asserts that a operational agent provides a service.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

Tagged Values

Relevant Viewpoints

- [L3 - Node Interaction](#)

3.216 ProvidesCompetence

Definition

A tuple that asserts that an ActualOrganizationalResource provides a specific set of Competencies.

Meta Model

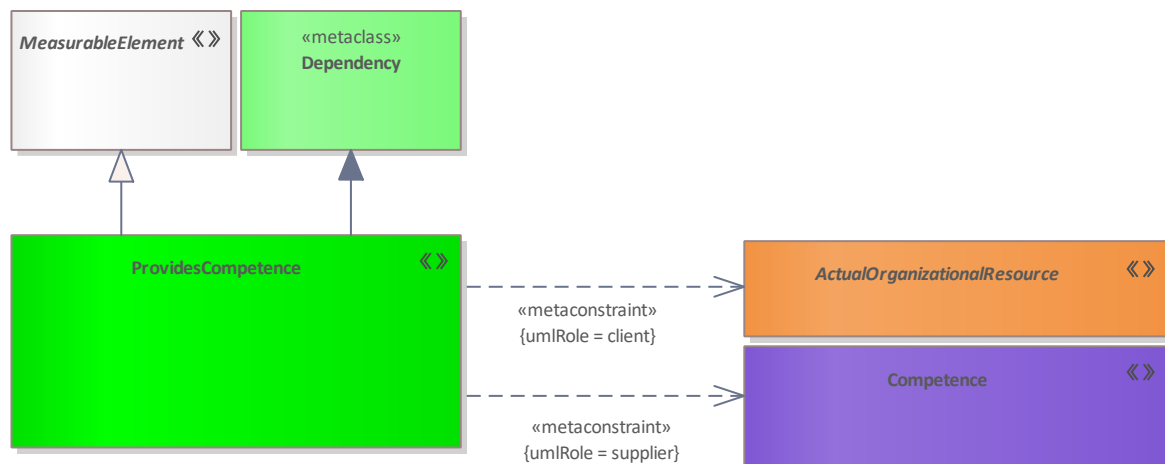


Figure 272: ProvidesCompetence

Elements in Diagram

Name	Definition
ActualOrganizationalResource	Abstract element for an ActualOrganization, ActualPerson or ActualPost.
Competence	A specific set of abilities defined by knowledge, skills and aptitude.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ProvidesCompetence	A tuple that asserts that an ActualOrganizationalResource provides a specific set of Competencies.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.217 ProvidesServiceFunction

Definition

Relationship that expresses that a service function is provided by an interface.

Meta Model

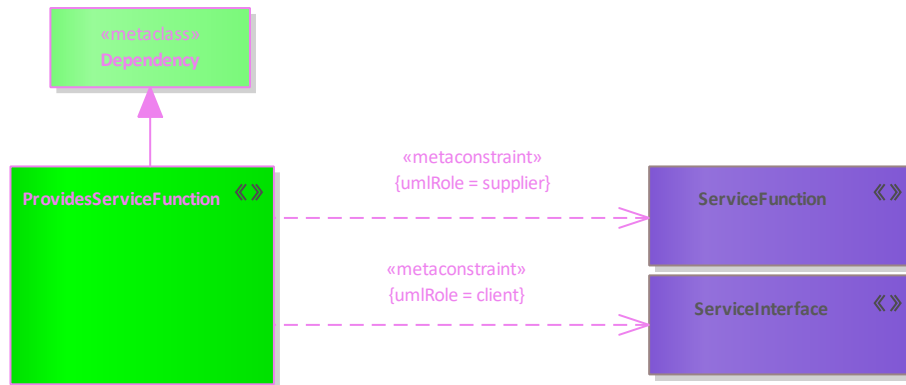


Figure 273: ProvidesServiceFunction

Elements in Diagram

Name	Definition
ProvidesServiceFunction	Relationship that expresses that a service function is provided by an interface.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.

Tagged Values

Relevant Viewpoints

- [S2 - Service Structure](#)
- [S7 - Service Interface Parameters](#)

3.218 RatifiedStandards

Definition

A relationship that expresses that an actual organization releases a standard.

Meta Model

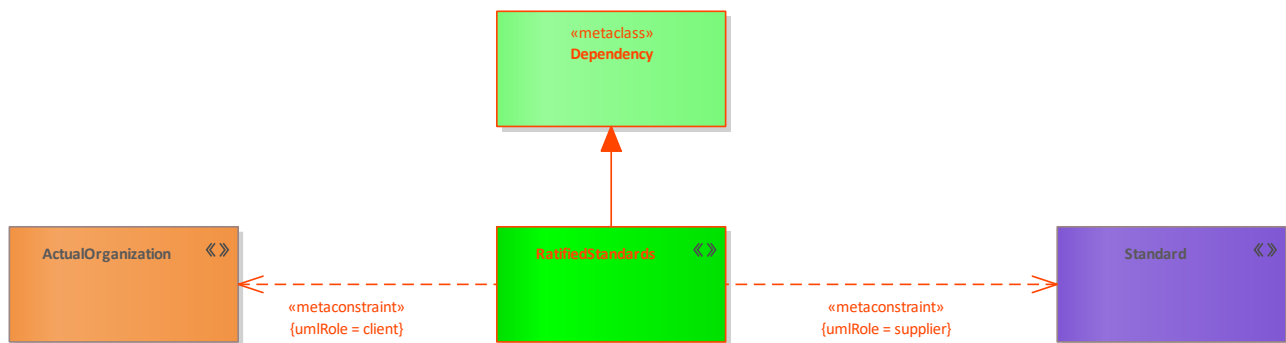


Figure 274: RatifiedStandards

Elements in Diagram

Name	Definition
ActualOrganization	An actual formal or informal organizational unit, e.g. "Driving and Vehicle Licensing Agency", "UAF team Alpha".
RatifiedStandards	A relationship that expresses that an actual organization releases a standard.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.

Tagged Values

Relevant Viewpoints

- [A8 - Standards](#)

3.219 RealiseRequirement

Definition

Relation states that a functional or non-functional requirement is realized through this element.

Meta Model



Figure 275: RealiseRequirement

Elements in Diagram

Name	Definition
BWRequirement	Abstract base class for requirements.

Name	Definition
DataElement	A formalized representation of data that is managed by or exchanged between resources.
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
Protocol	A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.
Protocolstack	A sub type of Protocol that contains the ProtocolLayers, defining a complete stack.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.

Tagged Values

Relevant Viewpoints

- [Rr - Requirement Realization](#)

3.220 RealizedDesiredEffect

Definition

Relationship that expresses which connector DesiredEffect the connector AchievedEffect realizes.

Meta Model

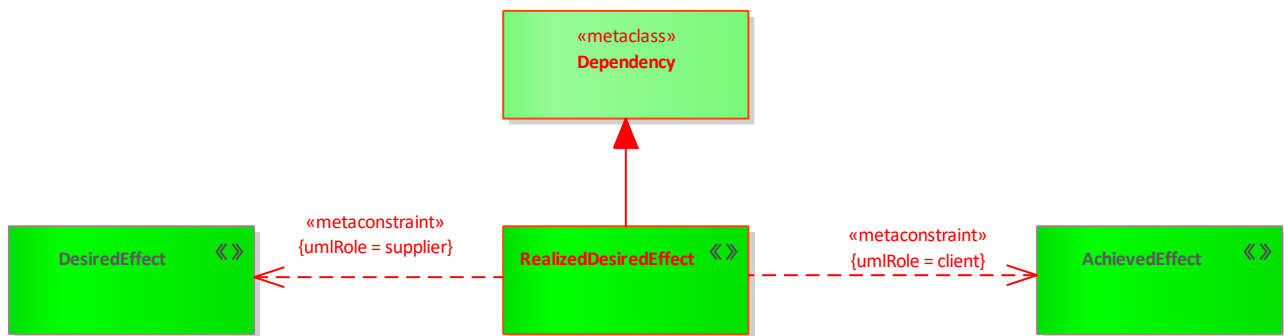


Figure 276: RealizedDesiredEffect

Elements in Diagram

Name	Definition
AchievedEffect	A tuple that exists between an ActualState (e.g., observed/measured during testing) of an element that attempts to achieve a DesiredEffect and an Achiever.
DesiredEffect	A tuple relating the Desirer (a Capability or OrganizationalResource) to an ActualState.
RealizedDesiredEffect	Relationship that expresses which connector DesiredEffect the connector AchievedEffect realizes.

Tagged Values

Relevant Viewpoints

- [C5 - Effects](#)

3.221 RealizesRecommendation

Definition

Relation states that a Recommendation is realized through this element.

Meta Model

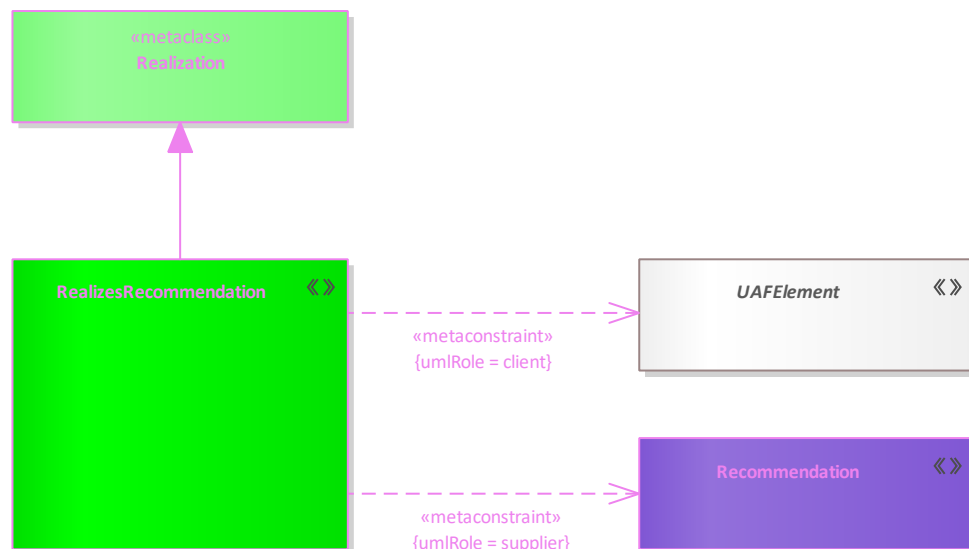


Figure 277: RealizesRecommendation

Elements in Diagram

Name	Definition
RealizesRecommendation	Relation states that a Recommendation is realized through this element.
Recommendation	Need for action from a finding.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [A2 - Architecture Products](#)
- [A3 - Architecture Correspondence](#)
- [A6 - Architecture Versions](#)
- [A7 - Architecture Compliance](#)
- [A8 - Standards](#)
- [Ar - Architecture Roadmap](#)
- [C1 - Capability Taxonomy](#)
- [C1-S1 - Capability to Service Mapping](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [Cr - Capability Roadmap](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)

- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R2 - Requirement Catalogue](#)
- [R3 - Requirement Dependencies](#)
- [R7 - Requirement Derivation](#)
- [R8 - Requirement Fulfilment](#)
- [Rr - Requirement Realization](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S6 - Service Interactions](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)
- [Sr - Service Roadmap](#)

3.222 RealizingAchievedEffect

Definition

Relationship that expresses which connector AchievedEffect realizes the connector DesiredEffect.

Meta Model

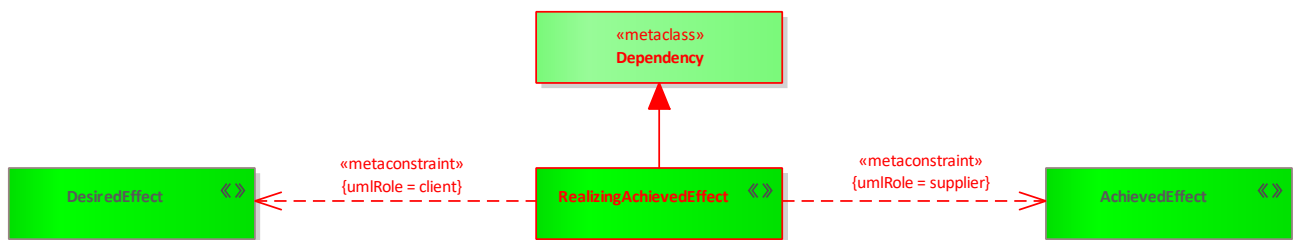


Figure 278: RealizingAchievedEffect

Elements in Diagram

Name	Definition
AchievedEffect	A tuple that exists between an ActualState (e.g., observed/measured during testing) of an element that attempts to achieve a DesiredEffect and an Achiever.
DesiredEffect	A tuple relating the Desirer (a Capability or OrganizationalResource) to an ActualState.
RealizingAchievedEffect	Relationship that expresses which connector AchievedEffect realizes the connector DesiredEffect.

Tagged Values

Relevant Viewpoints

- [C5 - Effects](#)

3.223 Recommendation

Definition

Need for action from a finding.

Meta Model

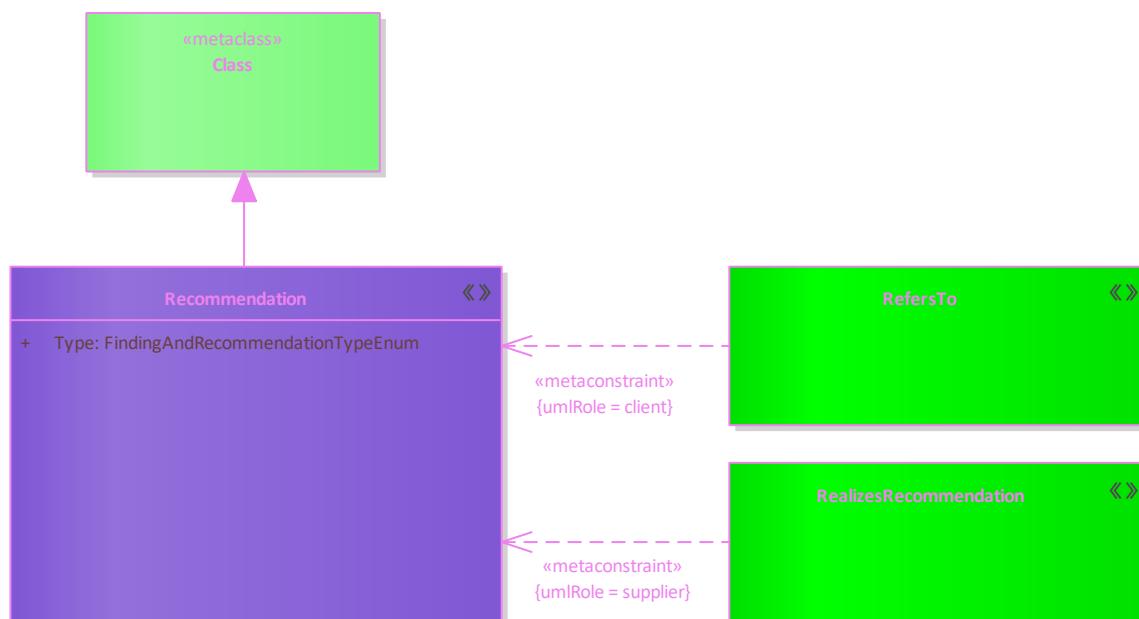


Figure 279: Recommendation

Elements in Diagram

Name	Definition
RealizesRecommendation	Relation states that a Recommendation is realized through this element.
Recommendation	Need for action from a finding.
RefersTo	Relationship that assigns a finding to a recommendation.

Tagged Values

Tag Name	Valid Values
Type	Method, Tool, Others, Subject

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [A2 - Architecture Products](#)
- [A3 - Architecture Correspondence](#)
- [A6 - Architecture Versions](#)
- [A7 - Architecture Compliance](#)
- [A8 - Standards](#)
- [Ar - Architecture Roadmap](#)
- [C1 - Capability Taxonomy](#)
- [C1-S1 - Capability to Service Mapping](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [Cr - Capability Roadmap](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)

- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R2 - Requirement Catalogue](#)
- [R3 - Requirement Dependencies](#)
- [R7 - Requirement Derivation](#)
- [R8 - Requirement Fulfilment](#)
- [Rr - Requirement Realization](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S6 - Service Interactions](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)
- [Sr - Service Roadmap](#)

3.224 Reference

Definition

Element describes all types of references.

Meta Model

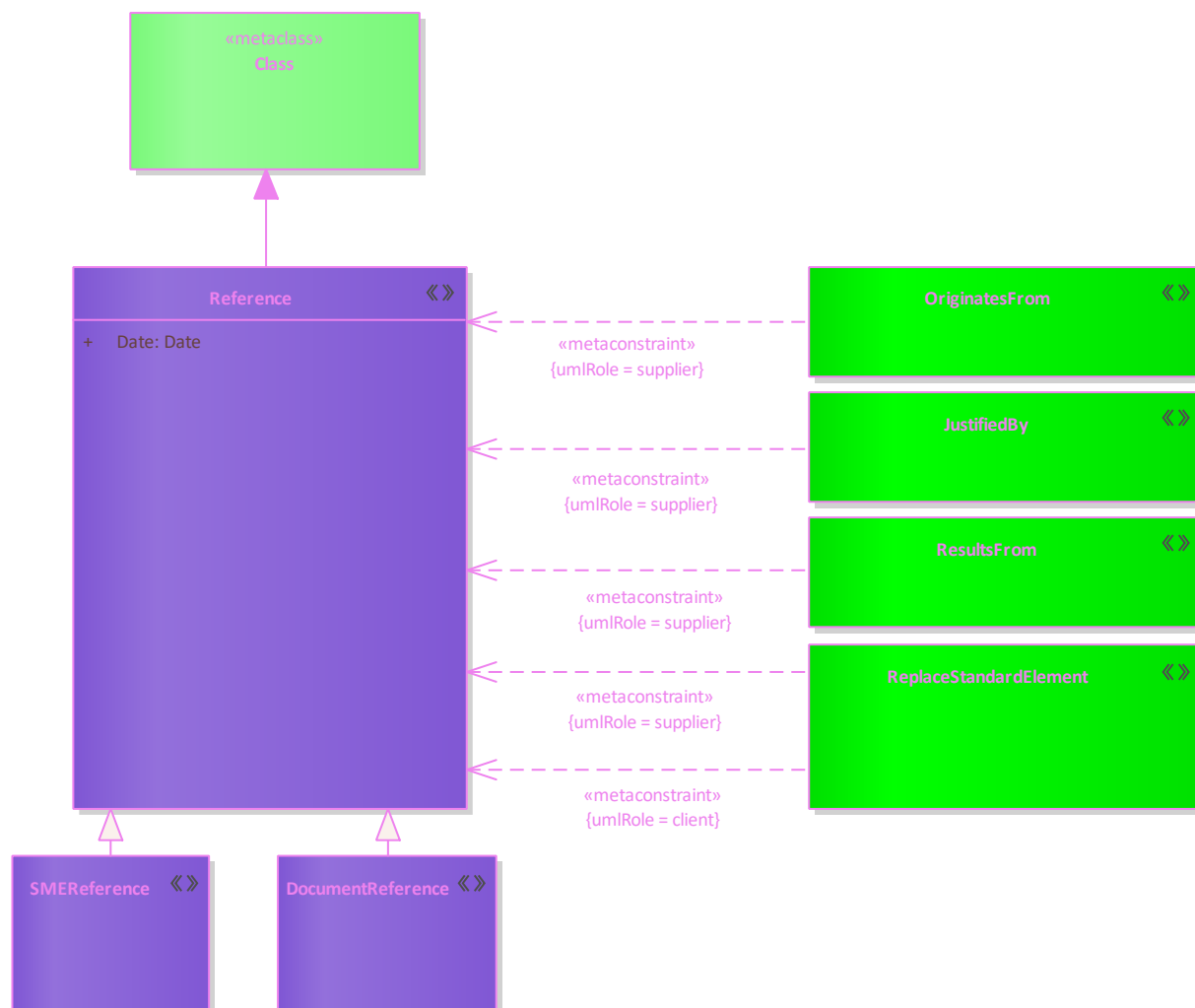


Figure 280: Reference

Elements in Diagram

Name	Definition
DocumentReference	The element describes a regulation, instruction or a general document.
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
OriginatesFrom	Relation that derives an element in the architectural model from a reference (Reference, DocumentReference, SMEReference).
Reference	Element describes all types of references.
ReplaceStandardElement	Relation that represents a replacement of a standard element with another standard element
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.
SMEReference	Element stands for a result of a workshop or expert knowledge.

Tagged Values

Tag Name	Valid Values
Date	Date

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R7 - Requirement Derivation](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)

3.225 RefersTo

Definition

Relationship that assigns a finding to a recommendation.

Meta Model

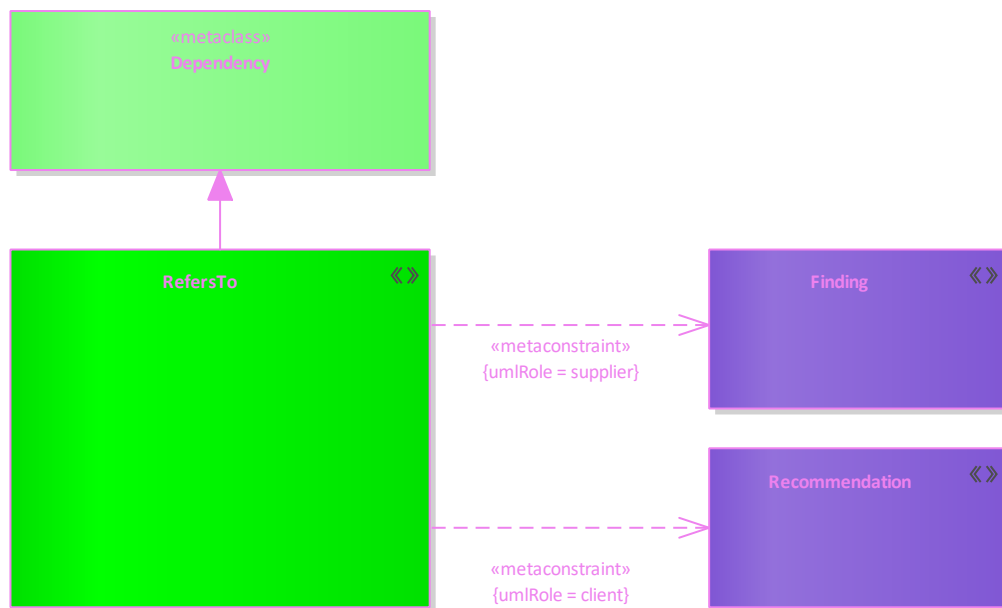


Figure 281: RefersTo

Elements in Diagram

Name	Definition
Finding	An ascertainment made in the model, which relates to the methodology used, the subject under consideration, the tool or something else.
Recommendation	Need for action from a finding.
RefersTo	Relationship that assigns a finding to a recommendation.

Tagged Values

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [A2 - Architecture Products](#)
- [A3 - Architecture Correspondence](#)
- [A6 - Architecture Versions](#)
- [A7 - Architecture Compliance](#)
- [A8 - Standards](#)
- [Ar - Architecture Roadmap](#)
- [C1 - Capability Taxonomy](#)
- [C1-S1 - Capability to Service Mapping](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [Cr - Capability Roadmap](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)

- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R2 - Requirement Catalogue](#)
- [R3 - Requirement Dependencies](#)
- [R7 - Requirement Derivation](#)
- [R8 - Requirement Fulfilment](#)
- [Rr - Requirement Realization](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S6 - Service Interactions](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)
- [Sr - Service Roadmap](#)

3.226 Refines

Definition

Relation that represents a refinement of a requirement by another requirement.

Meta Model

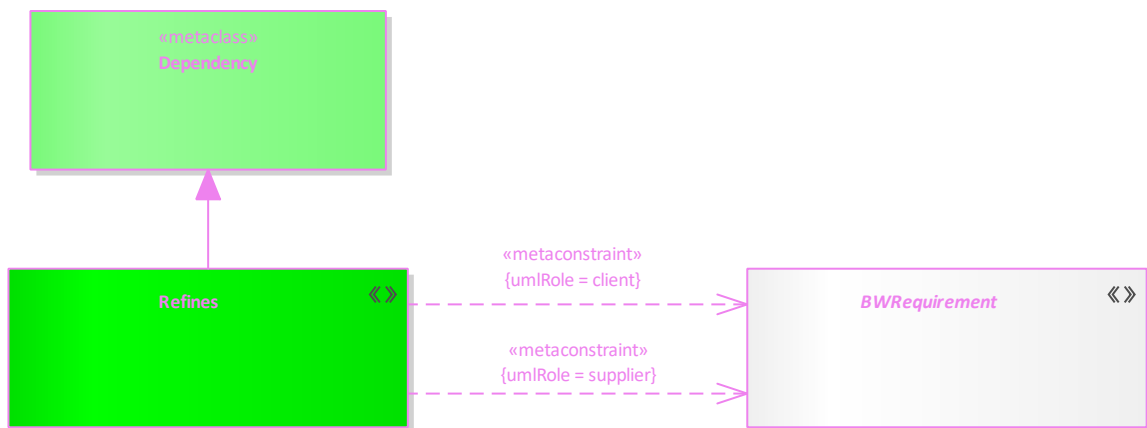


Figure 282: Refines

Elements in Diagram

Name	Definition
BWRequirement	Abstract base class for requirements.
Refines	Relation that represents a refinement of a requirement by another requirement.

Tagged Values

Relevant Viewpoints

- [R3 - Requirement Dependencies](#)
- [R7 - Requirement Derivation](#)

3.227 Replaces

Definition

Relation that represents a replacement of a requirement with another requirement.

Meta Model

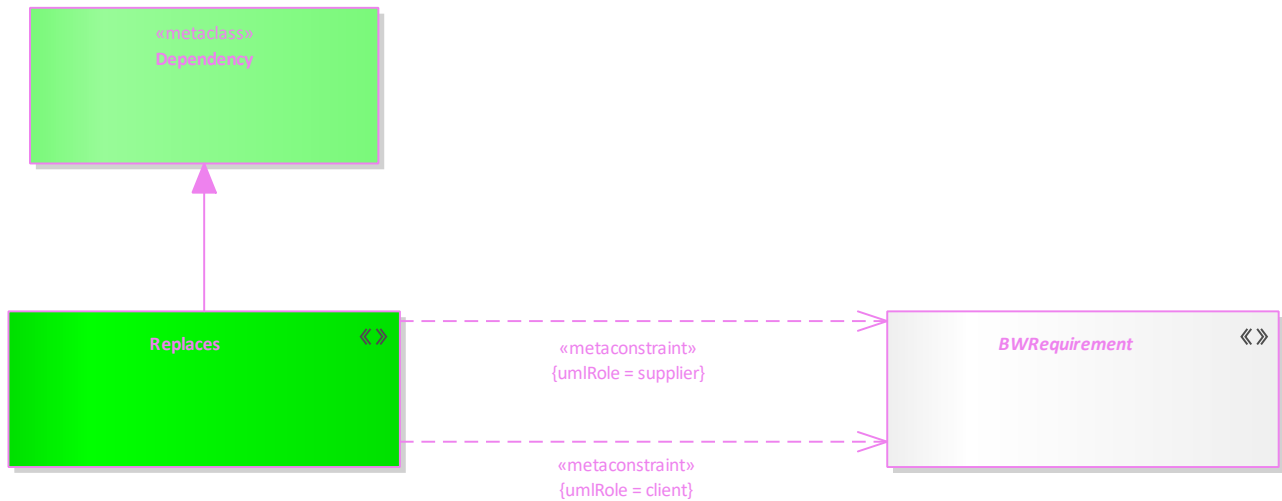


Figure 283: Replaces

Elements in Diagram

Name	Definition
BWRequirement	Abstract base class for requirements.
Replaces	Relation that represents a replacement of a requirement with another requirement.

Tagged Values

Relevant Viewpoints

- [R3 - Requirement Dependencies](#)

3.228 ReplaceStandardElement

Definition

Relation that represents a replacement of a standard element with another standard element

Meta Model

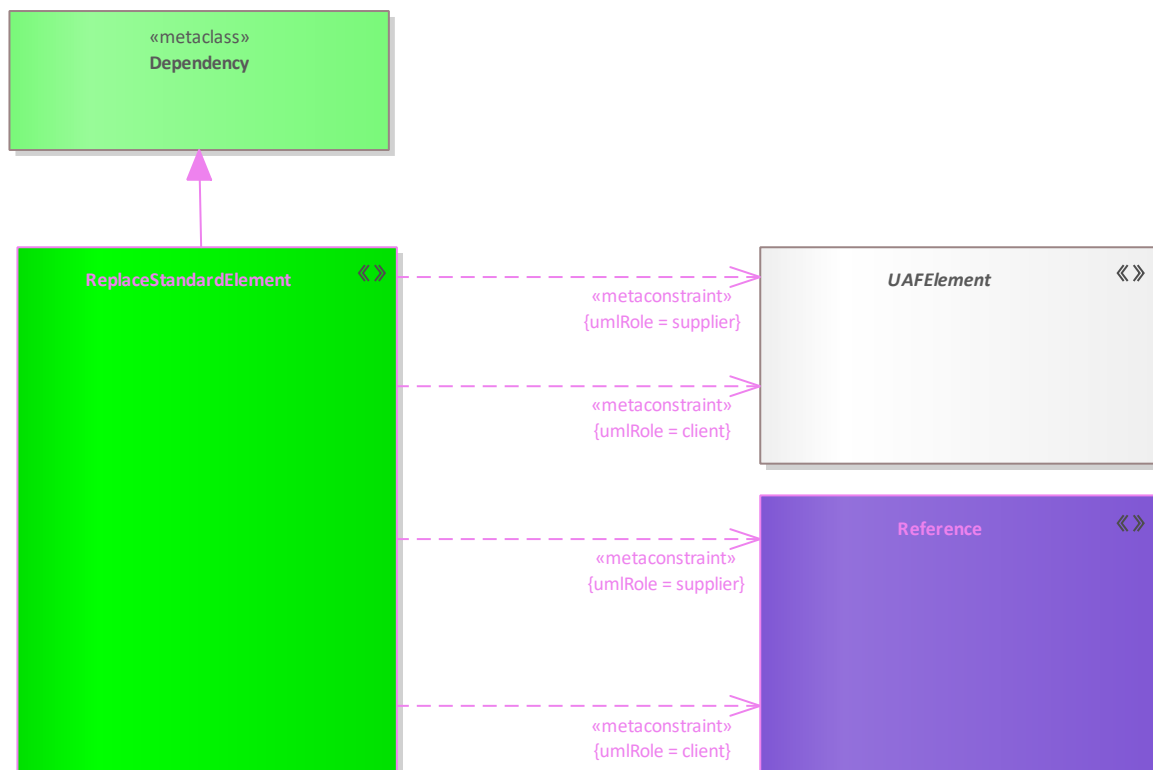


Figure 284: ReplaceStandardElement

Elements in Diagram

Name	Definition
Reference	Element describes all types of references.
ReplaceStandardElement	Relation that represents a replacement of a standard element with another standard element
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Relevant Viewpoints

3.229 RequiredEnvironment

Definition

A relationship that expresses that a location holder operates under specific environmental conditions.

Meta Model

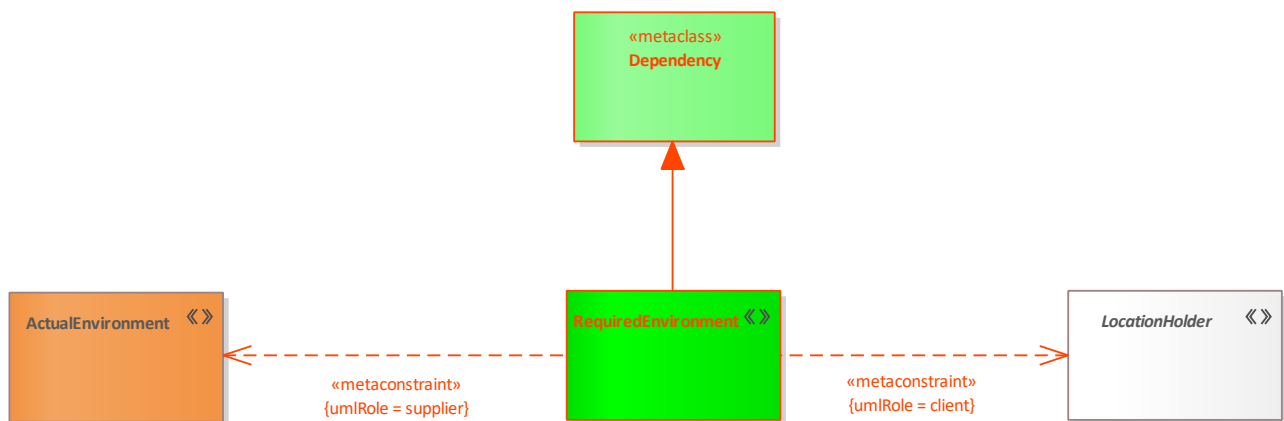


Figure 285: RequiredEnvironment

Elements in Diagram

Name	Definition
ActualEnvironment	The ActualState that describes the circumstances of an Environment.
LocationHolder	Abstract type, used to group elements that are allowed to be associated with a Location.
RequiredEnvironment	A relationship that expresses that a location holder operates under specific environmental conditions.

Tagged Values

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [P2 - Resource Structure](#)

3.230 RequiredResource

Definition

Relationship that indicates which resources a project milestone requires

Meta Model

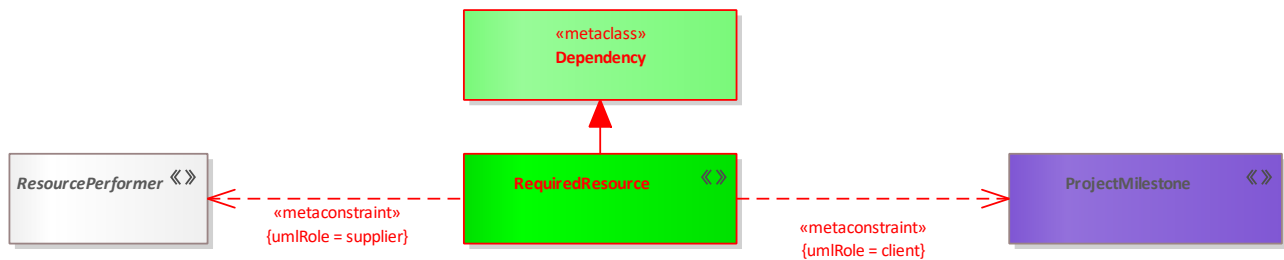


Figure 286: RequiredResource

Elements in Diagram

Name	Definition
ProjectMilestone	A type of event in a Project by which progress is measured.
RequiredResource	Relationship that indicates which resources a project milestone requires
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).

Tagged Values

Relevant Viewpoints

- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.231 RequiredServiceLevel

Definition

A sub type of ActualService that details a specific service level required of the provider.

Meta Model

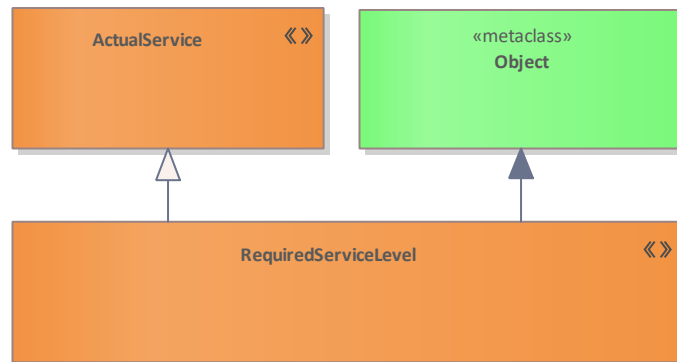


Figure 287: RequiredServiceLevel

Elements in Diagram

Name	Definition
ActualService	An individual ServiceSpecification.
RequiredServiceLevel	A sub type of ActualService that details a specific service level required of the provider.

Tagged Values

Tag Name	Valid Values
URI	String
endDate	endDate
startDate	startDate

Relevant Viewpoints

- [L4 - Logical Activities](#)
- [P1- Resource Types](#)
- [Sr - Service Roadmap](#)

3.232 RequirementCatalogue

Definition

Element represents a catalog of requirements, which consists of different categories (RequirementCategory) of functional and non-functional requirements.

Meta Model

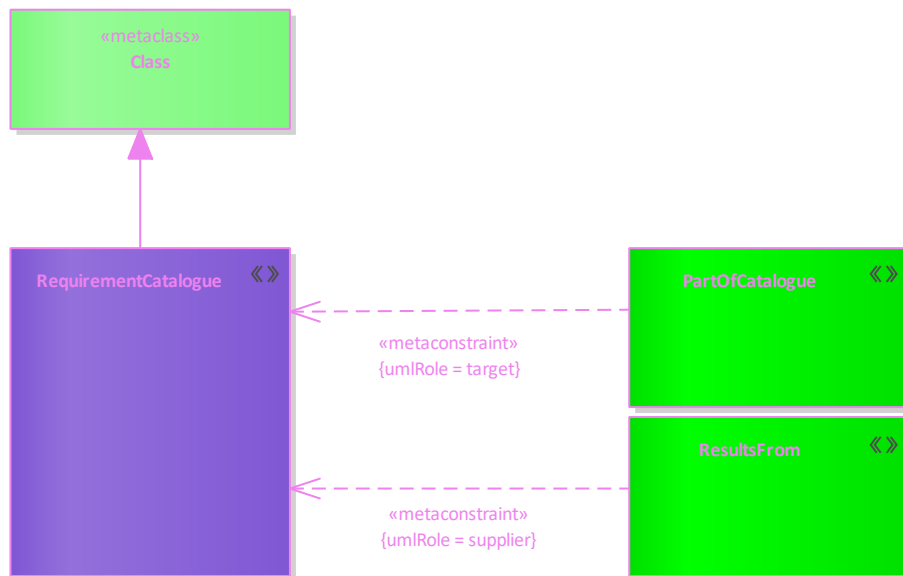


Figure 288: RequirementCatalogue

Elements in Diagram

Name	Definition
PartOfCatalogue	This relation states that a category (RequirementCategory) belongs to a requirements catalog (RequirementCatalogue).
RequirementCatalogue	Element represents a catalog of requirements, which consists of different categories (RequirementCategory) of functional and non-functional requirements.
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.

Tagged Values

Relevant Viewpoints

- [R2 - Requirement Catalogue](#)

3.233 RequirementCategory

Definition

Element represents a category of a catalog of requirements.

Meta Model

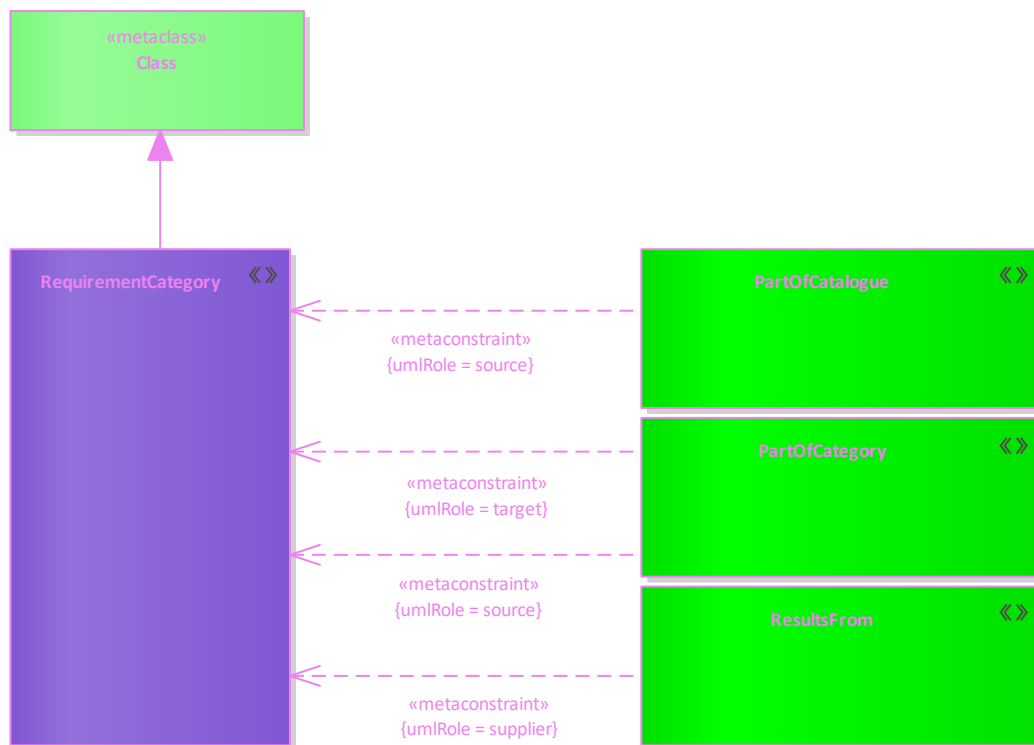


Figure 289: RequirementCategory

Elements in Diagram

Name	Definition
PartOfCatalogue	This relation states that a category (RequirementCategory) belongs to a requirements catalog (RequirementCatalogue).
PartOfCategory	This relation states that his functional or non-functional requirement belongs to a category (RequirementCategory) of the requirements catalog.
RequirementCategory	Element represents a category of a catalog of requirements.
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.

Tagged Values

Relevant Viewpoints

- [R2 - Requirement Catalogue](#)

3.234 Requires

Definition

Relation that represents that a requirement assumes another requirement.

Meta Model

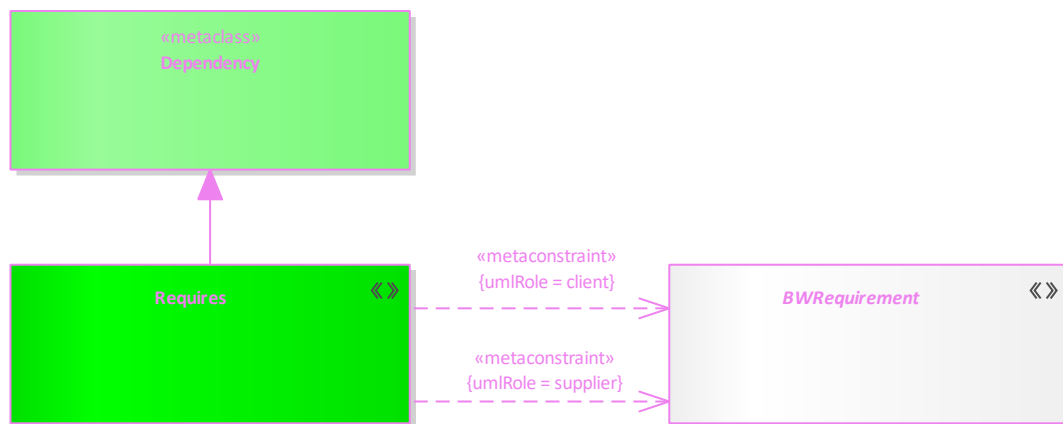


Figure 290: Requires

Elements in Diagram

Name	Definition
BWRRequirement	Abstract base class for requirements.
Requires	Relation that represents that a requirement assumes another requirement.

Tagged Values

Relevant Viewpoints

- [R3 - Requirement Dependencies](#)
- [R7 - Requirement Derivation](#)

3.235 RequiresCompetence

Definition

A tuple that asserts that an ActualOrganizationalResource is required to have a specific set of Competencies.

Meta Model

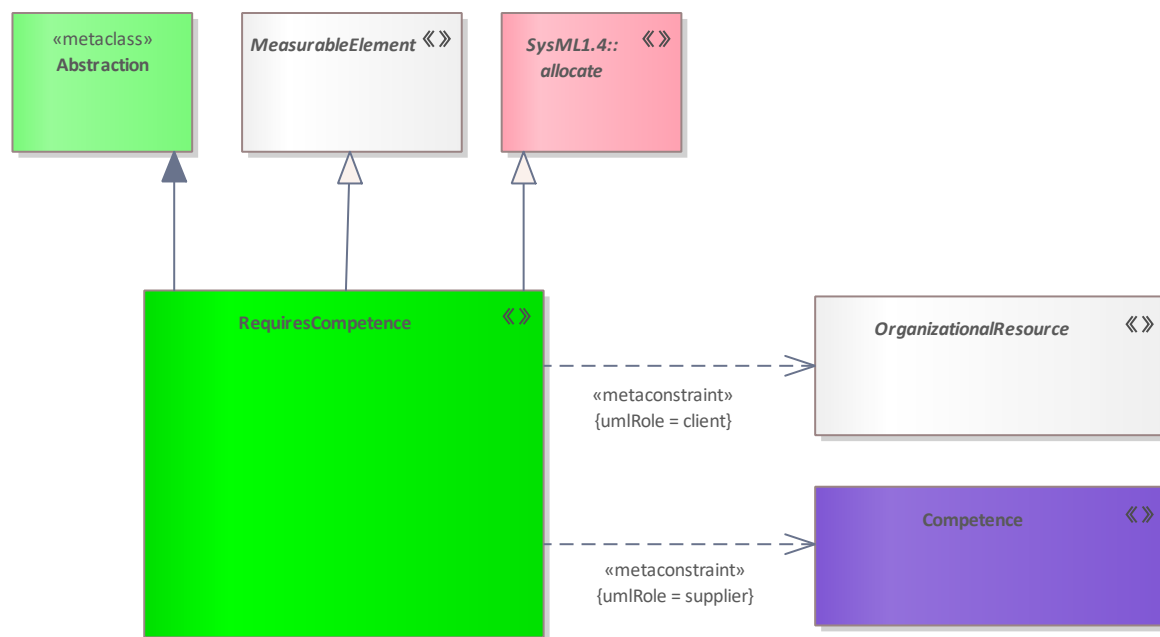


Figure 291: RequiresCompetence

Elements in Diagram

Name	Definition
Competence	A specific set of abilities defined by knowledge, skills and aptitude.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
RequiresCompetence	A tuple that asserts that an ActualOrganizationalResource is required to have a specific set of Competencies.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [P1- Resource Types](#)

3.236 Resource

Definition

Abstract element grouping for all elements that can be conveyed by an Exchange.

Meta Model

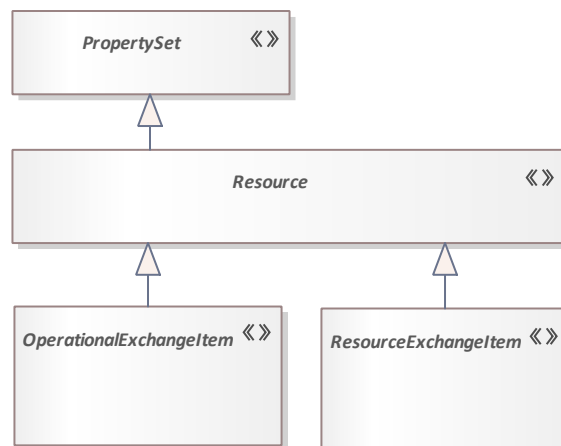


Figure 292: Resource

Elements in Diagram

Name	Definition
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
Resource	Abstract element grouping for all elements that can be conveyed by an Exchange.
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.237 ResourceArchitecture

Definition

A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.

Meta Model

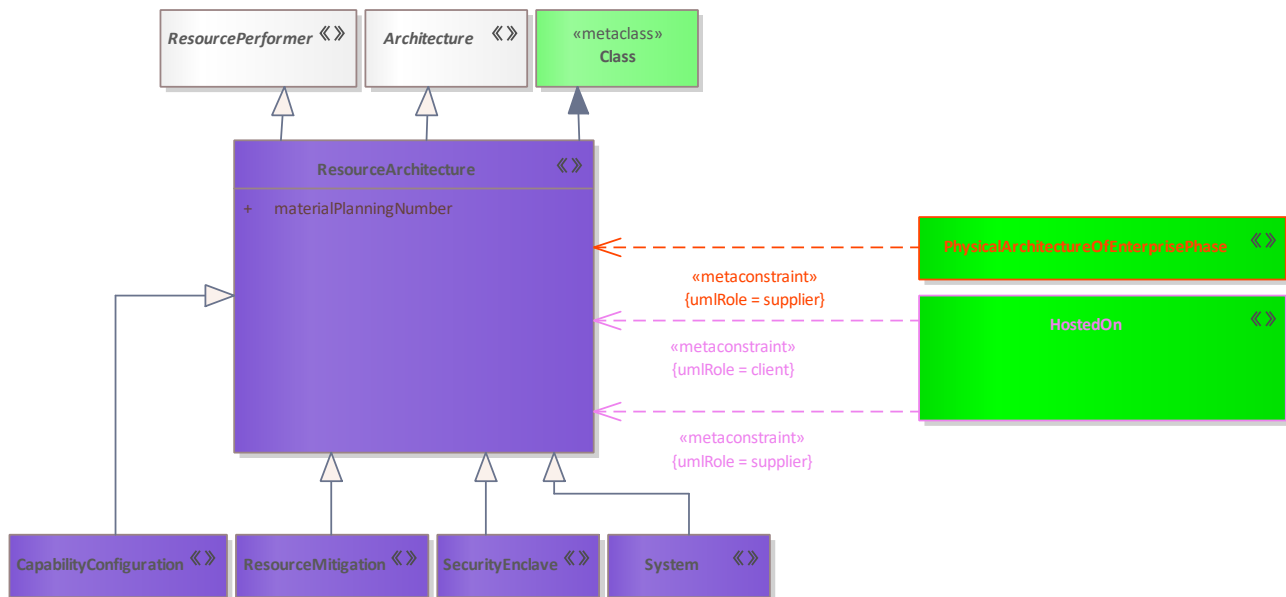


Figure 293: ResourceArchitecture

Elements in Diagram

Name	Definition
Architecture	An abstract type that represents a generic architecture. Subtypes are OperationalArchitecture and ResourceArchitecture.
CapabilityConfiguration	A composite structure representing the physical and human resources (and their interactions) in an enterprise, assembled to meet a capability).
HostedOn	Relation states that hardware (virtualized) or software is hosted on a virtualized platform or physical hardware.
PhysicalArchitectureOfEnterprisePhase	A relationship that expresses that an actual enterprise phase has resource architectures.
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourceMitigation	A set of measures intended to implement an OperationalMitigation. Comprises a subset of activities that are performed in mitigation of the risk to protect the asset that is the subject of risk (ResourceRole) at the physical level. In the case of a Risk applicable to security, the form of activity is a SecurityControl or an EnhancedSecurityControl, otherwise it is a Function.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
SecurityEnclave	Collection of information systems connected by one or more internal networks under the control of a single authority and security policy. The systems may be structured by physical proximity or by function, independent of location. Element is not used in the current version of the framework and reserved for future developments.
System	An integrated set of elements, subsystems, or assemblies that accomplish a defined objective. These elements include products (hardware, software, firmware), processes, people, information, techniques, facilities, services, and other support elements (INCOSE SE Handbook V4, 2015).

Tagged Values

Tag Name	Valid Values
materialPlanningNumber	
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)

3.238 ResourceArtifact

Definition

A type of man-made object that contains no human beings (i.e. satellite, radio, petrol, gasoline, etc.).

Meta Model

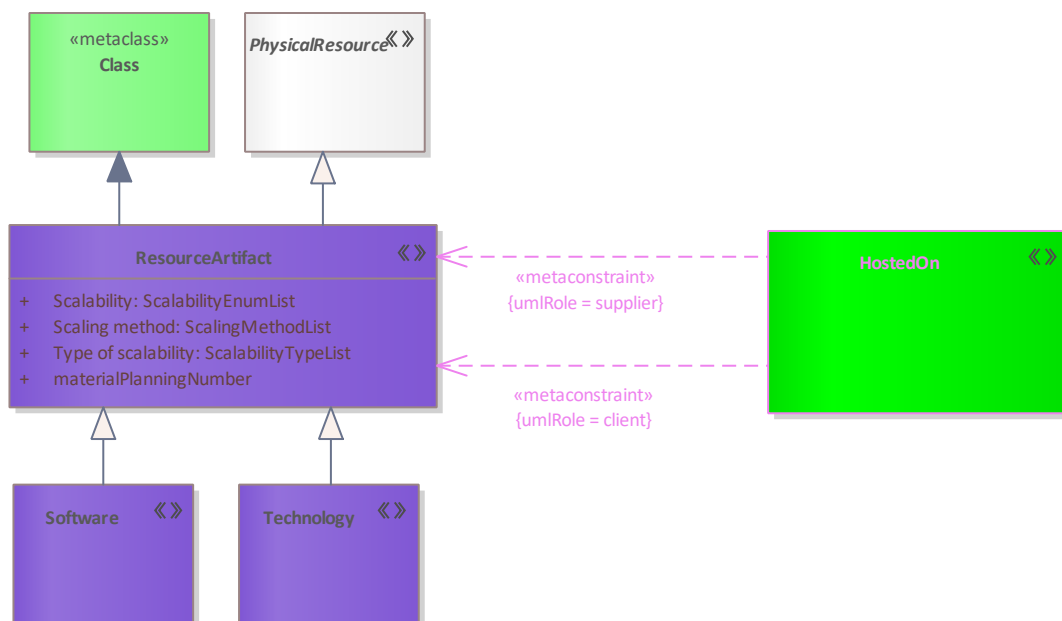


Figure 294: ResourceArtifact

Elements in Diagram

Name	Definition
HostedOn	Relation states that hardware (virtualized) or software is hosted on a virtualized platform or physical hardware.
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).
ResourceArtifact	A type of man-made object that contains no human beings (i.e. satellite, radio, petrol, gasoline, etc.).
Software	A sub-type of ResourceArtifact that specifies an executable computer program.
Technology	A sub type of ResourceArtifact that indicates a technology domain, i.e. nuclear, mechanical, electronic, mobile telephony etc.

Tagged Values

Tag Name	Valid Values
Scalability	scale up (vertikal), scale out (horizontal), keine Skalierung, keine Relevanz, not set
Scaling method	Sharding, Clustering, Partitionierung, keine, keine Relevanz, not set
Type of scalability	keine Skalierung, Lastskalierbarkeit, räumliche Skalierung, zeitlich-räumliche Skalierung, strukturelle Skalierung, keine Relevanz, not set
materialPlanningNumber	
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)

- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)

3.239 ResourceAsset

Definition

An abstract element used to group the elements of ResourcePerformer and DataElement allowing them to own DataRoles

Meta Model

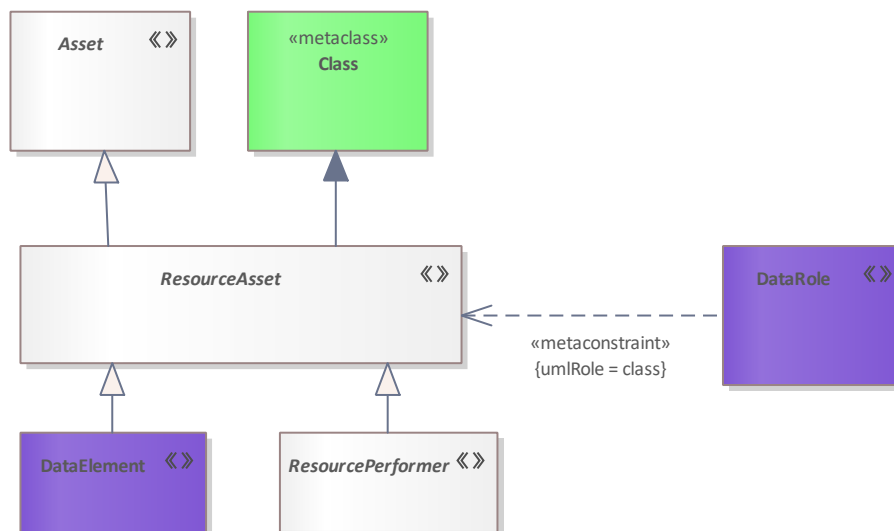


Figure 295: ResourceAsset

Elements in Diagram

Name	Definition
Asset	Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DataRole	A usage of DataElement that exists in the context of an ResourceAsset. It also allows the representation of the whole-part aggregation of DataElements.
ResourceAsset	An abstract element used to group the elements of ResourcePerformer and DataElement allowing them to own DataRoles
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.240 ResourceConnector

Definition

A channel for exchange between two ResourceRoles.

Meta Model

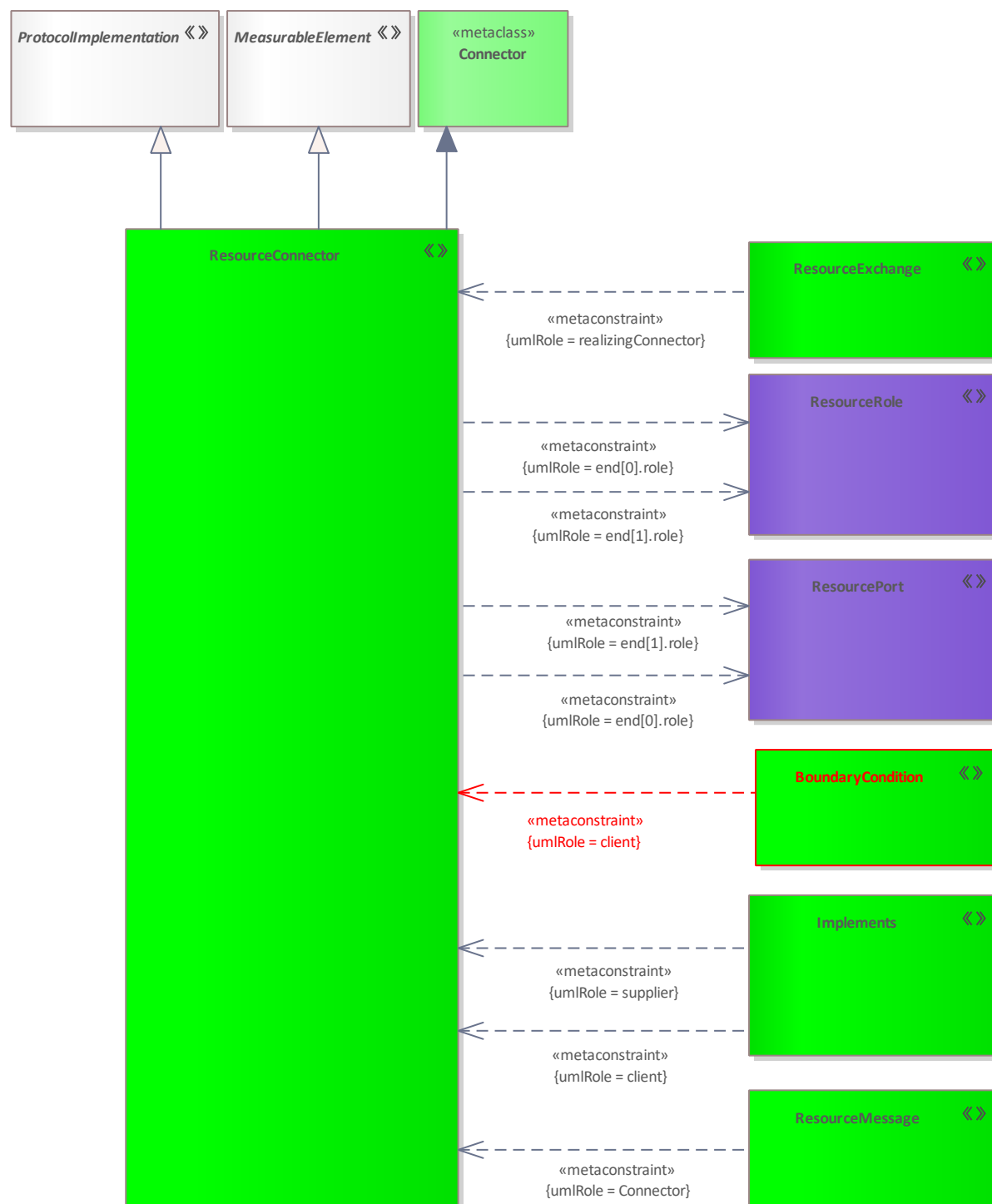


Figure 296: ResourceConnector

Elements in Diagram

Name	Definition
BoundaryCondition	A relationship that expresses which environment is relevant to an resource exchange.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the

Name	Definition
	OperationalActivities to the Functions that implement them) in the lower level of abstraction.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ProtocolImplementation	An abstract type grouping architectural elements that can implement Protocols.
ResourceConnector	A channel for exchange between two ResourceRoles.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceMessage	Message for use in an Resource Event-Trace which carries any of the subtypes of ResourceExchange.
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.

Tagged Values

Tag Name	Valid Values
Bandwidth	String
URI	String

Relevant Viewpoints

- [P3 - Resource Connectivity](#)

3.241 ResourceConstraint

Definition

A rule governing the structural or functional aspects of an implementation.

Meta Model

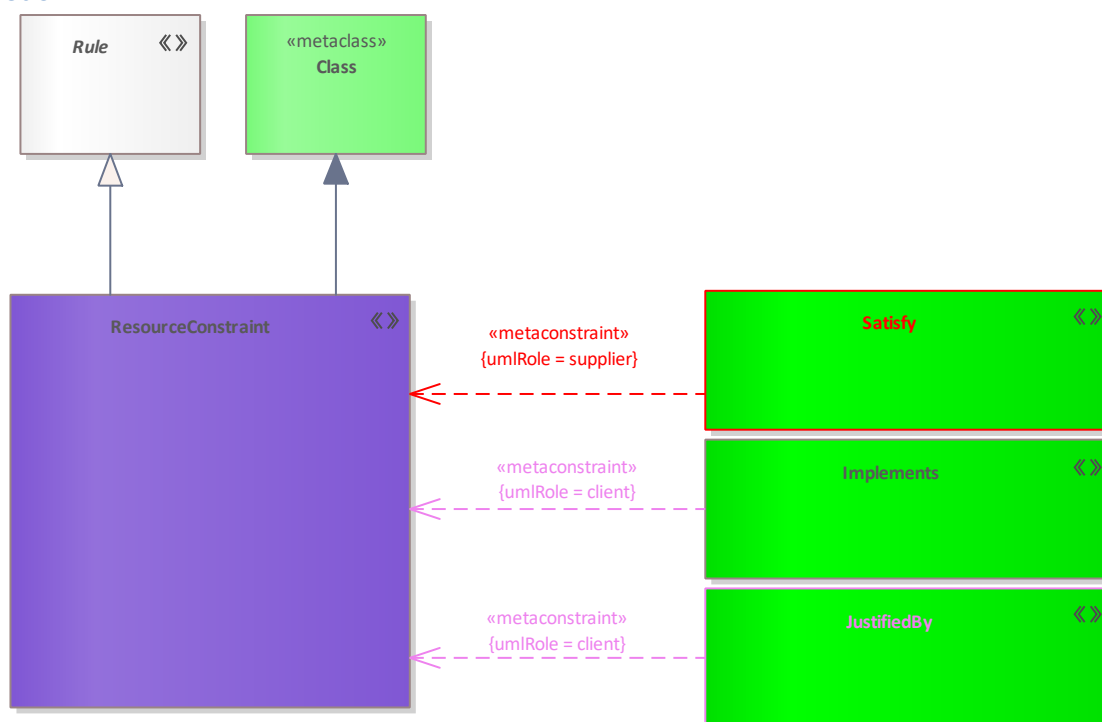


Figure 297: ResourceConstraint

Elements in Diagram

Name	Definition
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
Rule	An abstract type for all types of constraint (i.e. an OperationalConstraint could detail the rules of accountancy best practice).
Satisfy	This relation states that an constraint affects an element.

Tagged Values

Tag Name	Valid Values
ruleKind	StructuralAssertion, ActionAssertion, Derivation, Contract, Constraint, Guidance, SecurityPolicy, Caveat
URI	String

Relevant Viewpoints

- [C8 - Planning Assumption](#)
- [L4-P4 Activity to Function Mapping](#)
- [L8 - Logical Constraints](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)

- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R7 - Requirement Derivation](#)
- [S8 - Service Policy](#)

3.242 ResourceDependency

Definition

Relationship that is a dependency of a resource on a resource.

Meta Model

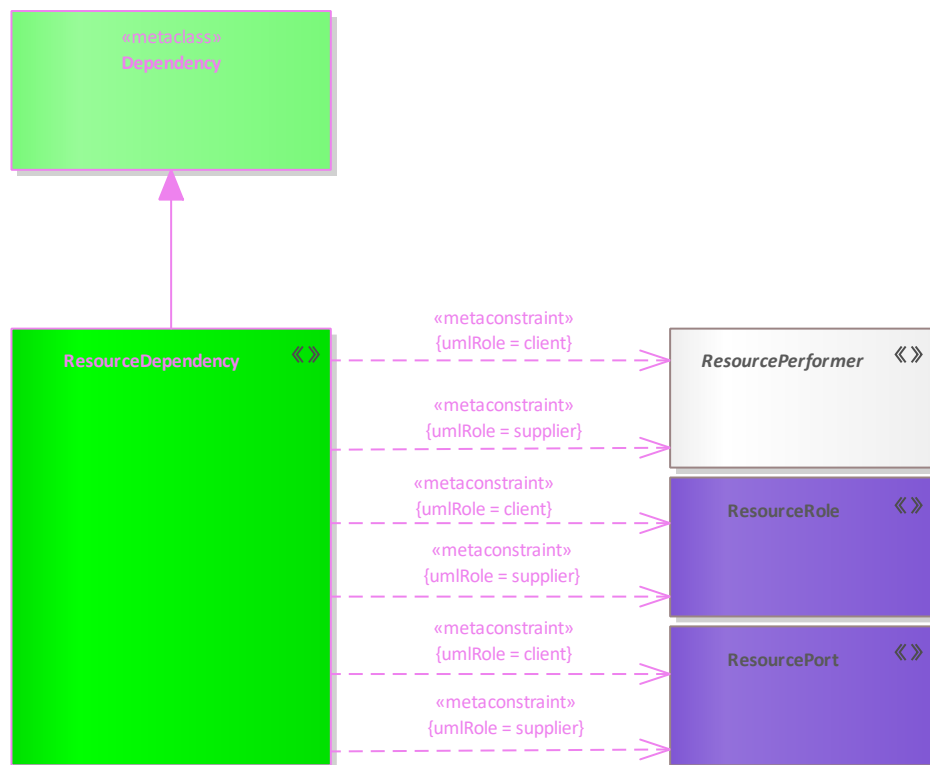


Figure 298: ResourceDependency

Elements in Diagram

Name	Definition
ResourceDependency	Relationship that is a dependency of a resource on a resource.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.

Tagged Values

Relevant Viewpoints

- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)

3.243 ResourceExchange

Definition

Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).

Meta Model

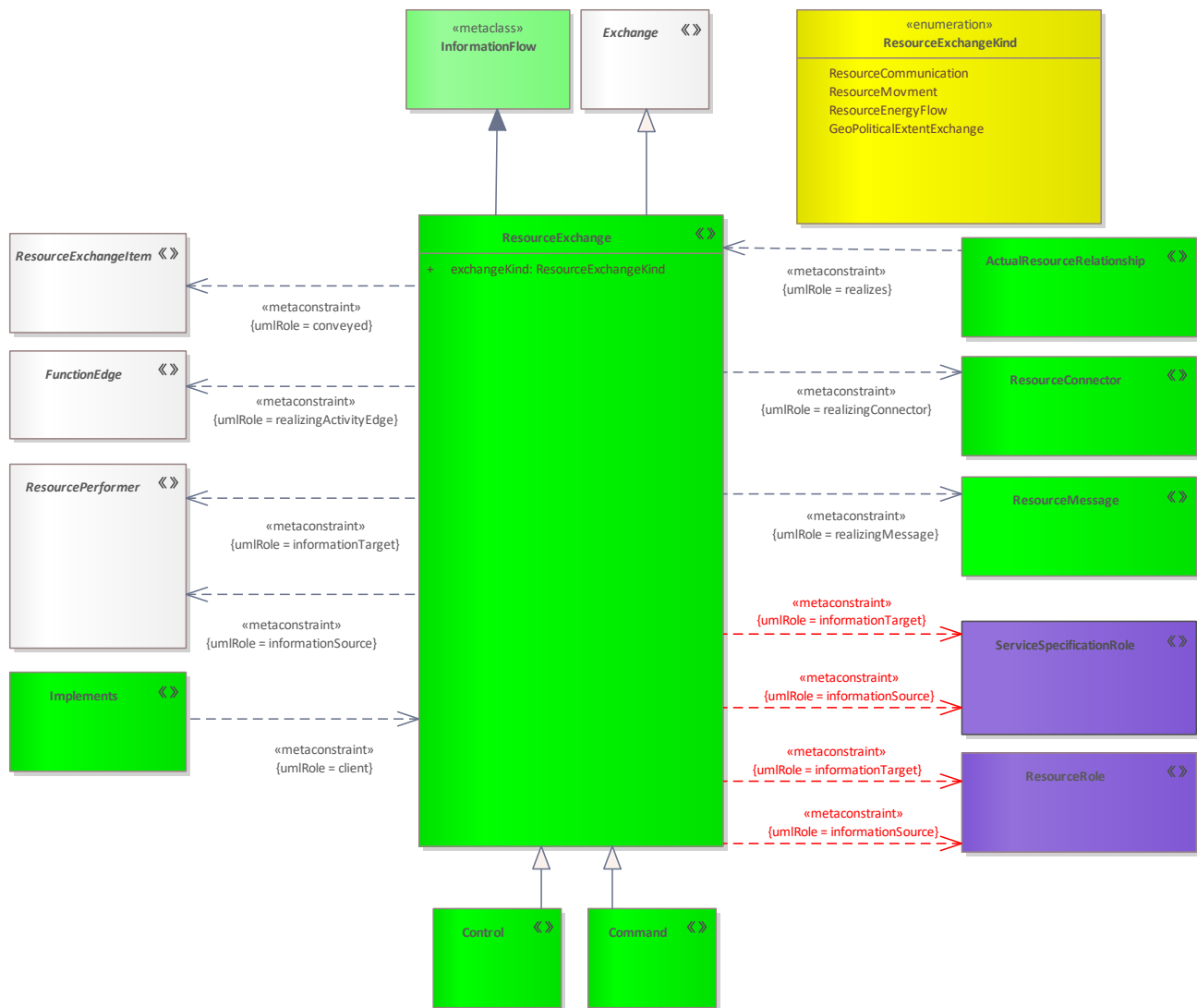


Figure 299: ResourceExchange

Elements in Diagram

Name	Definition
ActualResourceRelationship	An actual resource flow existing between ActualResources (i.e. flow of data, people, materiel, or energy).
Command	A type of ResourceExchange that asserts that one OrganizationalResource commands another.
Control	A type of ResourceExchange that asserts that one PhysicalResource controls another PhysicalResource (i.e. the driver of a vehicle controlling the vehicle speed or direction).
Exchange	Abstract tuple, grouping OperationalExchanges and ResourceExchanges that exchange Resources.
FunctionEdge	A tuple that shows the flow of Resources (objects/data) between FunctionActions.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
ResourceConnector	A channel for exchange between two ResourceRoles.

Name	Definition
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.
ResourceMessage	Message for use in an Resource Event-Trace which carries any of the subtypes of ResourceExchange.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ServiceSpecificationRole	An assertion that a ServiceSpecification calls upon another ServiceSpecification in order to deliver its stated functionality.

Tagged Values

Tag Name	Valid Values
exchangeKind	ResourceCommunication, ResourceMovment, ResourceEnergyFlow, GeoPoliticalExtentExchange
URI	String

Relevant Viewpoints

- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)

3.244 ResourceExchangeItem

Definition

An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.

Meta Model

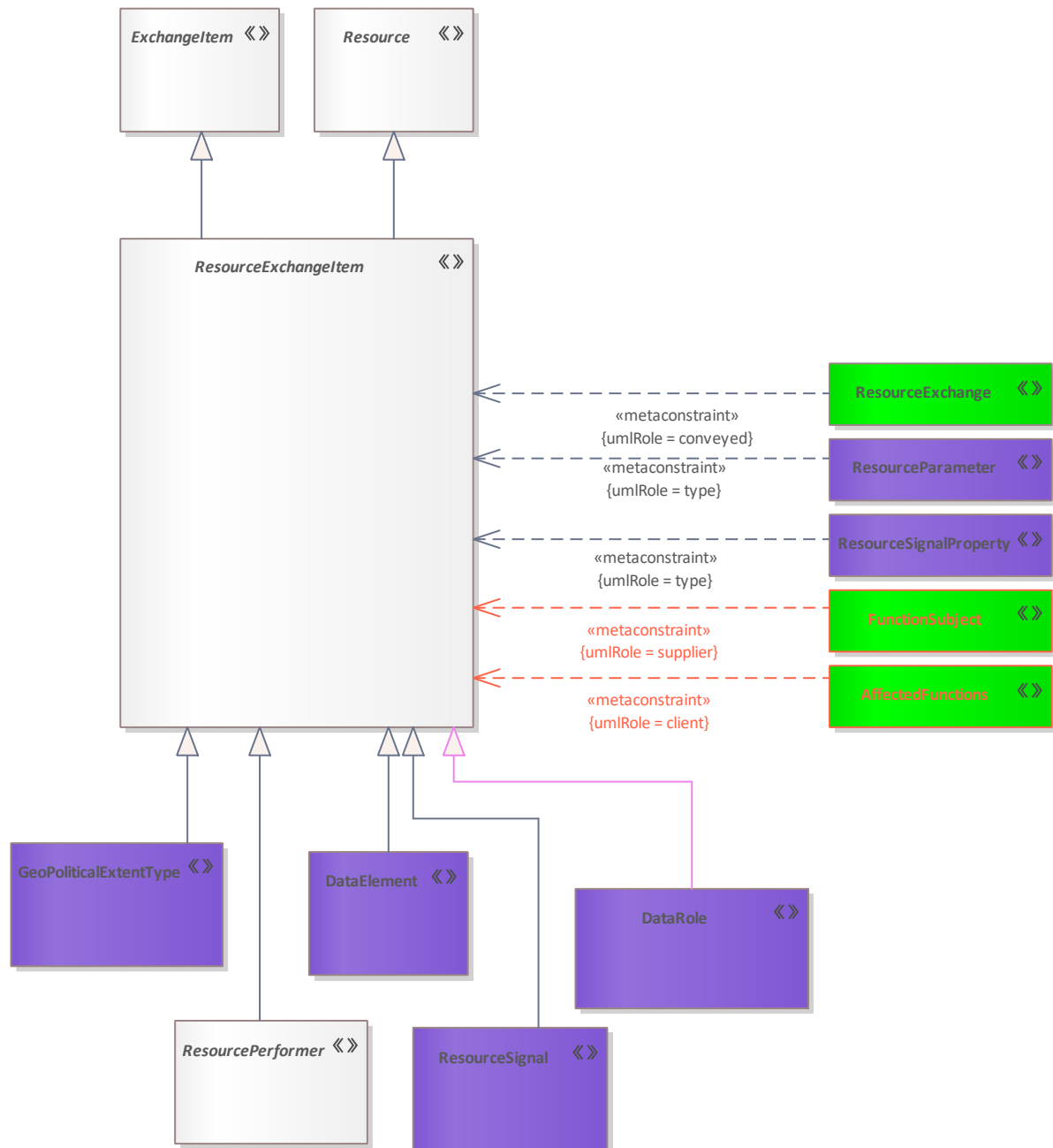


Figure 300: ResourceExchangeItem

Elements in Diagram

Name	Definition
AffectedFunctions	A relationship that expresses which function is affected by a resource.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DataRole	A usage of DataElement that exists in the context of an ResourceAsset. It also allows the representation of the whole-part aggregation of DataElements.
ExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between Assets and conveyed by an Exchange.

Name	Definition
FunctionSubject	A relationship that expresses that a function uses certain resources.
GeoPoliticalExtentType	A geospatial extent whose boundaries are defined by declaration or agreement by political parties.
Resource	Abstract element grouping for all elements that can be conveyed by an Exchange.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.
ResourceParameter	A type that represents inputs and outputs of an Function. It is typed by a ResourceInteractionItem.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceSignal	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
ResourceSignalProperty	A property of an ResourceSignal typed by ResourceExchangeItem. It enables ResourceExchangeItem e.g. DataElement to be passed as arguments of the ResourceSignal.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.245 ResourceInterface

Definition

A declaration that specifies a contract between the ResourcePerformers it is related to and any other ResourcePerformers it can interact with. It is also intended to be an implementation of a specification of an Interface in the Business and/or Service layer.

Meta Model

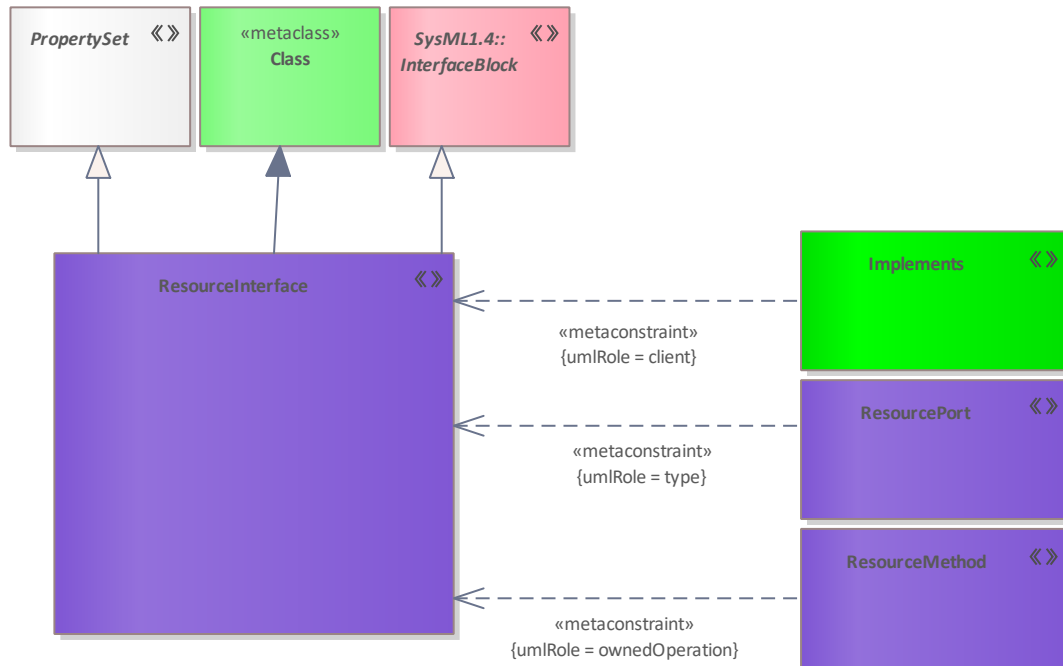


Figure 301: ResourceInterface

Elements in Diagram

Name	Definition
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
ResourceInterface	A declaration that specifies a contract between the ResourcePerformers it is related to and any other ResourcePerformers it can interact with. It is also intended to be an implementation of a specification of an Interface in the Business and/or Service layer.
ResourceMethod	A behavioral feature of a ResourcePerformer whose behavior is specified in a Function.
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [P1- Resource Types](#)
- [P3 - Resource Connectivity](#)
- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)

3.246 ResourceMessage

Definition

Message for use in an Resource Event-Trace which carries any of the subtypes of ResourceExchange.

Meta Model

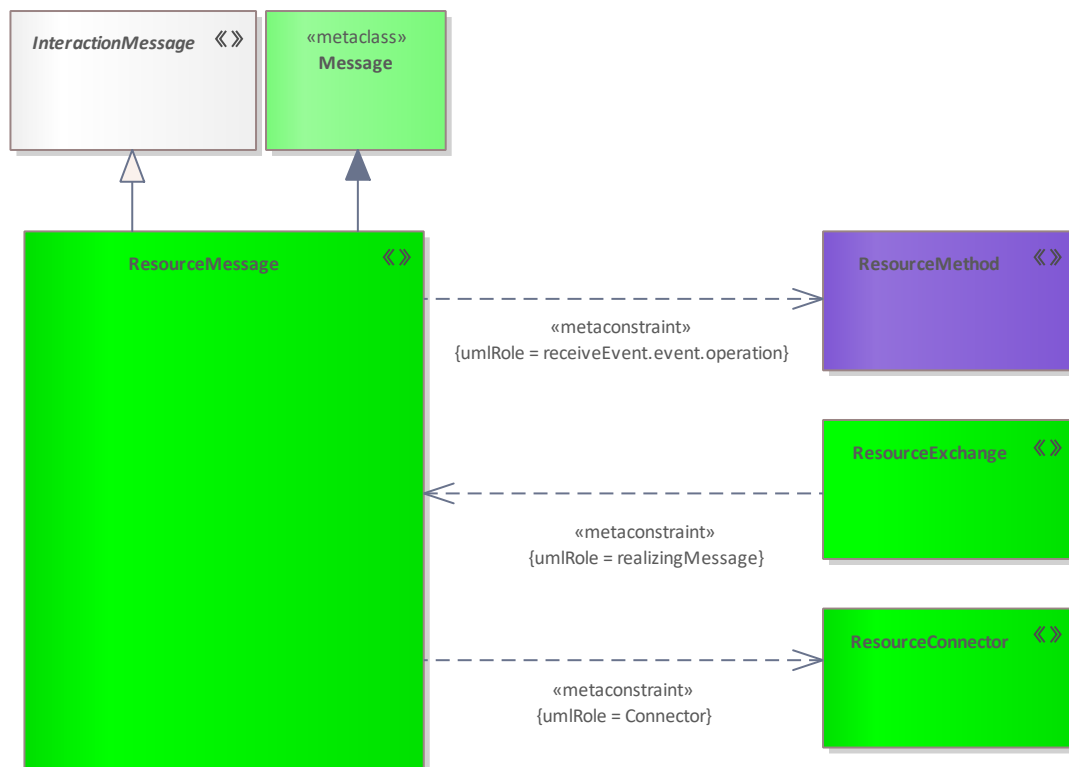


Figure 302: ResourceMessage

Elements in Diagram

Name	Definition
InteractionMessage	An abstract type that groups several types of messages used in the InteractionScenario.
ResourceConnector	A channel for exchange between two ResourceRoles.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceMessage	Message for use in an Resource Event-Trace which carries any of the subtypes of ResourceExchange.
ResourceMethod	A behavioral feature of a ResourcePerformer whose behavior is specified in a Function.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [P6 - Resource Sequence](#)
- [S6 - Service Interactions](#)

3.247 ResourceMethod

Definition

A behavioral feature of a ResourcePerformer whose behavior is specified in a Function.

Meta Model

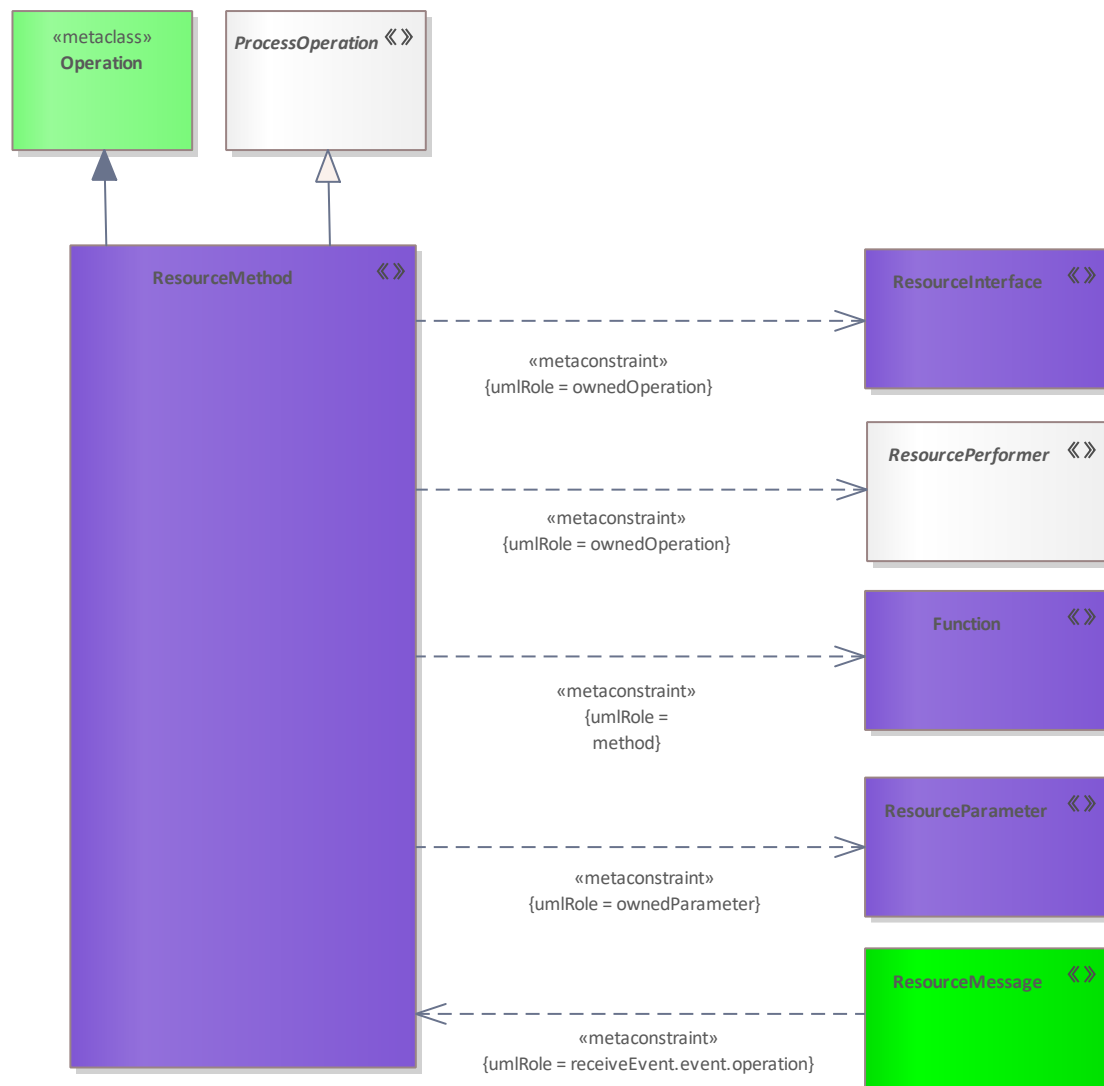


Figure 303: ResourceMethod

Elements in Diagram

Name	Definition
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
ProcessOperation	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
ResourceInterface	A declaration that specifies a contract between the ResourcePerformers it is related to and any other ResourcePerformers it can interact with. It is also intended to be an implementation of a specification of an Interface in the Business and/or Service layer.
ResourceMessage	Message for use in an Resource Event-Trace which carries any of the subtypes of ResourceExchange.
ResourceMethod	A behavioral feature of a ResourcePerformer whose behavior is specified in a Function.
ResourceParameter	A type that represents inputs and outputs of an Function. It is typed by a ResourceInteractionItem.

Name	Definition
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.248 ResourceMitigation

Definition

A set of measures intended to implement an OperationalMitigation. Comprises a subset of activities that are performed in mitigation of the risk to protect the asset that is the subject of risk (ResourceRole) at the physical level. In the case of a Risk applicable to security, the form of activity is a SecurityControl or an EnhancedSecurityControl, otherwise it is a Function.

Meta Model

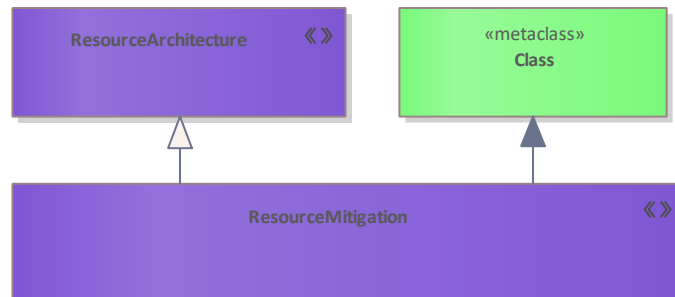


Figure 304: ResourceMitigation

Elements in Diagram

Name	Definition
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourceMitigation	A set of measures intended to implement an OperationalMitigation. Comprises a subset of activities that are performed in mitigation of the risk to protect the asset that is the subject of risk (ResourceRole) at the physical level. In the case of a Risk applicable to security, the form of activity is a SecurityControl or an EnhancedSecurityControl, otherwise it is a Function.

Tagged Values

Tag Name	Valid Values
materialPlanningNumber	
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.249 ResourceParameter

Definition

A type that represents inputs and outputs of an Function. It is typed by a ResourceInteractionItem.

Meta Model

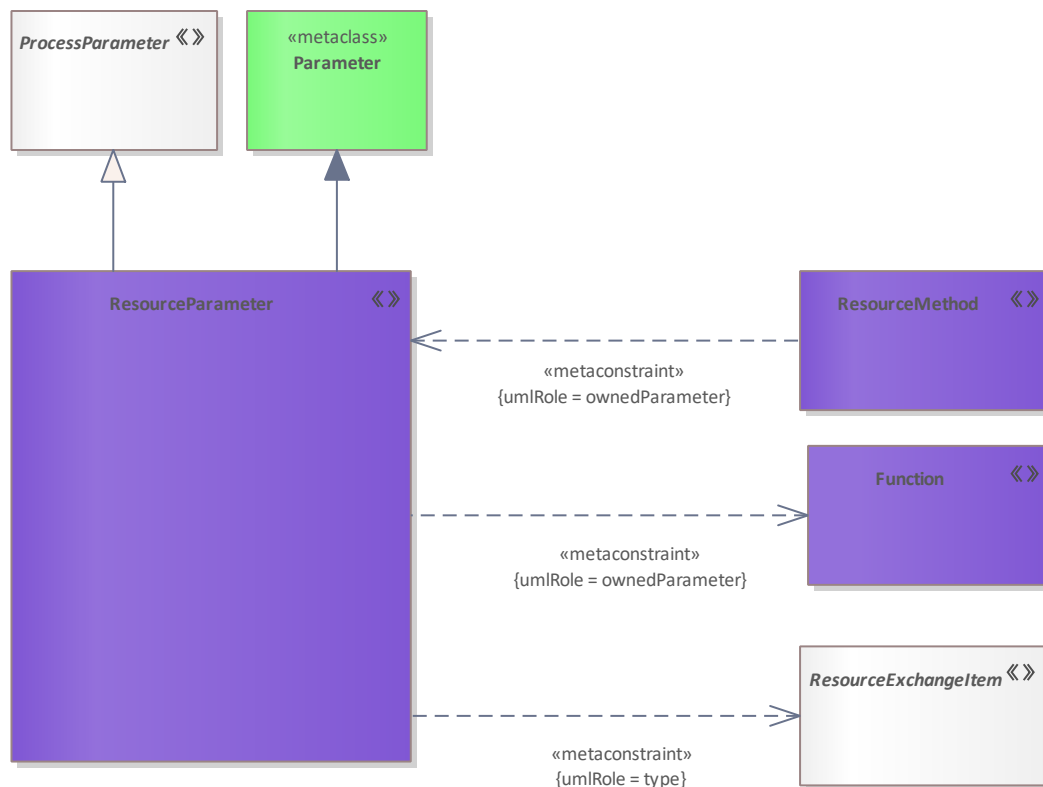


Figure 305: ResourceParameter

Elements in Diagram

Name	Definition
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
ProcessParameter	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.
ResourceMethod	A behavioral feature of a ResourcePerformer whose behavior is specified in a Function.
ResourceParameter	A type that represents inputs and outputs of an Function. It is typed by a ResourceInteractionItem.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.250 ResourcePerformer

Definition

An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).

Meta Model

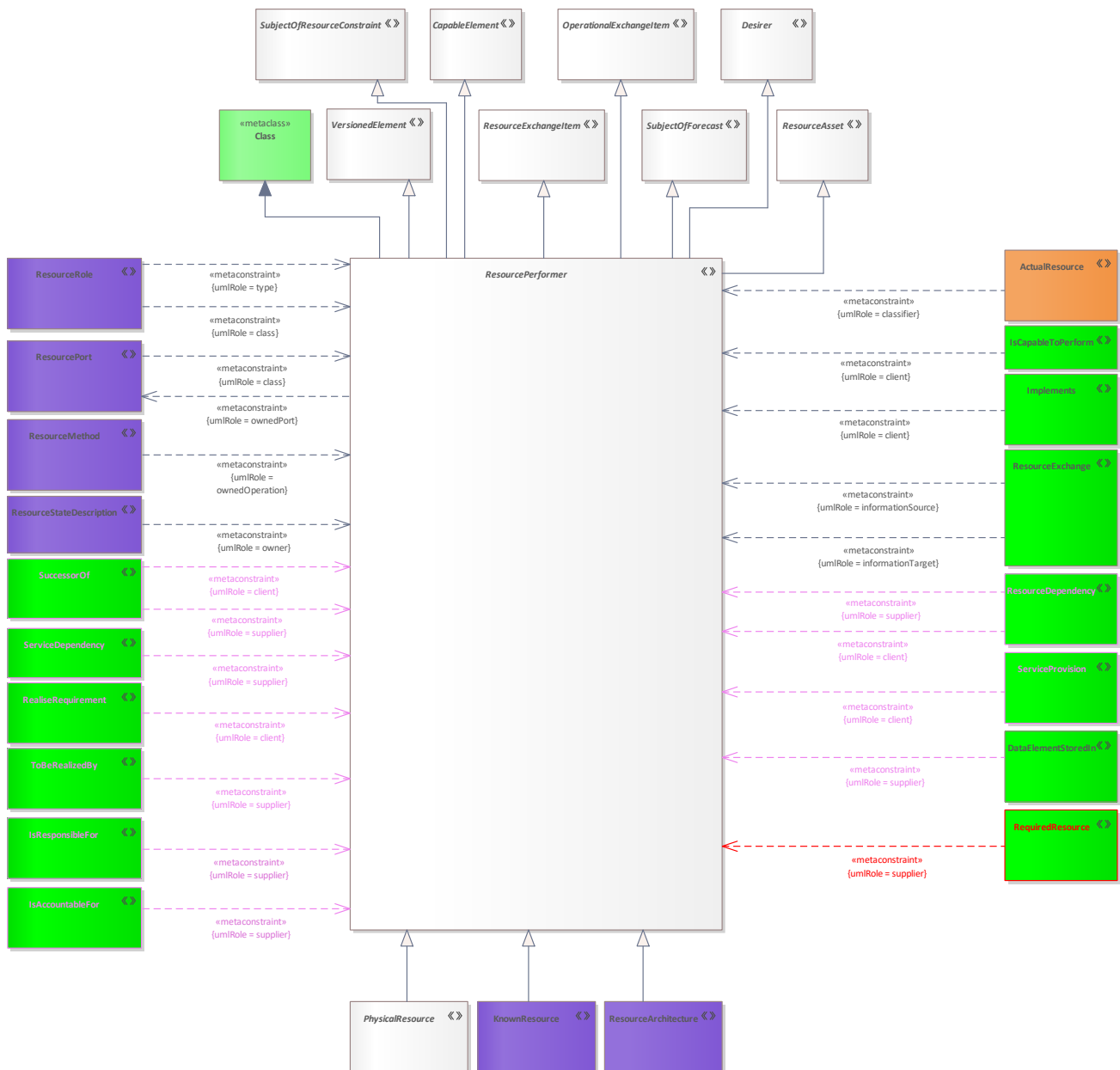


Figure 306: ResourcePerformer

Elements in Diagram

Name	Definition
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
DataElementStoredIn	Relation says that a data is stored in software.
Desirer	Abstract type used to group architecture elements that might desire a particular effect.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the

Name	Definition
	OperationalActivities to the Functions that implement them) in the lower level of abstraction.
IsAccountableFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project in the context of an approval.
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
IsResponsibleFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project.
KnownResource	Asserts that a known ResourcePerformer constrains the implementation of the OperationalPerformer that plays the role in the LogicalArchitecture.
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
RequiredResource	Relationship that indicates which resources a project milestone requires
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourceAsset	An abstract element used to group the elements of ResourcePerformer and DataElement allowing them to own DataRoles
ResourceDependency	Relationship that is a dependency of a resource on a resource.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.
ResourceMethod	A behavioral feature of a ResourcePerformer whose behavior is specified in a Function.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ResourceStateDescription	A state machine describing the behavior of a ResourcePerformer, depicting how the ResourcePerformer responds to various events and the actions.
ServiceDependency	Relationship that is a dependency of a service on a service, operational node or resource.
ServiceProvision	An assertion that a Resource delivers a Service to a specified ServiceLevel.
SubjectOfForecast	An abstract type grouping elements that can be the subject of a Forecast.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.
SuccessorOf	A relationship between two elements that indicates that one element is the successor of the other.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.
VersionedElement	An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [P3 - Resource Connectivity](#)

3.252 ResourceRole

Definition

Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.

Meta Model

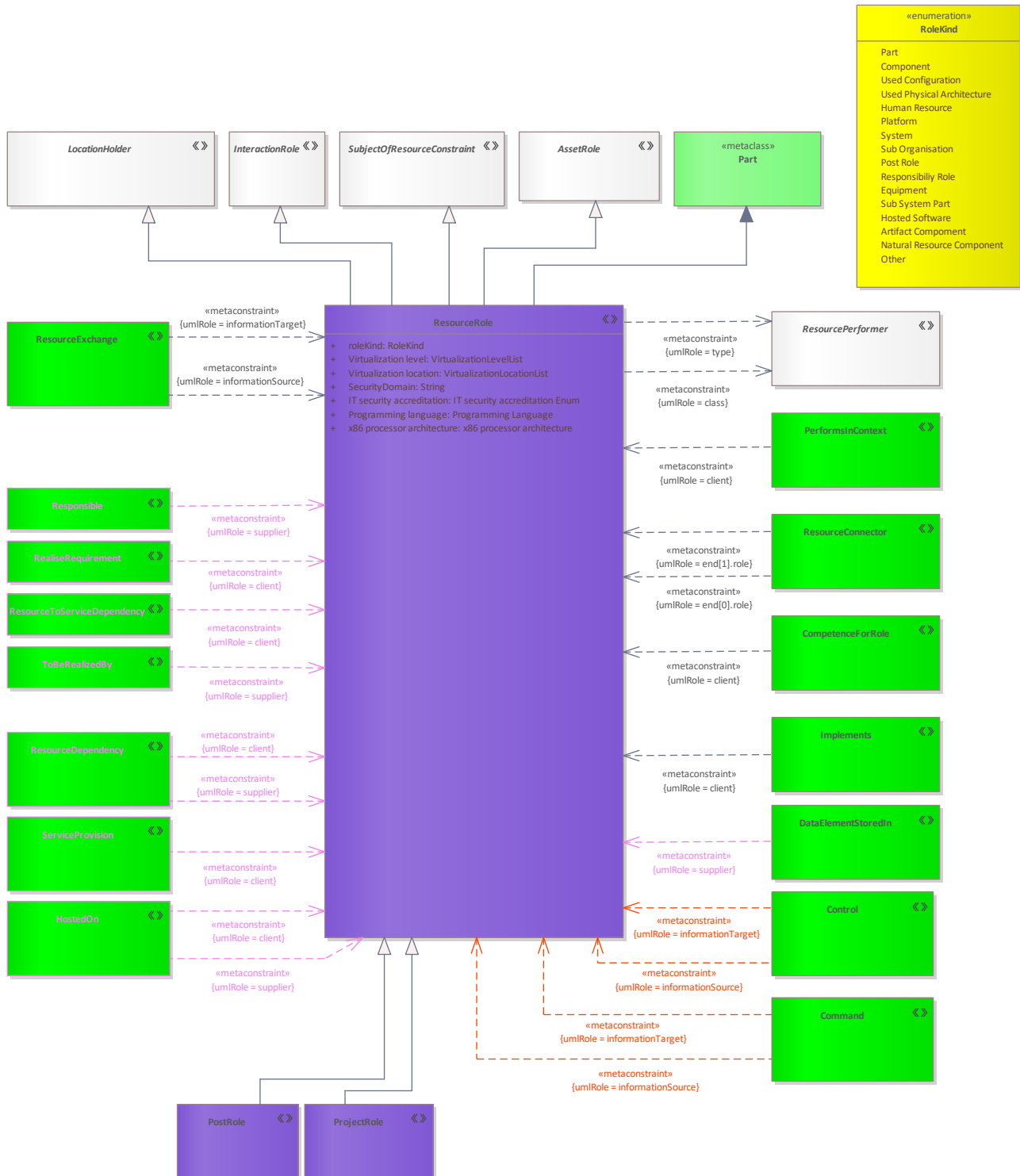


Figure 308: ResourceRole

Elements in Diagram

Name	Definition
AssetRole	AssetRole as applied to Security views, an abstract element that indicates the type of elements that can be considered as a subject for

Name	Definition
	security analysis in the particular context (currently no security viewpoints in the framework).
Command	A type of ResourceExchange that asserts that one OrganizationalResource commands another.
CompetenceForRole	A tuple used to associate an organizational role with a specific set of required competencies.
Control	A type of ResourceExchange that asserts that one PhysicalResource controls another PhysicalResource (i.e. the driver of a vehicle controlling the vehicle speed or direction).
DataElementStoredIn	Relation says that a data is stored in software.
HostedOn	Relation states that hardware (virtualized) or software is hosted on a virtualized platform or physical hardware.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
InteractionRole	An abstract type that represents an individual participant in the InteractionScenario.
LocationHolder	Abstract type, used to group elements that are allowed to be associated with a Location.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
PostRole	A usage of a post in the context of another OrganizationalResource. Creates a whole-part relationship.
ProjectRole	Usage of a Project in the context of another Project. Creates a whole-part relationship.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
ResourceConnector	A channel for exchange between two ResourceRoles.
ResourceDependency	Relationship that is a dependency of a resource on a resource.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ResourceToServiceDependency	Relation states that a resource is dependent on a service.
Responsible	Relation states that a project is responsible for a service or a material resource.
ServiceProvision	An assertion that a Resource delivers a Service to a specified ServiceLevel.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
roleKind	Part, Component, Used Configuration, Used Physical Architecture, Human Resource, Platform, System, Sub Organisation, Post Role, Responsibility Role, Equipment, Sub System Part, Hosted Software, Artifact Component, Natural Resource Component, Other
Virtualization level	vollständige Virtualisierung, Paravirtualisierung, Betriebssystemvirtualisierung, nicht virtualisiert, keine Relevanz, not set

Virtualization location	Bare Metal, Hosted, keine Virtualisierung, keine Relevanz, not set
SecurityDomain	String
IT security accreditation	akkreditiert VS-NfD, akkreditiert Geheim, konform VS-NfD, konform Geheim, nicht akkreditiert, keine Relevanz, not set
Programming language	ABAP, Java, PHP, C++, C#, Python, keine Relevanz, not set
x86 processor architecture	Ja, Nein, begründete Abweichung, keine Relevanz, not set
URI	String

Relevant Viewpoints

- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P6 - Resource Sequence](#)
- [S6 - Service Interactions](#)

3.253 ResourceSignal

Definition

A property of an element representing something in the physical world, expressed in amounts of a unit of measure.

Meta Model

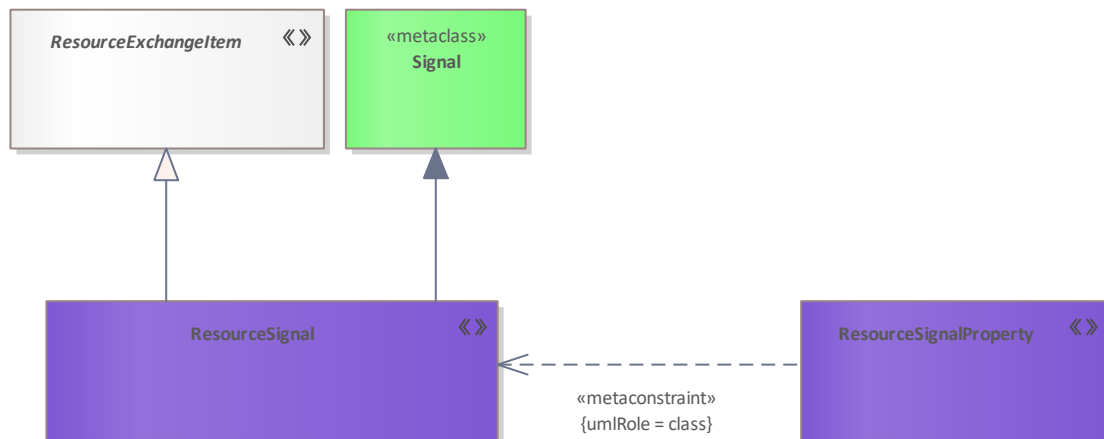


Figure 309: ResourceSignal

Elements in Diagram

Name	Definition
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.
ResourceSignal	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
ResourceSignalProperty	A property of an ResourceSignal typed by ResourceExchangeItem. It enables ResourceExchangeItem e.g. DataElement to be passed as arguments of the ResourceSignal.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [P3 - Resource Connectivity](#)

3.254 ResourceSignalProperty

Definition

A property of an ResourceSignal typed by ResourceExchangeItem. It enables ResourceExchangeItem e.g. DataElement to be passed as arguments of the ResourceSignal.

Meta Model

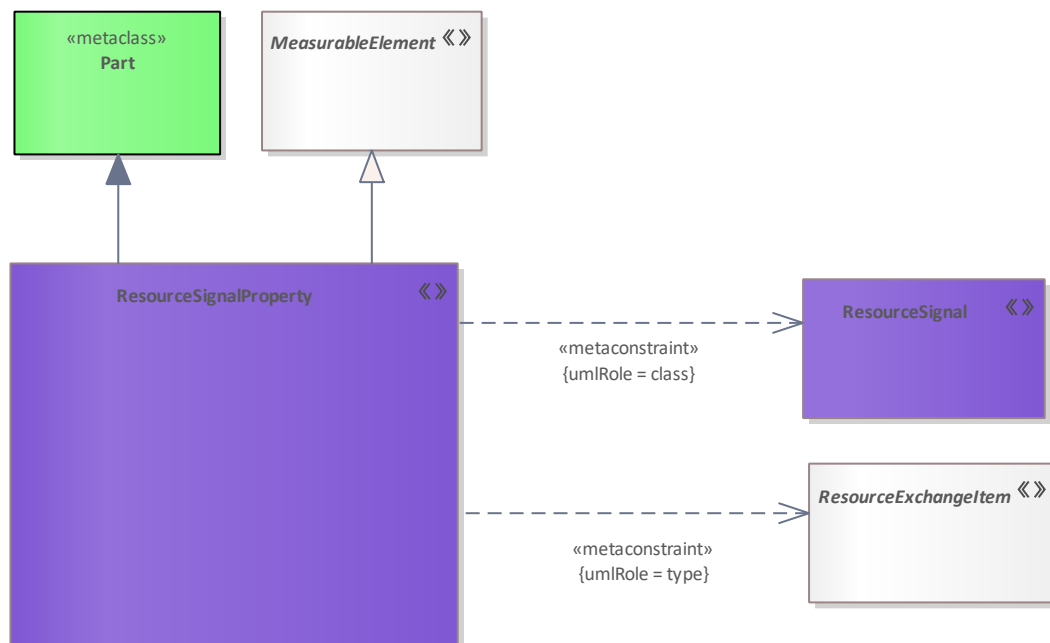


Figure 310: ResourceSignalProperty

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ResourceExchangeItem	An abstract type grouping elements that defines the types of elements that can be exchanged between ResourcePerformers and conveyed by a ResourceExchange.
ResourceSignal	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
ResourceSignalProperty	A property of an ResourceSignal typed by ResourceExchangeItem. It enables ResourceExchangeItem e.g. DataElement to be passed as arguments of the ResourceSignal.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.255 ResourceStateDescription

Definition

A state machine describing the behavior of a ResourcePerformer, depicting how the ResourcePerformer responds to various events and the actions.

Meta Model

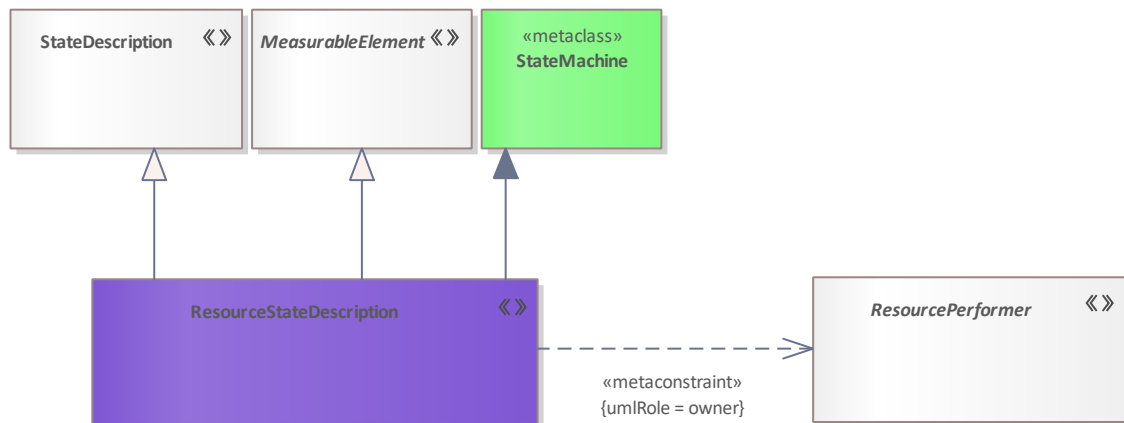


Figure 311: ResourceStateDescription

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceStateDescription	A state machine describing the behavior of a ResourcePerformer, depicting how the ResourcePerformer responds to various events and the actions.
StateDescription	An abstract type that represents a state machine (i.e. an OperationalStateDescription or ResourceStateDescription), depicting how the Asset responds to various events and the actions.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [P5 - Resource States](#)

3.256 ResourceToServiceDependency

Definition

Relation states that a resource is dependent on a service.

Meta Model

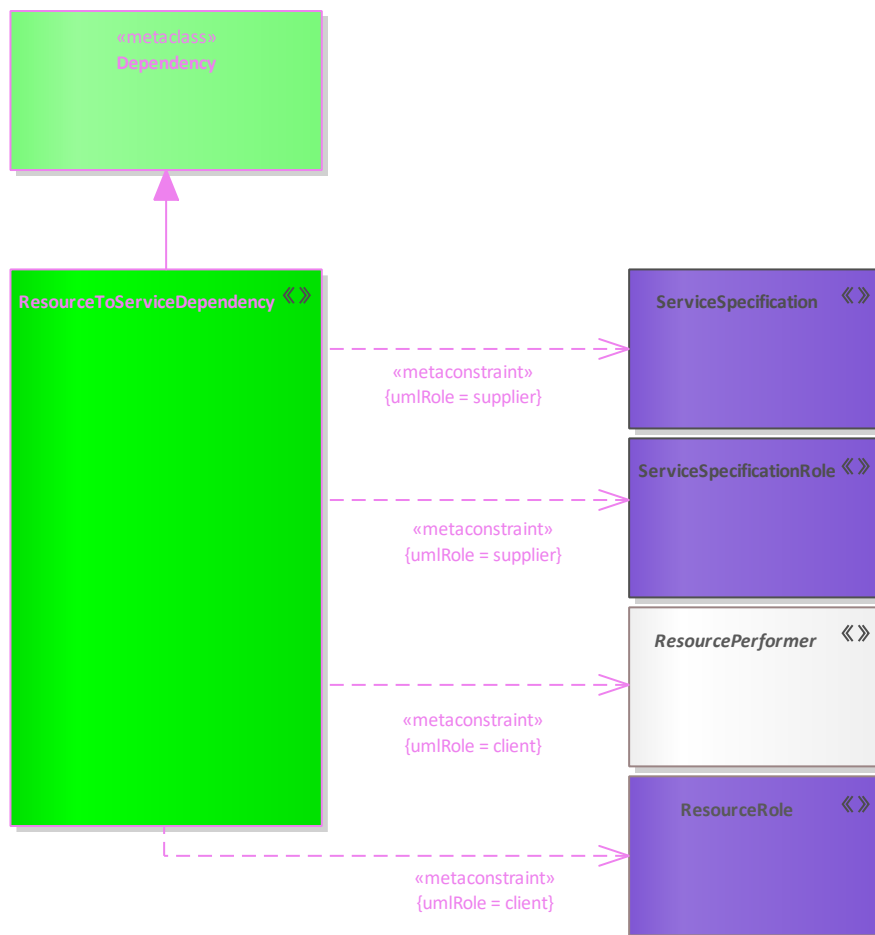


Figure 312: ResourceToServiceDependency

Elements in Diagram

Name	Definition
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ResourceToServiceDependency	Relation states that a resource is dependent on a service.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

Tagged Values

Relevant Viewpoints

- [P2 - Resource Structure](#)

3.257 Responsibility

Definition

The type of duty required of a Person or Organization.

Meta Model

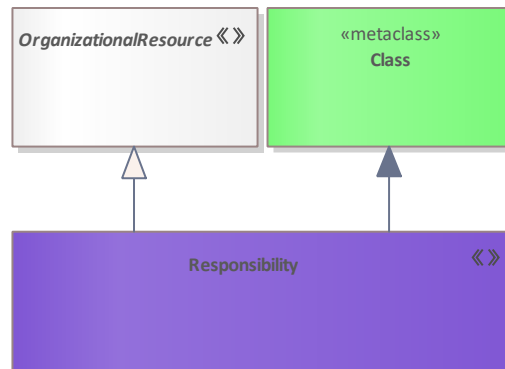


Figure 313: Responsibility

Elements in Diagram

Name	Definition
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
Responsibility	The type of duty required of a Person or Organization.

Tagged Values

Tag Name	Valid Values
URI	String
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R

Relevant Viewpoints

- [A2 - Architecture Products](#)
- [L2 - Logical Scenario](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)

3.258 Responsible

Definition

Relation states that a project is responsible for a service or a material resource.

Meta Model

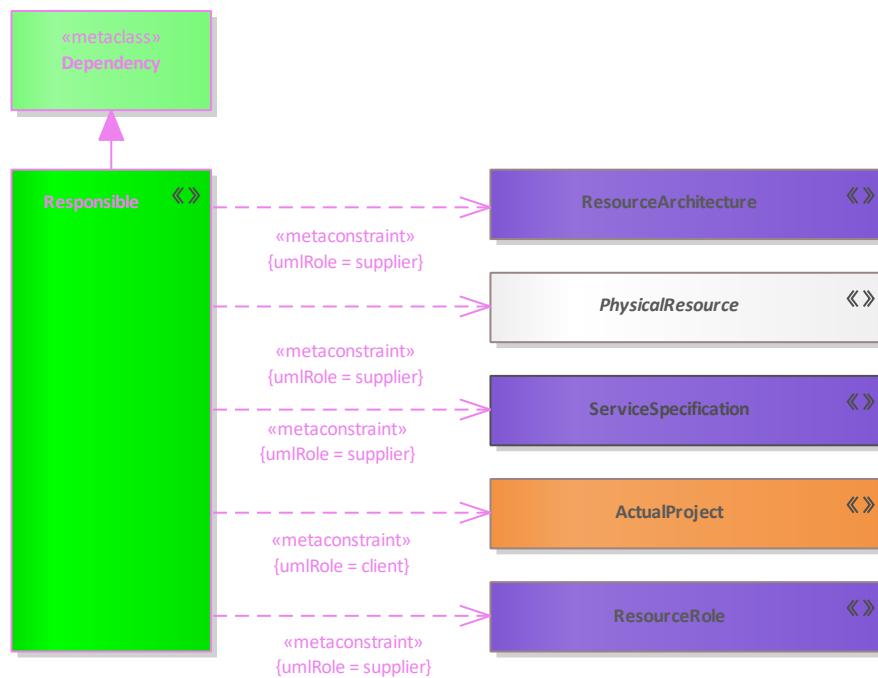


Figure 314: Responsible

Elements in Diagram

Name	Definition
ActualProject	A time-limited endeavor to provide a specific set of ActualResource that meet specific Capability needs.
PhysicalResource	An abstract type defining physical resources (i.e. OrganizationalResource, ResourceArtifact and NaturalResource).
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
Responsible	Relation states that a project is responsible for a service or a material resource.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Tagged Values

Relevant Viewpoints

- [P2 - Resource Structure](#)

3.259 ResultsFrom

Definition

Relationship expresses that an element of architecture is the reason for a finding.

Meta Model



Figure 315: ResultsFrom

Elements in Diagram

Name	Definition
Classification	Classification according to STANAG 1059.
Finding	An ascertainment made in the model, which relates to the methodology used, the subject under consideration, the tool or something else.
FitCriterion	This element represents an acceptance criterion for a functional or non-functional requirement.
FulfilmentCriterion	This element represents a criterion for evaluating the degree of implementation of a functional or non-functional requirement.
FunctionalRequirement	The element represents a functional requirement (what should the system / software be able to do?).
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
NonfunctionalRequirement	The element represents a non-functional requirement (how should the system / software be able to do something?).
Reference	Element describes all types of references.

Name	Definition
RequirementCatalogue	Element represents a catalog of requirements, which consists of different categories (RequirementCategory) of functional and non-functional requirements.
RequirementCategory	Element represents a category of a catalog of requirements.
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
Type	Method, Tool, Others, Subject

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [A2 - Architecture Products](#)
- [A3 - Architecture Correspondence](#)
- [A6 - Architecture Versions](#)
- [A7 - Architecture Compliance](#)
- [A8 - Standards](#)
- [Ar - Architecture Roadmap](#)
- [C1 - Capability Taxonomy](#)
- [C1-S1 - Capability to Service Mapping](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [Cr - Capability Roadmap](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R2 - Requirement Catalogue](#)
- [R3 - Requirement Dependencies](#)
- [R7 - Requirement Derivation](#)
- [R8 - Requirement Fulfilment](#)
- [Rr - Requirement Realization](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)

- [S5 - Service States](#)
- [S6 - Service Interactions](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)
- [Sr - Service Roadmap](#)

3.260 Rule

Definition

An abstract type for all types of constraint (i.e. an OperationalConstraint could detail the rules of accountancy best practice).

Meta Model

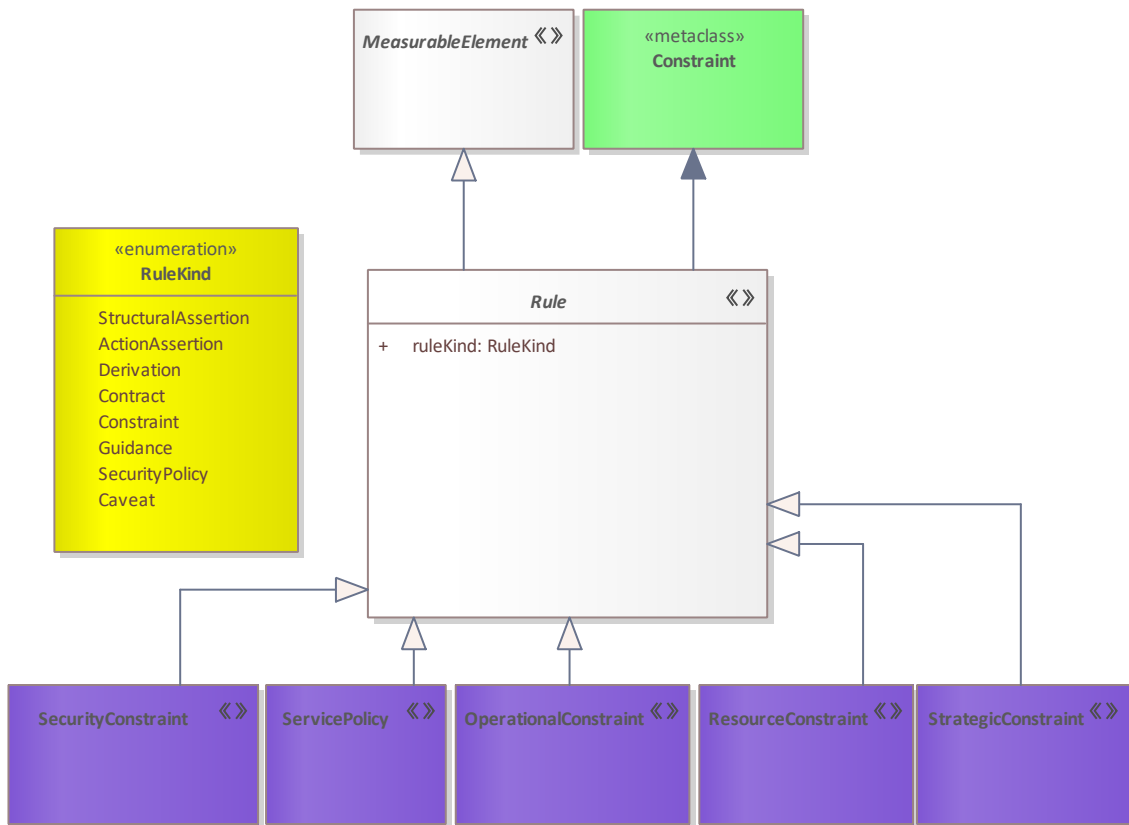


Figure 316: Rule

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
Rule	An abstract type for all types of constraint (i.e. an OperationalConstraint could detail the rules of accountancy best practice).
SecurityConstraint	A type of rule that captures a formal statement to define security laws, regulations, guidances, and policy. Element is not used in the current version of the framework and reserved for future developments.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
StrategicConstraint	A Rule governing a capability.

Tagged Values

Tag Name	Valid Values
ruleKind	StructuralAssertion, ActionAssertion, Derivation, Contract, Constraint, Guidance, SecurityPolicy, Caveat
URI	String

Relevant Viewpoints

3.261 SameAs

Definition

A tuple that asserts that two elements refer to the same real-world thing.

Meta Model

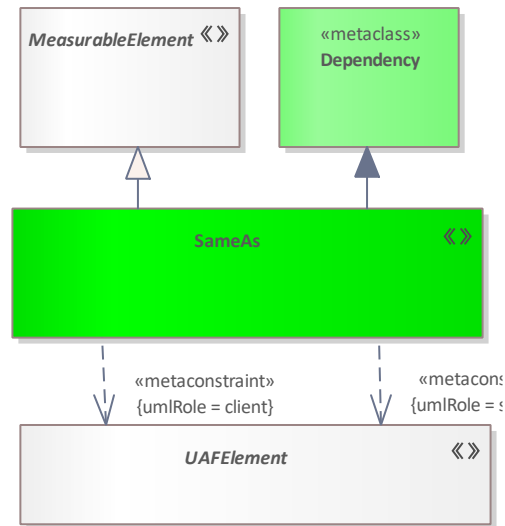


Figure 317: SameAs

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
SameAs	A tuple that asserts that two elements refer to the same real-world thing.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [A7 - Architecture Compliance](#)

3.262 Satisfy

Definition

This relation states that an constraint affects an element.

Meta Model

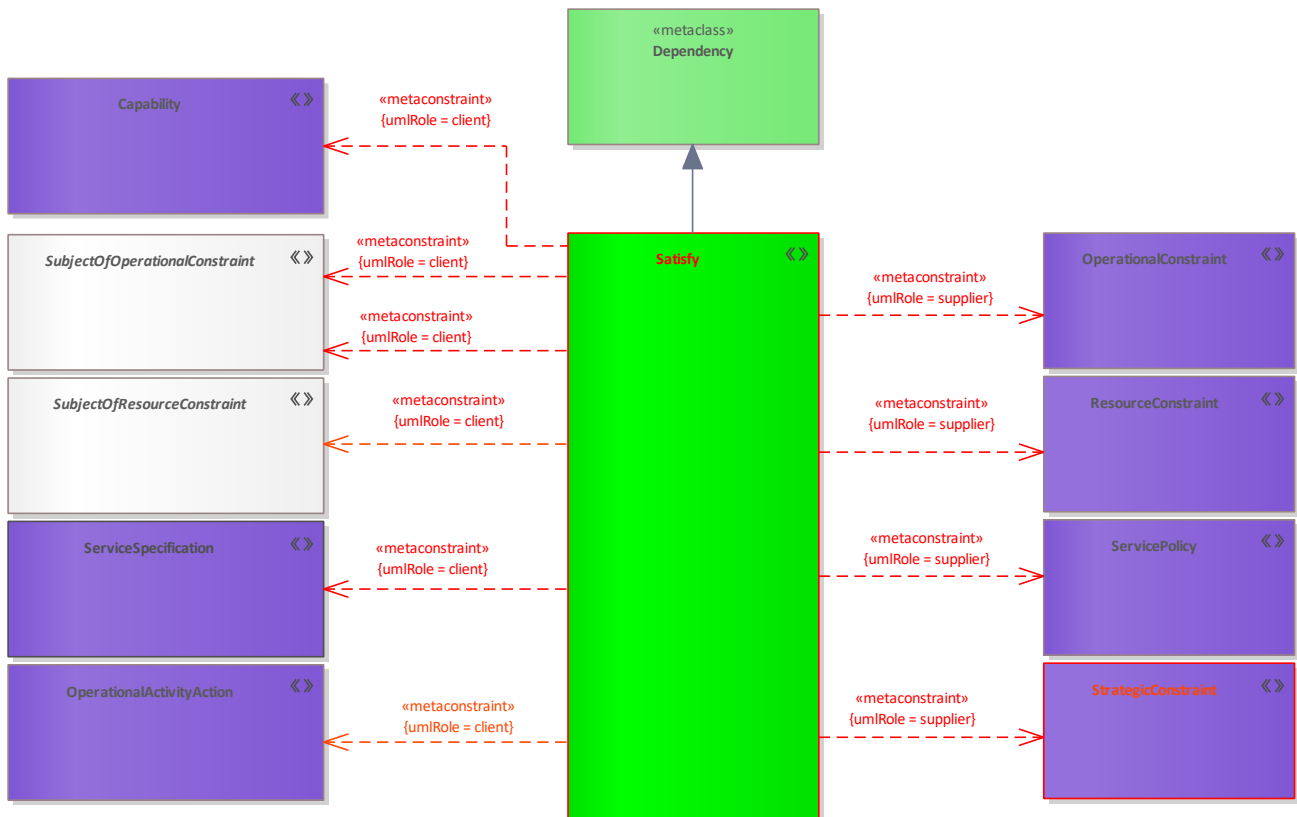


Figure 318: Satisfy

Elements in Diagram

Name	Definition
Capability	A high level specification of the enterprise's ability to execute a specified course of action.
OperationalActivityAction	A call of an OperationalActivity in the context of another OperationalActivity.
OperationalConstraint	A Rule governing a logical architectural element i.e. OperationalPerformer, OperationalActivity, InformationElement etc.
ResourceConstraint	A rule governing the structural or functional aspects of an implementation.
Satisfy	This relation states that an constraint affects an element.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
StrategicConstraint	A Rule governing a capability.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.

Tagged Values

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)

- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R7 - Requirement Derivation](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)

3.263 SecurityConstraint

Definition

A type of rule that captures a formal statement to define security laws, regulations, guidances, and policy. Element is not used in the current version of the framework and reserved for future developments.

Meta Model

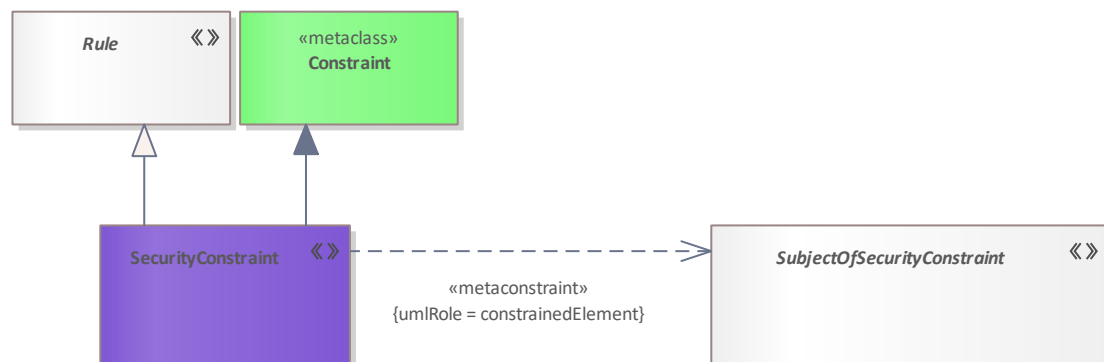


Figure 319: SecurityConstraint

Elements in Diagram

Name	Definition
Rule	An abstract type for all types of constraint (i.e. an OperationalConstraint could detail the rules of accountancy best practice).
SecurityConstraint	A type of rule that captures a formal statement to define security laws, regulations, guidances, and policy. Element is not used in the current version of the framework and reserved for future developments.
SubjectOfSecurityConstraint	An abstract grouping of elements that can be the subject of a SecurityConstraint. Element is not used in the current version of the framework and reserved for future developments.

Tagged Values

Tag Name	Valid Values
ruleKind	StructuralAssertion, ActionAssertion, Derivation, Contract, Constraint, Guidance, SecurityPolicy, Caveat
URI	String

Relevant Viewpoints

3.264 SecurityEnclave

Definition

Collection of information systems connected by one or more internal networks under the control of a single authority and security policy. The systems may be structured by physical proximity or by function, independent of location.

Element is not used in the current version of the framework and reserved for future developments.

Meta Model

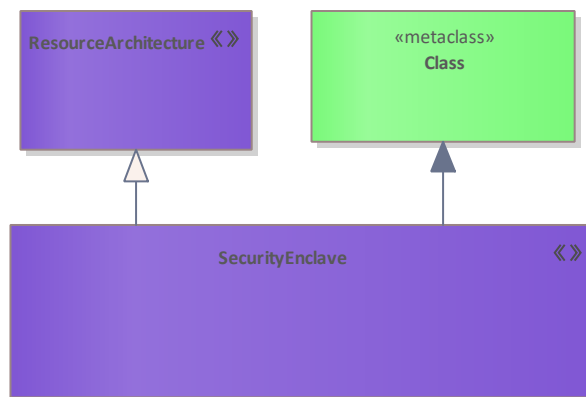


Figure 320: SecurityEnclave

Elements in Diagram

Name	Definition
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
SecurityEnclave	Collection of information systems connected by one or more internal networks under the control of a single authority and security policy. The systems may be structured by physical proximity or by function, independent of location. Element is not used in the current version of the framework and reserved for future developments.

Tagged Values

Tag Name	Valid Values
materialPlanningNumber	
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.265 SecurityProcess

Definition

The security-related procedure that satisfies the security control requirement.

Element is not used in the current version of the framework and reserved for future developments.

Meta Model

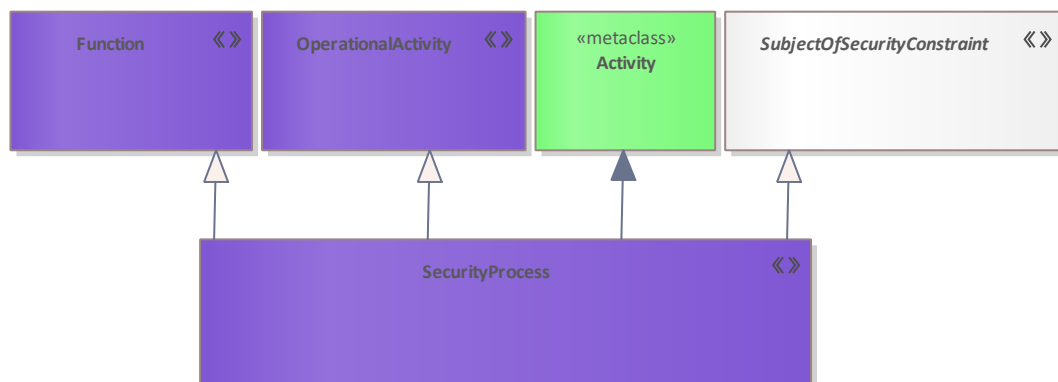


Figure 321: SecurityProcess

Elements in Diagram

Name	Definition
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
SecurityProcess	The security-related procedure that satisfies the security control requirement. Element is not used in the current version of the framework and reserved for future developments.
SubjectOfSecurityConstraint	An abstract grouping of elements that can be the subject of a SecurityConstraint. Element is not used in the current version of the framework and reserved for future developments.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

3.266 ServiceClassification

Definition

Relation is used to show that two services have a relationship in the sense of a taxonomy.

Meta Model

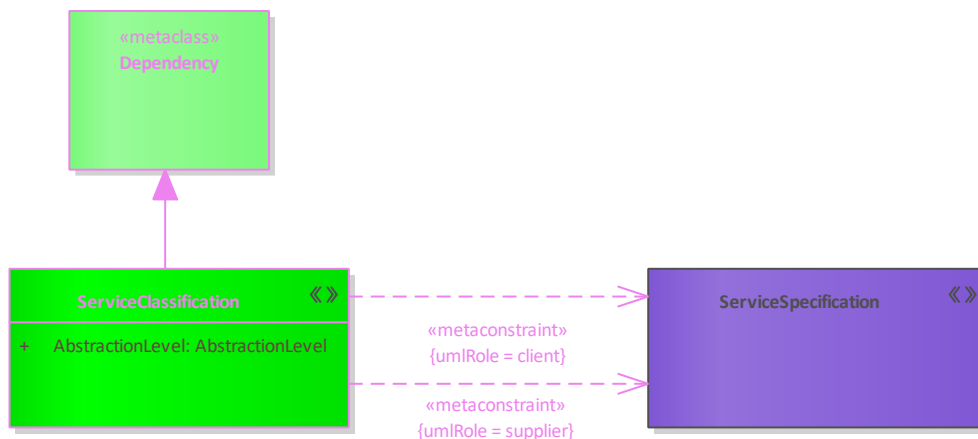


Figure 322: ServiceClassification

Elements in Diagram

Name	Definition
ServiceClassification	Relation is used to show that two services have a relationship in the sense of a taxonomy.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R

Relevant Viewpoints

- [S1 - Service Taxonomy](#)

3.267 ServiceConnector

Definition

A channel for exchange between two ServiceSpecifications. Where one acts as the consumer of the other.

Meta Model

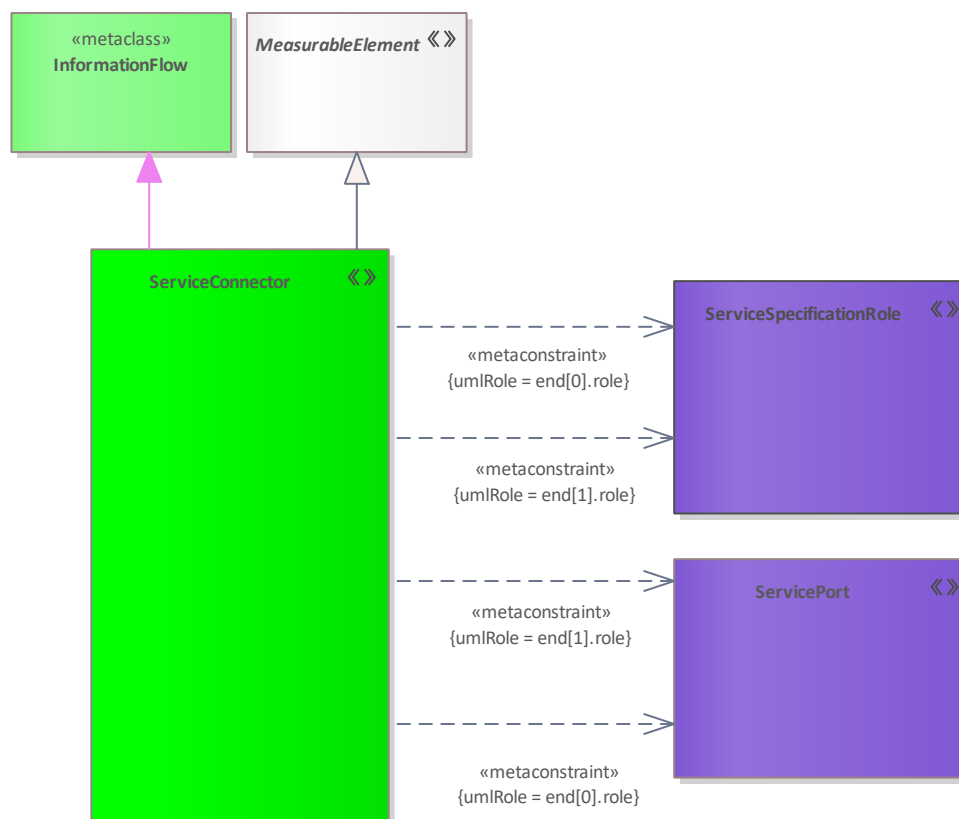


Figure 323: ServiceConnector

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ServiceConnector	A channel for exchange between two ServiceSpecifications. Where one acts as the consumer of the other.
ServicePort	An interaction point for a ServiceSpecification through which it can interact with the outside environment and which is defined by a ServiceInterface.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [S3 - Service Interfaces](#)

3.268 ServiceDependency

Definition

Relationship that is a dependency of a service on a service, operational node or resource.

Meta Model

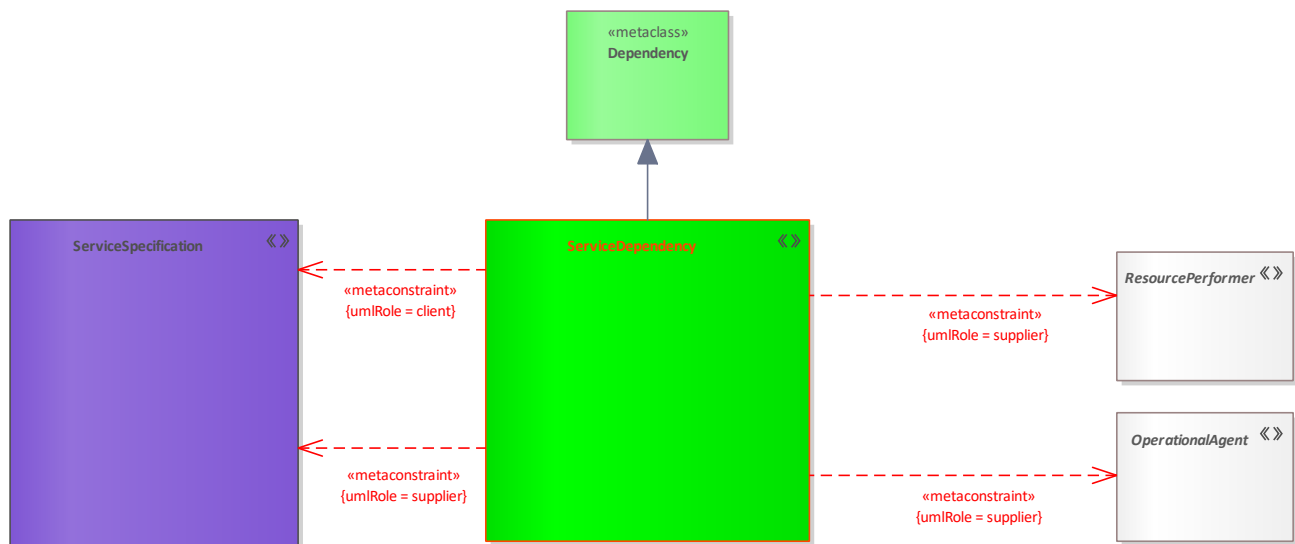


Figure 324: ServiceDependency

Elements in Diagram

Name	Definition
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceDependency	Relationship that is a dependency of a service on a service, operational node or resource.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Tagged Values

Relevant Viewpoints

- [S2 - Service Structure](#)

3.269 ServiceFunction

Definition

An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.

Meta Model

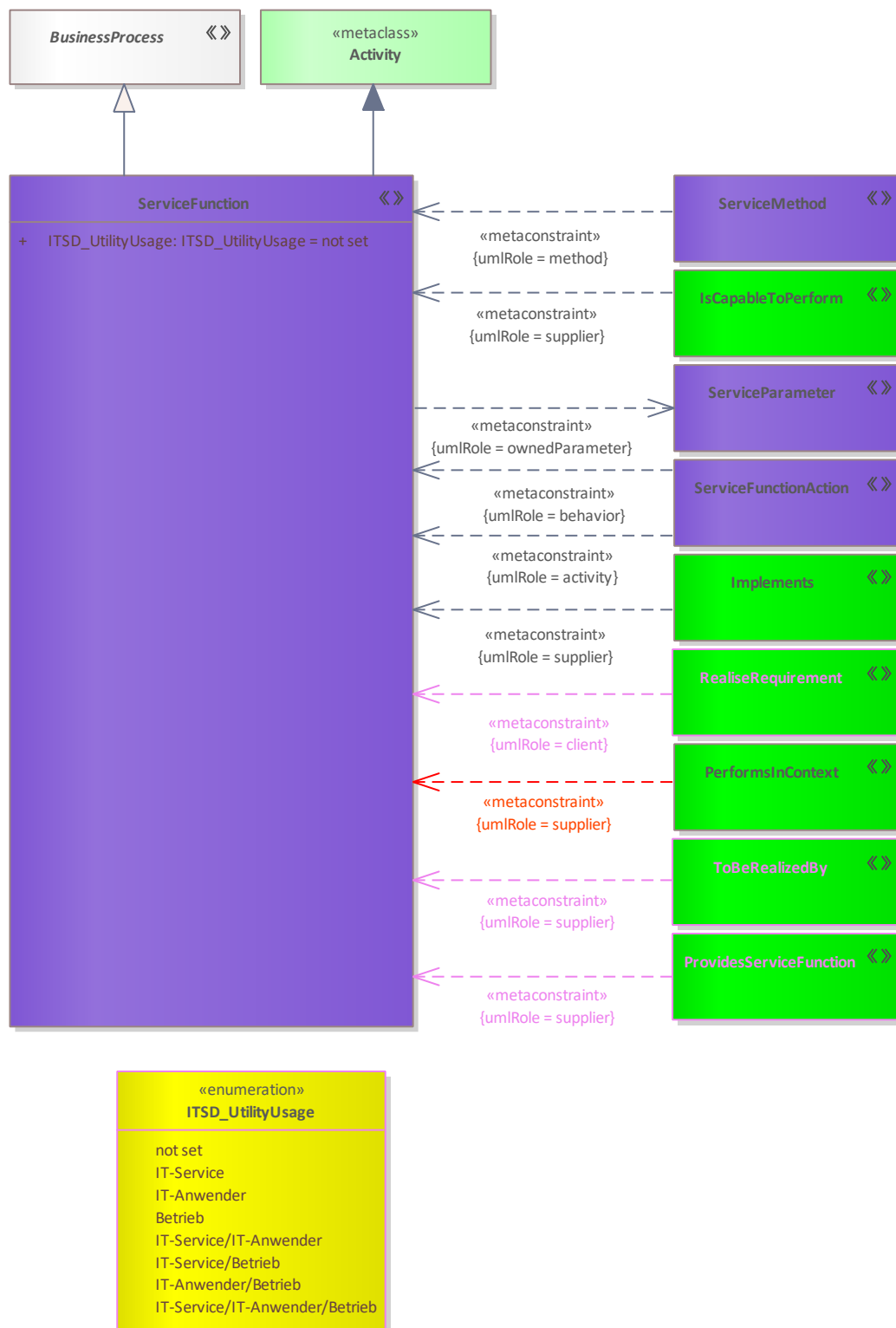


Figure 325: ServiceFunction

Elements in Diagram

Name	Definition
BusinessProcess	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
ProvidesServiceFunction	Relationship that expresses that a service function is provided by an interface.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceFunctionAction	A call of a ServiceFunction in the context of another ServiceFunction.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
ServiceParameter	A type that represents inputs and outputs of a ServiceFunction, represents inputs and outputs of a ServiceSpecification.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
ITSD_UtilityUsage	not set, IT-Service, IT-Anwender, Betrieb, IT-Service/IT-Anwender, IT-Service/Betrieb, IT-Anwender/Betrieb, IT-Service/IT-Anwender/Betrieb
URI	String

Relevant Viewpoints

- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)
- [S4 - Service Functions](#)
- [S7 - Service Interface Parameters](#)

3.270 ServiceFunctionAction

Definition

A call of a ServiceFunction in the context of another ServiceFunction.

Meta Model

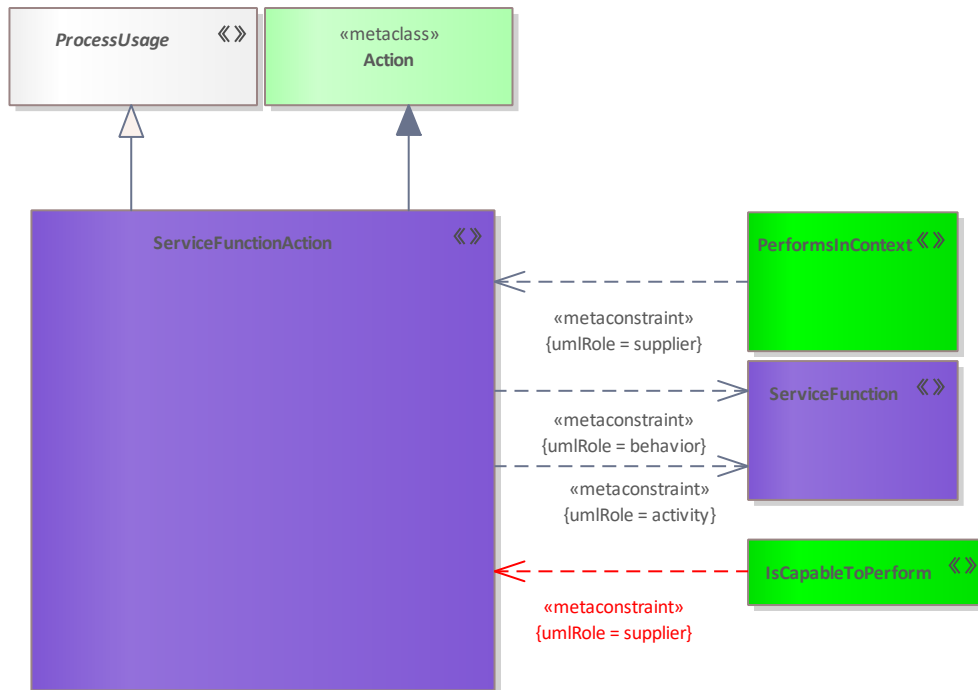


Figure 326: ServiceFunctionAction

Elements in Diagram

Name	Definition
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
ProcessUsage	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer or Role.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceFunctionAction	A call of a ServiceFunction in the context of another ServiceFunction.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [S4 - Service Functions](#)

3.271 ServiceInterface

Definition

A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.

Meta Model

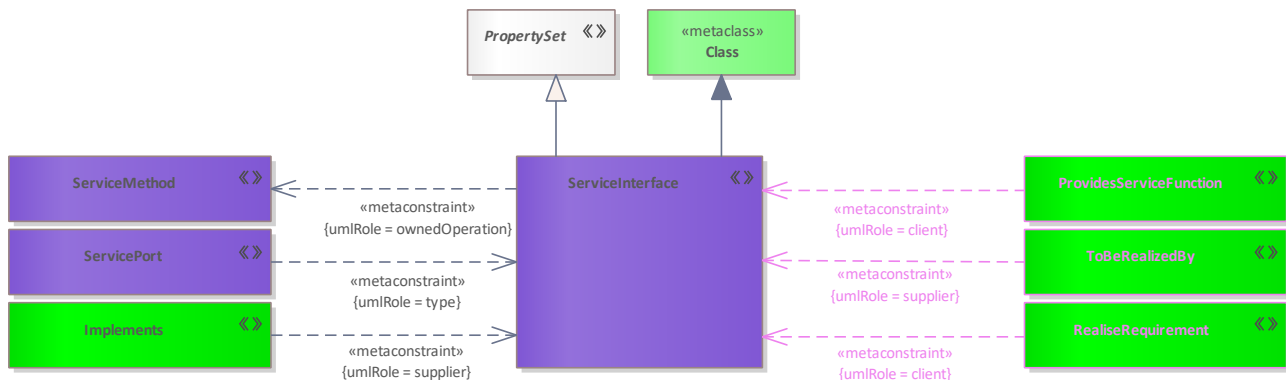


Figure 327: ServiceInterface

Elements in Diagram

Name	Definition
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
ProvidesServiceFunction	Relationship that expresses that a service function is provided by an interface.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
ServicePort	An interaction point for a ServiceSpecification through which it can interact with the outside environment and which is defined by a ServiceInterface.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S7 - Service Interface Parameters](#)

3.272 ServiceMessage

Definition

Message for use in a Service Event-Trace.

Meta Model

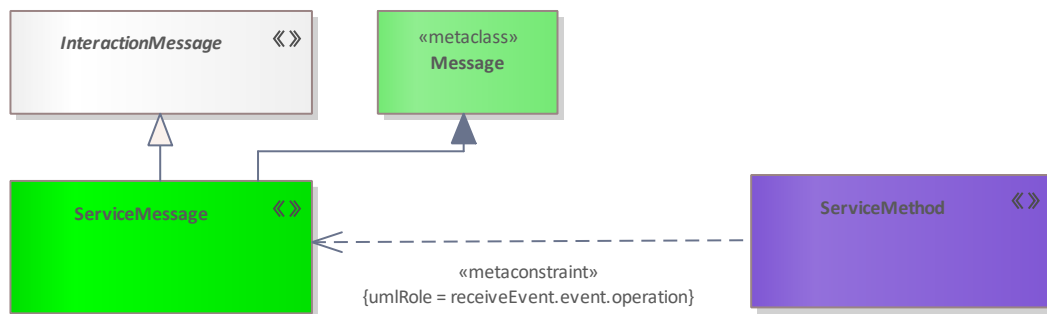


Figure 328: ServiceMessage

Elements in Diagram

Name	Definition
InteractionMessage	An abstract type that groups several types of messages used in the InteractionScenario.
ServiceMessage	Message for use in a Service Event-Trace.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L6 - Logical Sequence](#)
- [P6 - Resource Sequence](#)
- [S6 - Service Interactions](#)

3.273 ServiceMethod

Definition

A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.

Meta Model

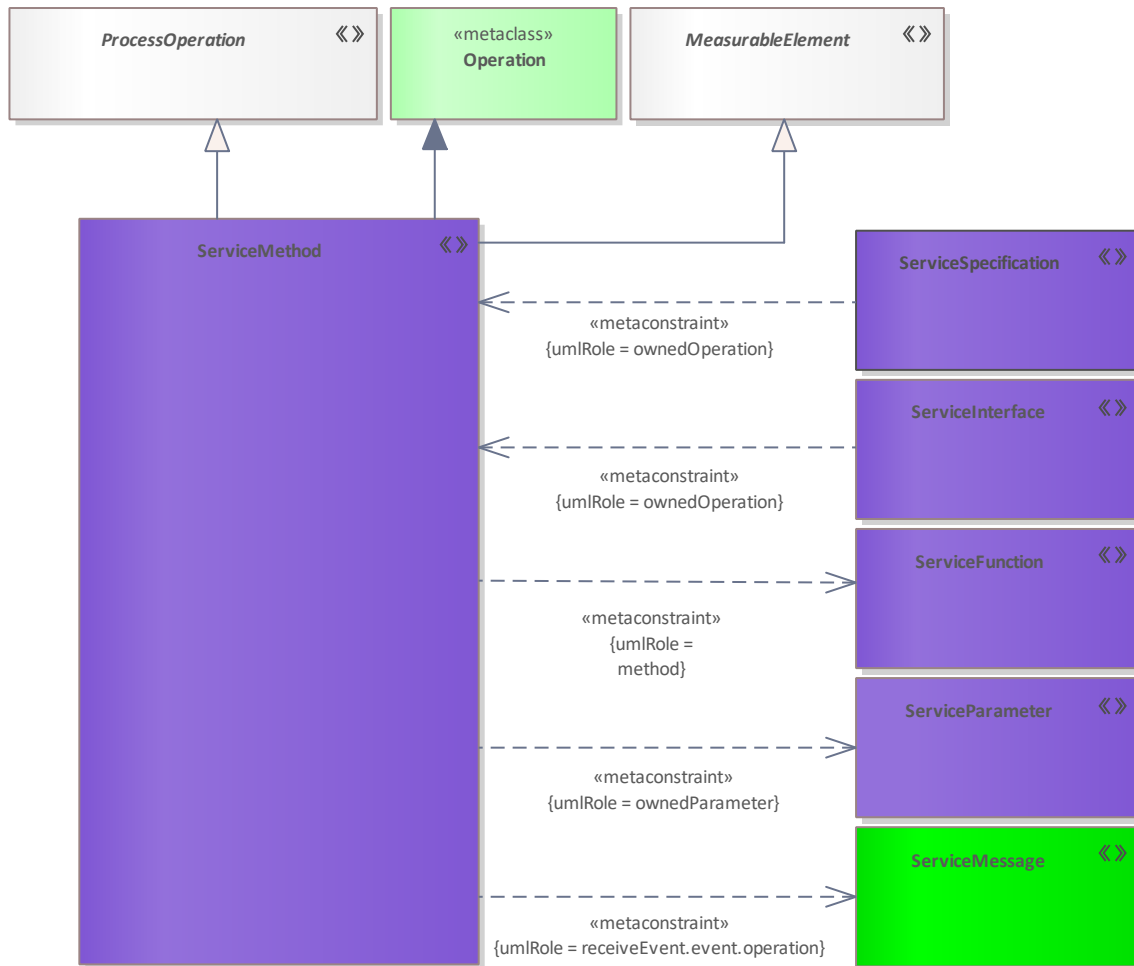


Figure 329: ServiceMethod

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ProcessOperation	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServiceMessage	Message for use in a Service Event-Trace.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
ServiceParameter	A type that represents inputs and outputs of a ServiceFunction, represents inputs and outputs of a ServiceSpecification.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.274 ServiceParameter

Definition

A type that represents inputs and outputs of a ServiceFunction, represents inputs and outputs of a ServiceSpecification.

Meta Model

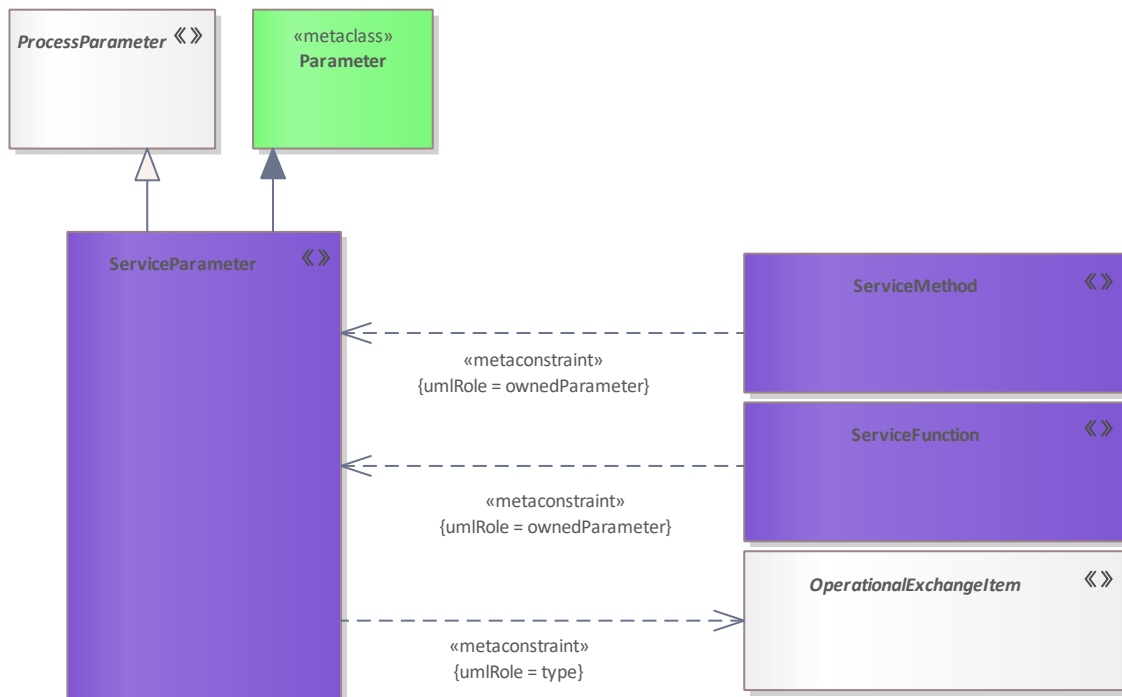


Figure 330: ServiceParameter

Elements in Diagram

Name	Definition
OperationalExchangeItem	An abstract grouping for elements that defines the types of elements that can be exchanged between OperationalPerformers and conveyed by an OperationalExchange.
ProcessParameter	An abstract type that represents a behavior or process (i.e. a Function or OperationalActivity) that can be performed by a Performer.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
ServiceParameter	A type that represents inputs and outputs of a ServiceFunction, represents inputs and outputs of a ServiceSpecification.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.275 ServicePolicy

Definition

A constraint governing the use of one or more ServiceSpecifications.

Meta Model

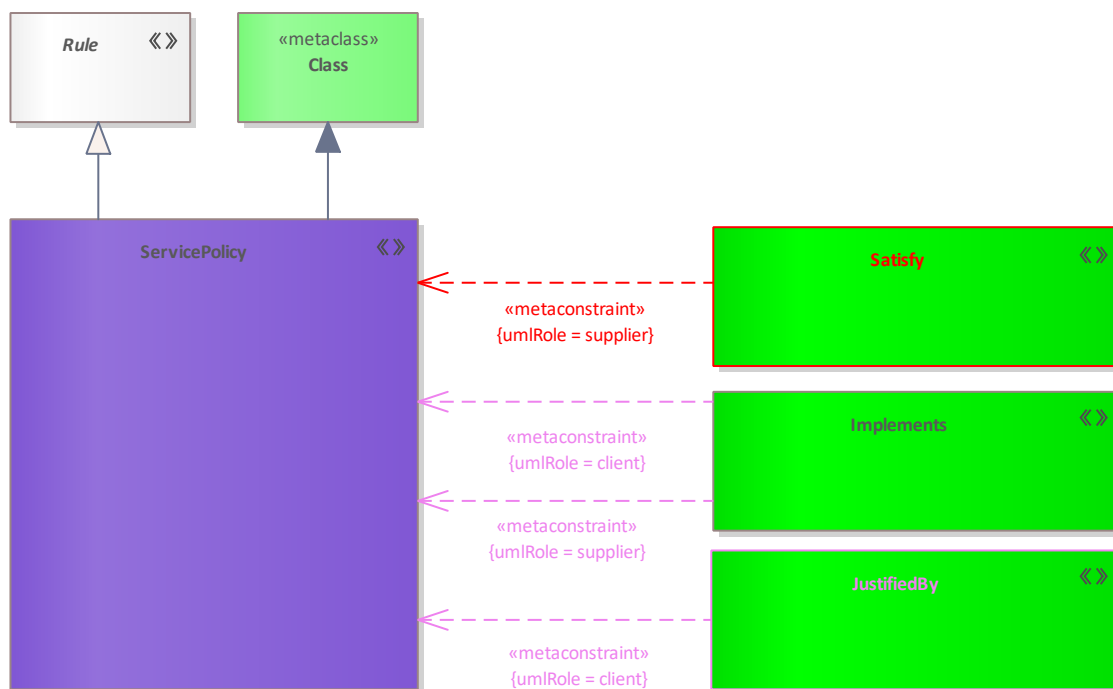


Figure 331: ServicePolicy

Elements in Diagram

Name	Definition
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
Rule	An abstract type for all types of constraint (i.e. an OperationalConstraint could detail the rules of accountancy best practice).
Satisfy	This relation states that an constraint affects an element.
ServicePolicy	A constraint governing the use of one or more ServiceSpecifications.

Tagged Values

Tag Name	Valid Values
ruleKind	StructuralAssertion, ActionAssertion, Derivation, Contract, Constraint, Guidance, SecurityPolicy, Caveat
URI	String

Relevant Viewpoints

- [C8 - Planning Assumption](#)
- [L8 - Logical Constraints](#)
- [P8 - Resource Constraints](#)
- [R7 - Requirement Derivation](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)

- [S5 - Service States](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)

3.276 ServicePort

Definition

An interaction point for a ServiceSpecification through which it can interact with the outside environment and which is defined by a ServiceInterface.

Meta Model

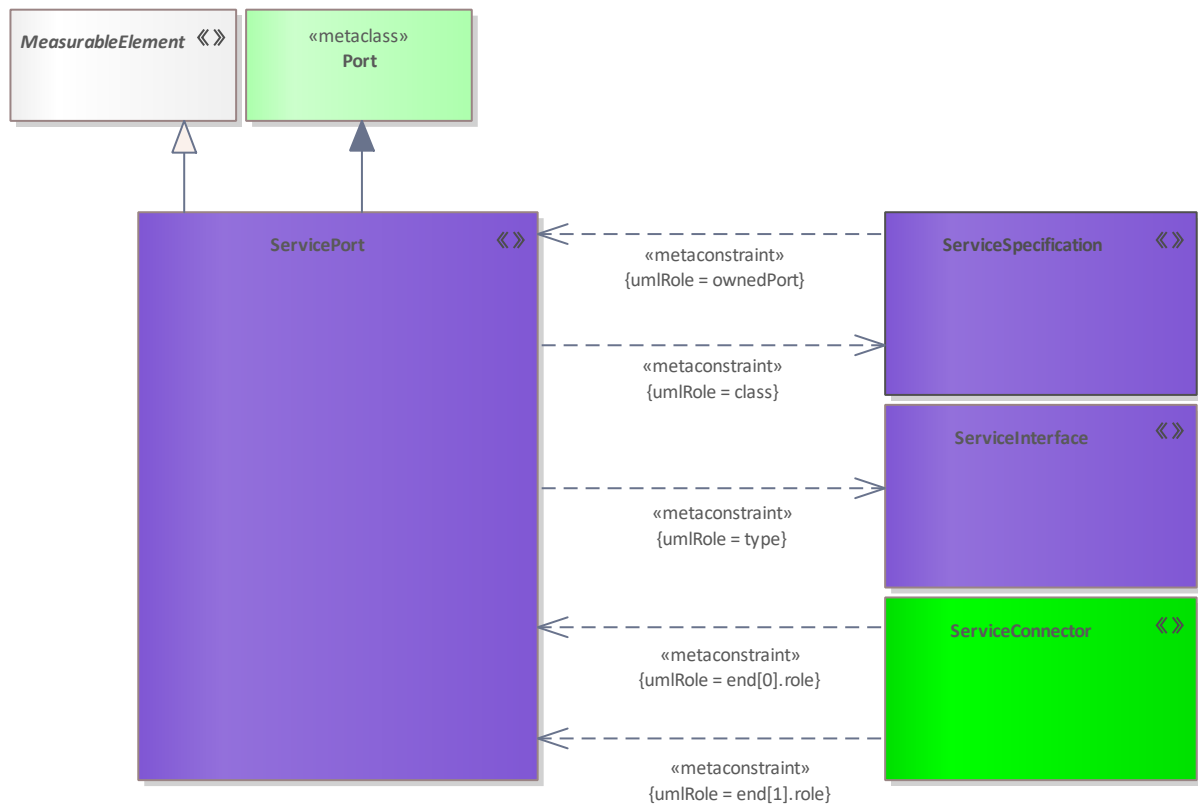


Figure 332: ServicePort

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ServiceConnector	A channel for exchange between two ServiceSpecifications. Where one acts as the consumer of the other.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServicePort	An interaction point for a ServiceSpecification through which it can interact with the outside environment and which is defined by a ServiceInterface.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)

3.277 ServiceProvision

Definition

An assertion that a Resource delivers a Service to a specified ServiceLevel.

Meta Model

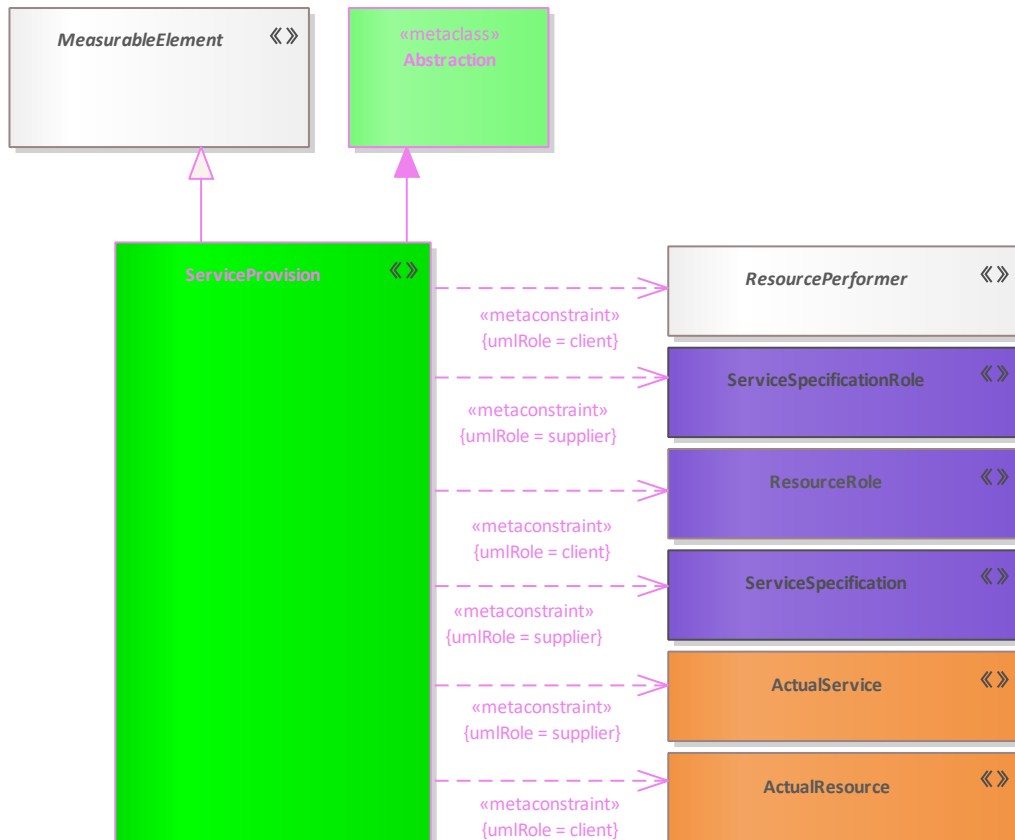


Figure 333: ServiceProvision

Elements in Diagram

Name	Definition
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
ActualService	An individual ServiceSpecification.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ServiceProvision	An assertion that a Resource delivers a Service to a specified ServiceLevel.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L4-P4 Activity to Function Mapping](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)

3.278 ServiceSpecification

Definition

The specification of a set of functionality provided one element for the use of others.

Meta Model

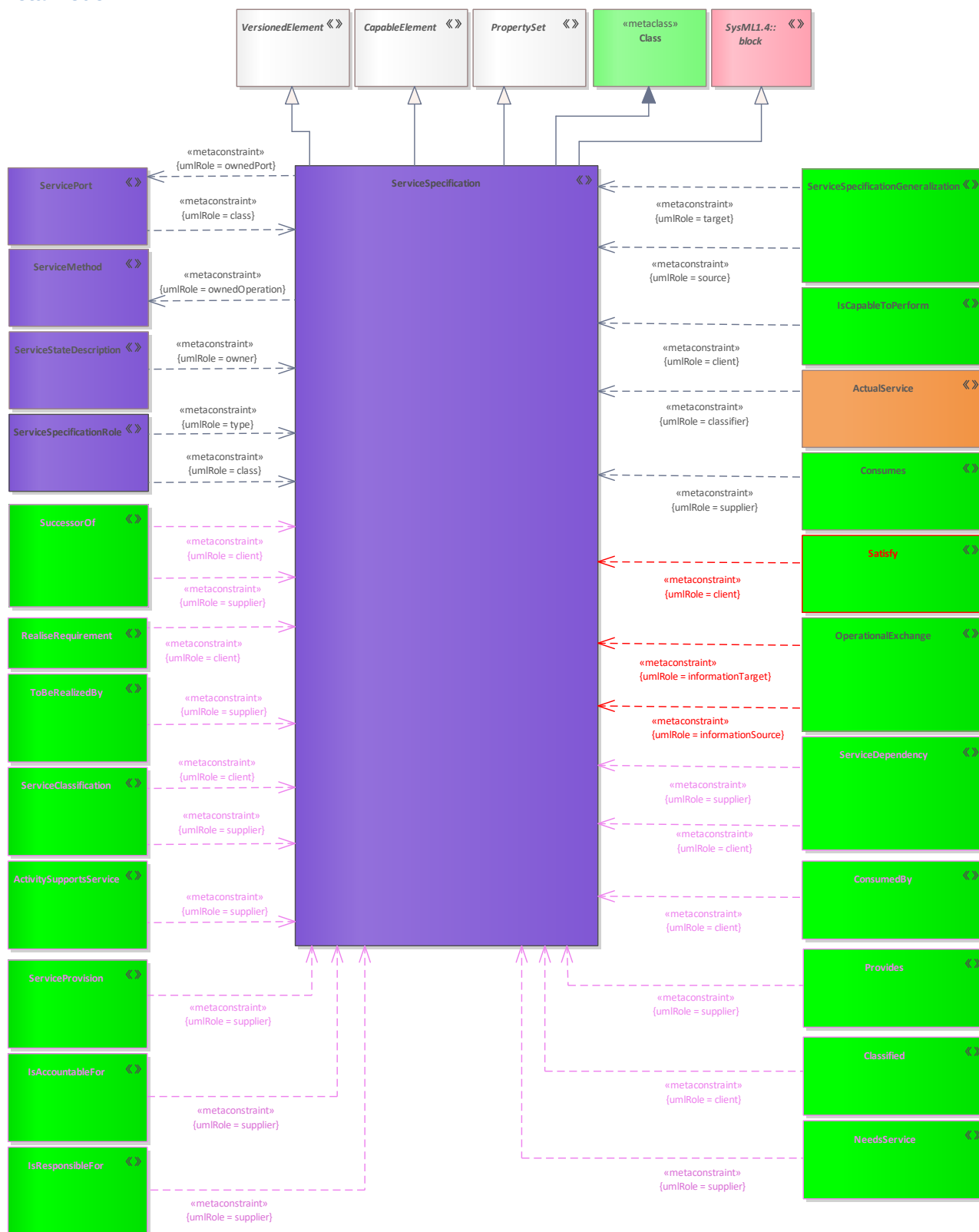


Figure 334: ServiceSpecification

Elements in Diagram

Name	Definition
ActivitySupportsService	Relation states that a process is necessary for the implementation of a service.
ActualService	An individual ServiceSpecification.
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
Classified	Relationship that indicates which classification an element has.
ConsumedBy	Asserts that a service is consumed by a node. It is not required to know what provides the service.
Consumes	A tuple that asserts that a service in someway contributes or assists in the execution of an OperationalActivity.
IsAccountableFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project in the context of an approval.
IsCapableToPerform	A relationship that says that a capable element performs an activity or action.
IsResponsibleFor	A relation that expresses that an OrganizationalResource is responsible for a resource, service or project.
NeedsService	A relation that expresses that a project needs a service
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
PropertySet	An abstract type grouping architectural elements that can own Measurements.
Provides	Asserts that a operational agent provides a service.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
Satisfy	This relation states that an constraint affects an element.
ServiceClassification	Relation is used to show that two services have a relationship in the sense of a taxonomy.
ServiceDependency	Relationship that is a dependency of a service on a service, operational node or resource.
ServiceMethod	A behavioral feature of a ServiceSpecification whose behavior is specified in a ServiceFunction.
ServicePort	An interaction point for a ServiceSpecification through which it can interact with the outside environment and which is defined by a ServiceInterface.
ServiceProvision	An assertion that a Resource delivers a Service to a specified ServiceLevel.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationGeneralization	A ServiceSpecificationGeneralization is a taxonomic relationship between a more general ServiceSpecification and a more specific ServiceSpecification.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.
ServiceStateDescription	A state machine describing the behavior of a ServiceSpecification, depicting how the ServiceSpecification responds to various events and the actions.
SuccessorOf	A relationship between two elements that indicates that one element is the successor of the other.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.
VersionedElement	An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.

Tagged Values

Tag Name	Valid Values
----------	--------------

Approved service tailoring	Ja, noch offen, nicht erforderlich, Nein, keine Relevanz, not set
Critical service	Ja, Nein, keine Relevanz, not set
Kind of robustness	String
Measure for robustness	String
Minimization of dependencies	Ja, Nein, keine Relevanz, not set
Service with mission reference	Ja, Nein, keine Relevanz, not set
Status	geplant, not set, realisiert
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [C1-S1 - Capability to Service Mapping](#)
- [C5 - Effects](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [Rr - Requirement Realization](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S7 - Service Interface Parameters](#)
- [Sr - Service Roadmap](#)

3.279 ServiceSpecificationGeneralization

Definition

A ServiceSpecificationGeneralization is a taxonomic relationship between a more general ServiceSpecification and a more specific ServiceSpecification.

Meta Model

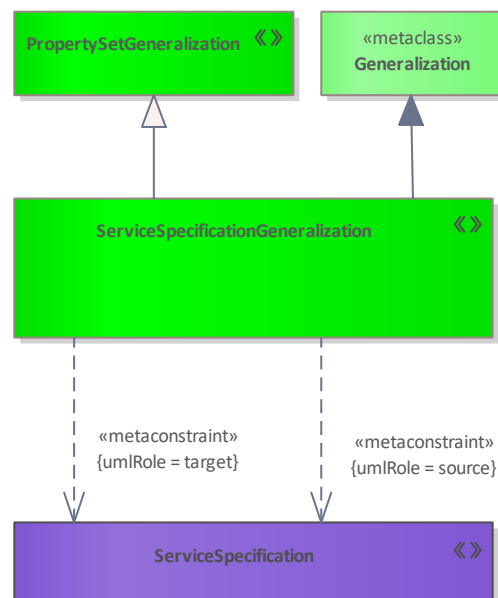


Figure 335: ServiceSpecificationGeneralization

Elements in Diagram

Name	Definition
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationGeneralization	A ServiceSpecificationGeneralization is a taxonomic relationship between a more general ServiceSpecification and a more specific ServiceSpecification.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [S1 - Service Taxonomy](#)

3.280 ServiceSpecificationRole

Definition

An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.

Meta Model

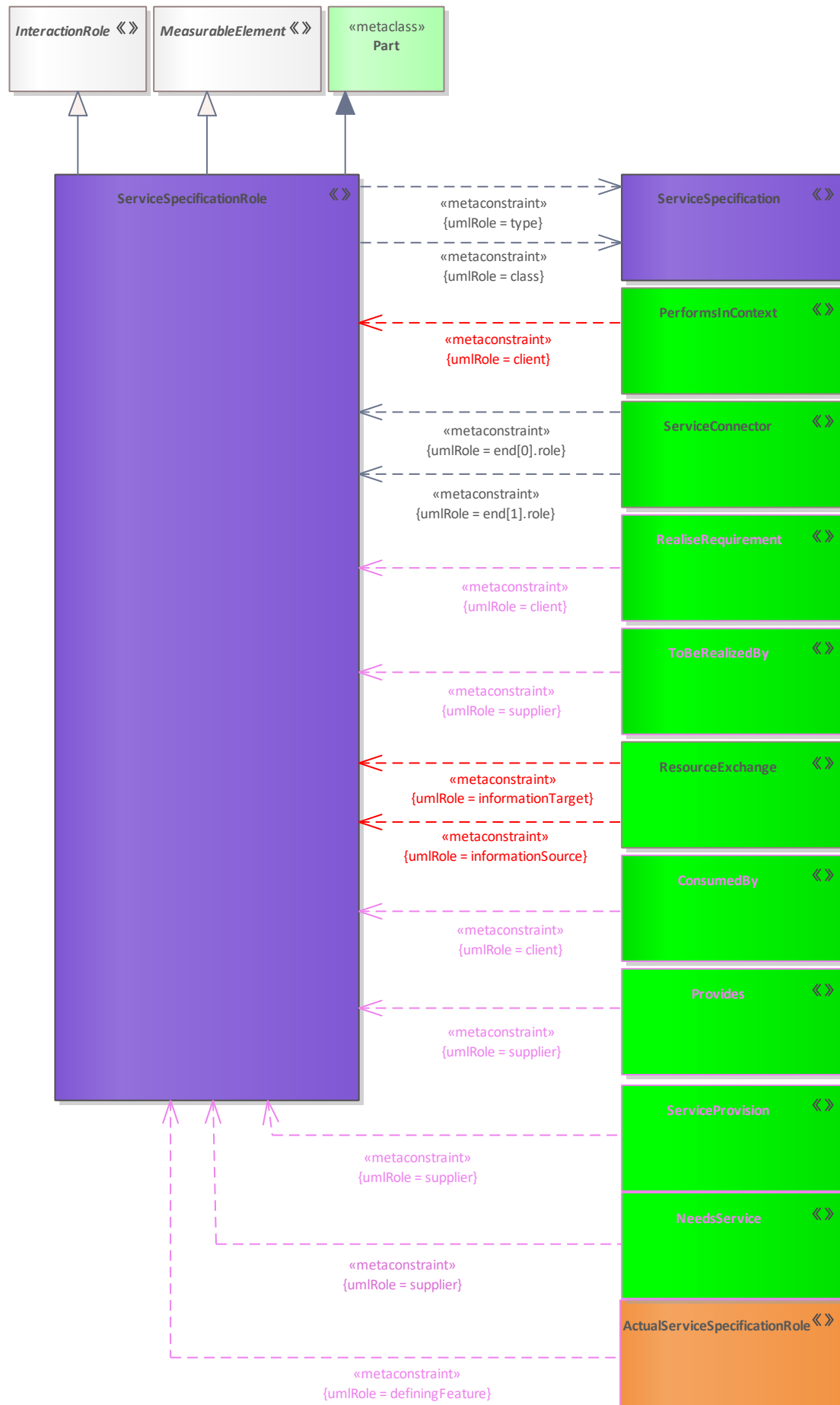


Figure 336: ServiceSpecificationRole

Elements in Diagram

Name	Definition
ActualServiceSpecificationRole	An instance of a ServiceSpecification in context of a ServiceSpecification.
ConsumedBy	Asserts that a service is consumed by a node. It is not required to know what provides the service.
InteractionRole	An abstract type that represents an individual participant in the InteractionScenario.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
NeedsService	A relation that expresses that a project needs a service
PerformsInContext	A relationship that says that a role performs an activity or action. It indicates that the action can be carried out by the role when used in a specific context or configuration.
Provides	Asserts that a operational agent provides a service.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
ResourceExchange	Asserts that a flow can exist between ResourcePerformers (i.e. flows of data, people, material, or energy).
ServiceConnector	A channel for exchange between two ServiceSpecifications. Where one acts as the consumer of the other.
ServiceProvision	An assertion that a Resource delivers a Service to a specified ServiceLevel.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSpecification calls upon another ServiceSpecification in order to deliver its stated functionality.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [L3 - Node Interaction](#)
- [L6 - Logical Sequence](#)
- [P2 - Resource Structure](#)
- [P6 - Resource Sequence](#)
- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)
- [S4 - Service Functions](#)
- [S6 - Service Interactions](#)

3.281 ServiceStateDescription

Definition

A state machine describing the behavior of a ServiceSpecification, depicting how the ServiceSpecification responds to various events and the actions.

Meta Model

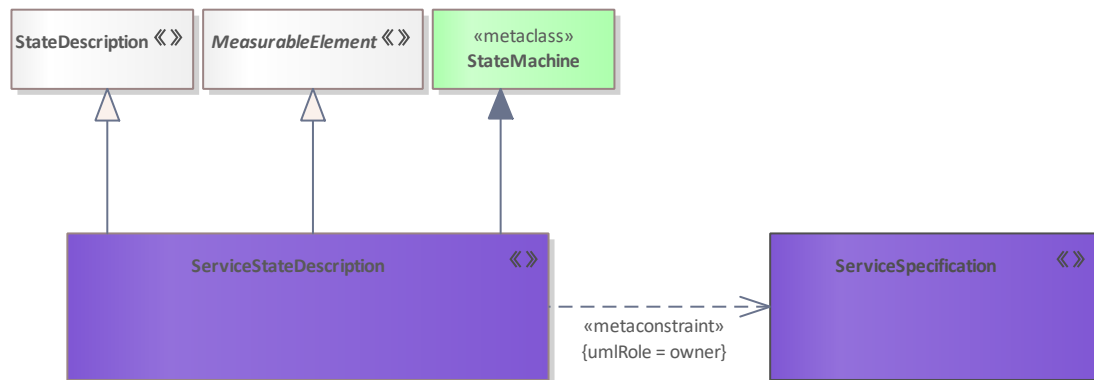


Figure 337: ServiceStateDescription

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceStateDescription	A state machine describing the behavior of a ServiceSpecification, depicting how the ServiceSpecification responds to various events and the actions.
StateDescription	An abstract type that represents a state machine (i.e. an OperationalStateDescription or ResourceStateDescription), depicting how the Asset responds to various events and the actions.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [S5 - Service States](#)

3.282 SMEReference

Definition

Element stands for a result of a workshop or expert knowledge.

Meta Model

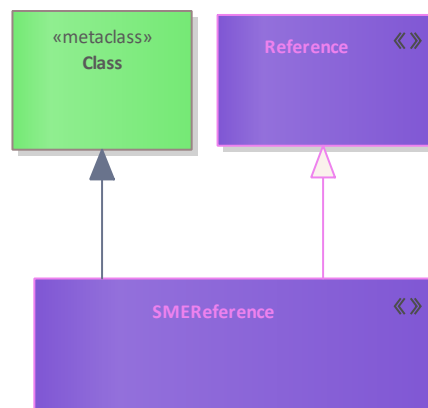


Figure 338: SMEReference

Elements in Diagram

Name	Definition
Reference	Element describes all types of references.
SMEReference	Element stands for a result of a workshop or expert knowledge.

Tagged Values

Tag Name	Valid Values
Date	Date

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)

- [R7 - Requirement Derivation](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)

3.283 Software

Definition

A sub-type of ResourceArtifact that specifies an executable computer program.

Meta Model

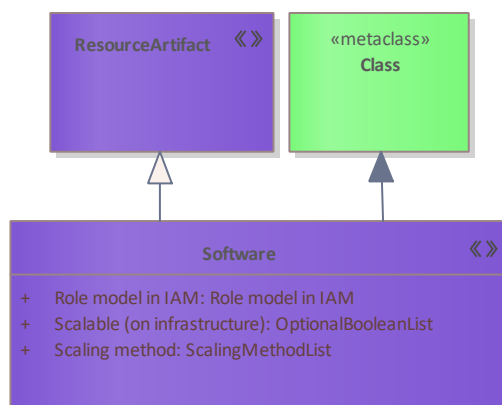


Figure 339: Software

Elements in Diagram

Name	Definition
ResourceArtifact	A type of man-made object that contains no human beings (i.e. satellite, radio, petrol, gasoline, etc.).
Software	A sub-type of ResourceArtifact that specifies an executable computer program.

Tagged Values

Tag Name	Valid Values
Role model in IAM	Vollständig, Teilweise, Nein, keine Relevanz, not set
Scalable (on infrastructure)	Ja, Nein, keine Relevanz, not set
Scaling method	Sharding, Clustering, Partitionierung, keine, keine Relevanz, not set
Scalability	scale up (vertikal), scale out (horizontal), keine Skalierung, keine Relevanz, not set
Type of scalability	keine Skalierung, Lastskalierbarkeit, räumliche Skalierung, zeitlich-räumliche Skalierung, strukturelle Skalierung, keine Relevanz, not set
materialPlanningNumber	
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L2-L3 - Logical Concept Viewpoint](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)

3.284 Stakeholder

Definition

individual, team, organization, or classes thereof, having an interest in an EnterprisePhase [ISO/IEC/IEEE 42010:2011].

Meta Model

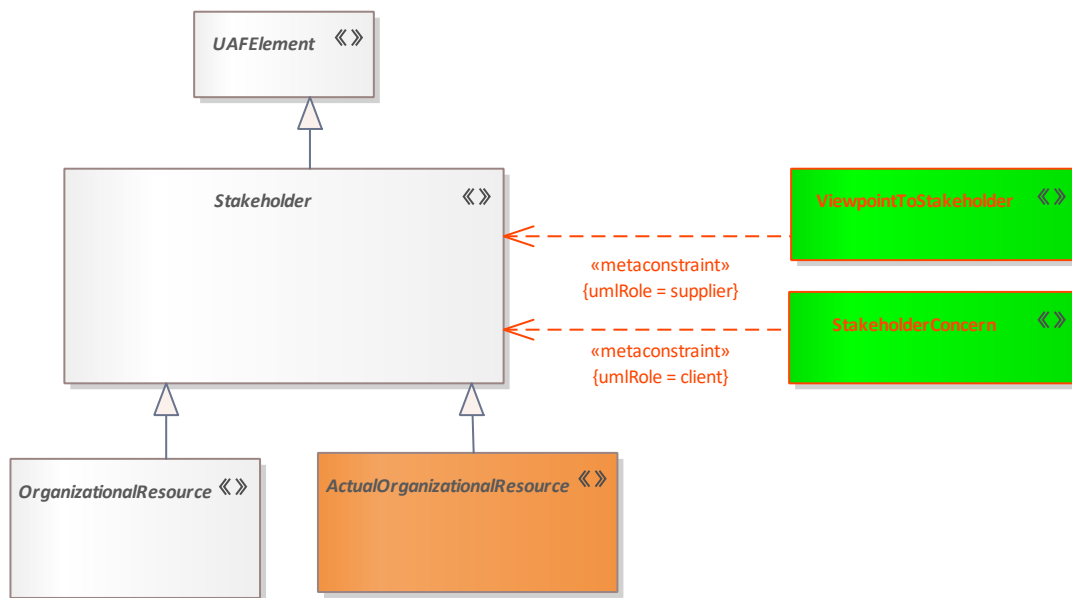


Figure 340: Stakeholder

Elements in Diagram

Name	Definition
ActualOrganizationalResource	Abstract element for an ActualOrganization, ActualPerson or ActualPost.
OrganizationalResource	An abstract type for Organization, Person Post and Responsibility.
Stakeholder	individual, team, organization, or classes thereof, having an interest in an EnterprisePhase [ISO/IEC/IEEE 42010:2011].
StakeholderConcern	A relationship that expresses which concern a stakeholder has.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.
ViewpointToStakeholder	A relationship that expresses which stakeholder needs viewpoint.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.285 StakeholderConcern

Definition

A relationship that expresses which concern a stakeholder has.

Meta Model

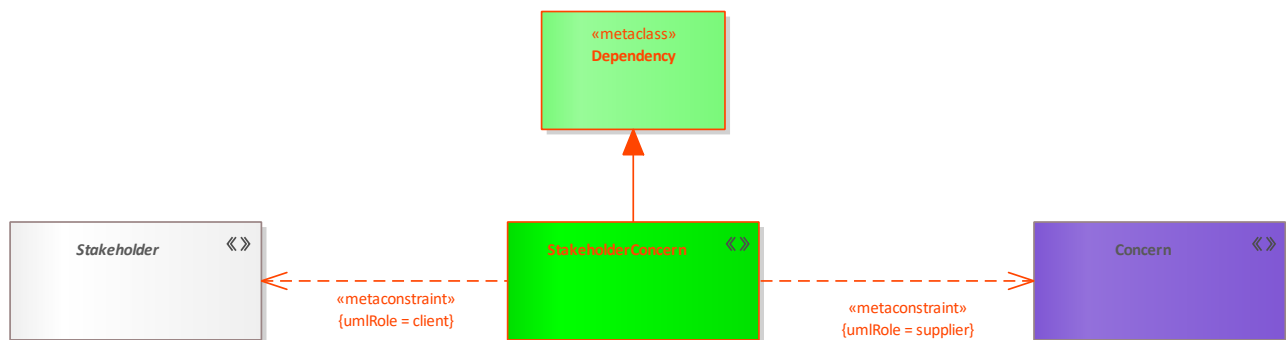


Figure 341: StakeholderConcern

Elements in Diagram

Name	Definition
Concern	Interest in an EnterprisePhase (EnterprisePhase is synonym for System in ISO 42010) relevant to one or more of its stakeholders.
Stakeholder	individual, team, organization, or classes thereof, having an interest in an EnterprisePhase [ISO/IEC/IEEE 42010:2011].
StakeholderConcern	A relationship that expresses which concern a stakeholder has.

Tagged Values

Relevant Viewpoints

- [A2 - Architecture Products](#)

3.286 Standard

Definition

A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.

Meta Model

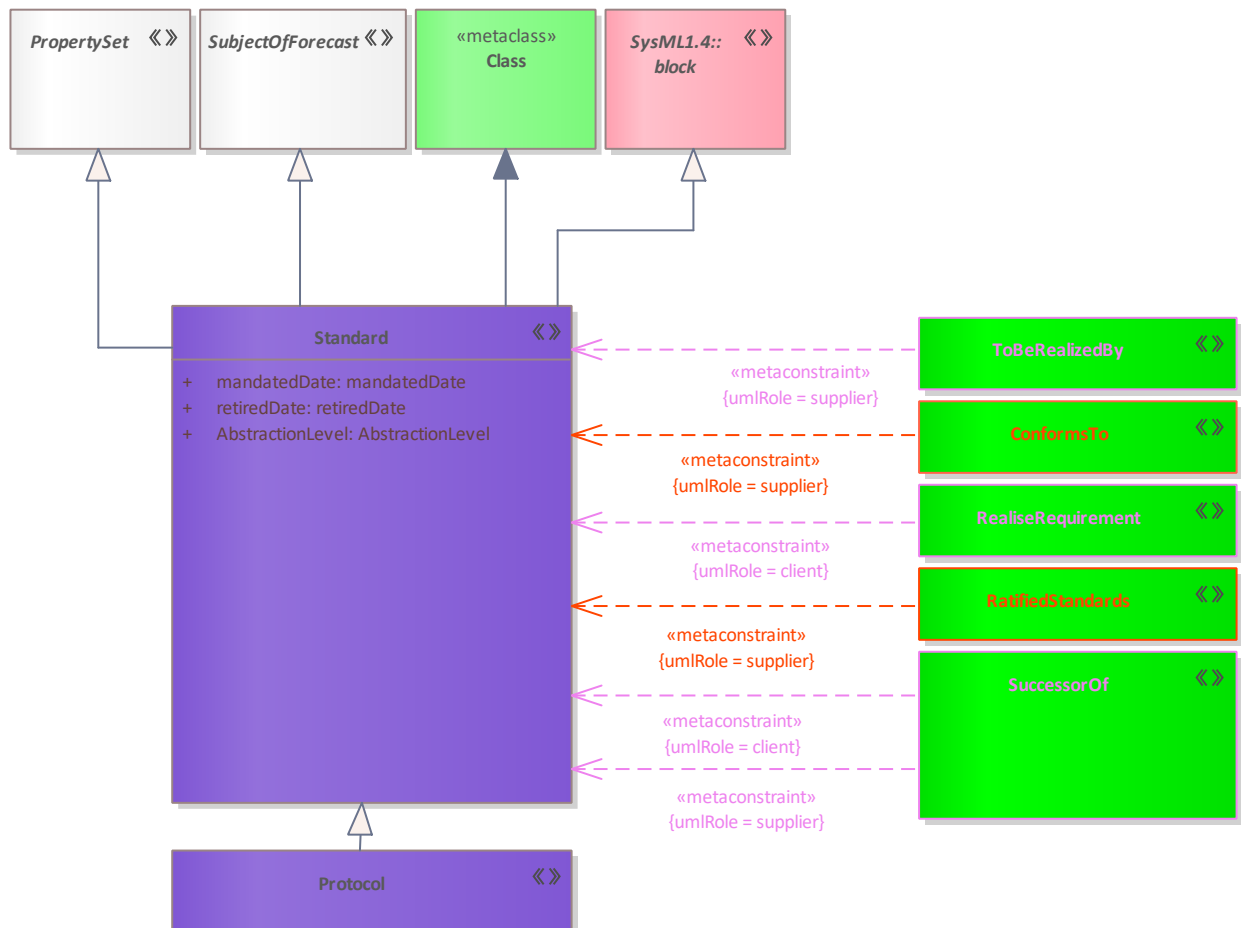


Figure 342: Standard

Elements in Diagram

Name	Definition
ConformsTo	A relationship that expresses that an UAFElement conforms to a standard.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
Protocol	A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.
RatifiedStandards	A relationship that expresses that an actual organization releases a standard.
RealiseRequirement	Relation states that a functional or non-functional requirement is realized through this element.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.
SubjectOfForecast	An abstract type grouping elements that can be the subject of a Forecast.
SuccessorOf	A relationship between two elements that indicates that one element is the successor of the other.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Tag Name	Valid Values
mandatedDate	mandatedDate
retiredDate	retiredDate
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [A1 - Meta-Data Definitions](#)
- [A2 - Architecture Products](#)
- [A3 - Architecture Correspondence](#)
- [A6 - Architecture Versions](#)
- [A7 - Architecture Compliance](#)
- [A8 - Standards](#)
- [Ar - Architecture Roadmap](#)
- [C1 - Capability Taxonomy](#)
- [C1-S1 - Capability to Service Mapping](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)
- [C8 - Planning Assumption](#)
- [Cr - Capability Roadmap](#)
- [L1 - Node Types](#)
- [L2 - Logical Scenario](#)
- [L2-L3 - Logical Concept Viewpoint](#)
- [L3 - Node Interaction](#)
- [L4 - Logical Activities](#)
- [L4-P4 Activity to Function Mapping](#)
- [L5 - Logical States](#)
- [L6 - Logical Sequence](#)
- [L8 - Logical Constraints](#)
- [Lr - Lines of Development](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [P4 - Resource Functions](#)
- [P5 - Resource States](#)
- [P6 - Resource Sequence](#)
- [P7 - Data Model](#)
- [P8 - Resource Constraints](#)
- [Pr - Configuration Management](#)
- [R2 - Requirement Catalogue](#)
- [R3 - Requirement Dependencies](#)
- [R7 - Requirement Derivation](#)
- [R8 - Requirement Fulfilment](#)
- [Rr - Requirement Realization](#)
- [S1 - Service Taxonomy](#)
- [S2 - Service Structure](#)
- [S3 - Service Interfaces](#)
- [S4 - Service Functions](#)
- [S5 - Service States](#)
- [S6 - Service Interactions](#)
- [S7 - Service Interface Parameters](#)
- [S8 - Service Policy](#)
- [Sr - Service Roadmap](#)

3.287 StandardOperationalActivity

Definition

A sub-type of OperationalActivity that is a standard operating procedure.

Meta Model

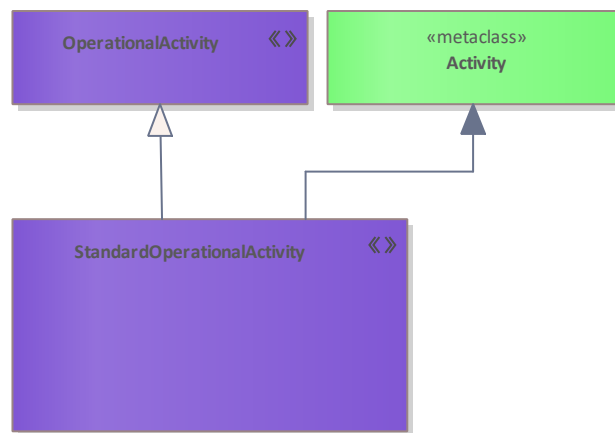


Figure 343: StandardOperationalActivity

Elements in Diagram

Name	Definition
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
StandardOperationalActivity	A sub-type of OperationalActivity that is a standard operating procedure.

Tagged Values

Tag Name	Valid Values
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [L4 - Logical Activities](#)

3.288 StateDescription

Definition

An abstract type that represents a state machine (i.e. an `OperationalStateDescription` or `ResourceStateDescription`), depicting how the Asset responds to various events and the actions.

Meta Model

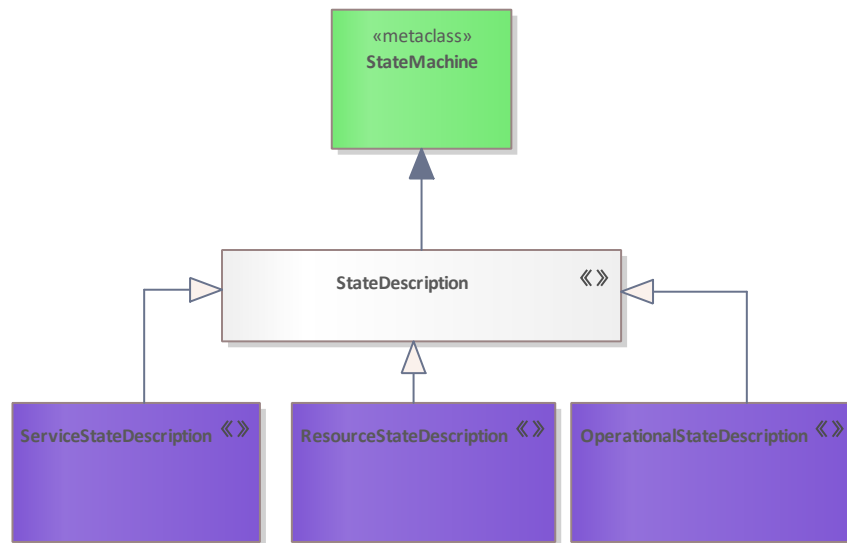


Figure 344: StateDescription

Elements in Diagram

Name	Definition
OperationalStateDescription	A state machine describing the behavior of a <code>OperationalPerformer</code> , depicting how the <code>OperationalPerformer</code> responds to various events and the actions.
ResourceStateDescription	A state machine describing the behavior of a <code>ResourcePerformer</code> , depicting how the <code>ResourcePerformer</code> responds to various events and the actions.
ServiceStateDescription	A state machine describing the behavior of a <code>ServiceSpecification</code> , depicting how the <code>ServiceSpecification</code> responds to various events and the actions.
StateDescription	An abstract type that represents a state machine (i.e. an <code>OperationalStateDescription</code> or <code>ResourceStateDescription</code>), depicting how the Asset responds to various events and the actions.

Tagged Values

Relevant Viewpoints

3.289 StatementTask

Definition

A relationship that expresses that an actual enterprise phase fulfills a actual enduring task.

Meta Model

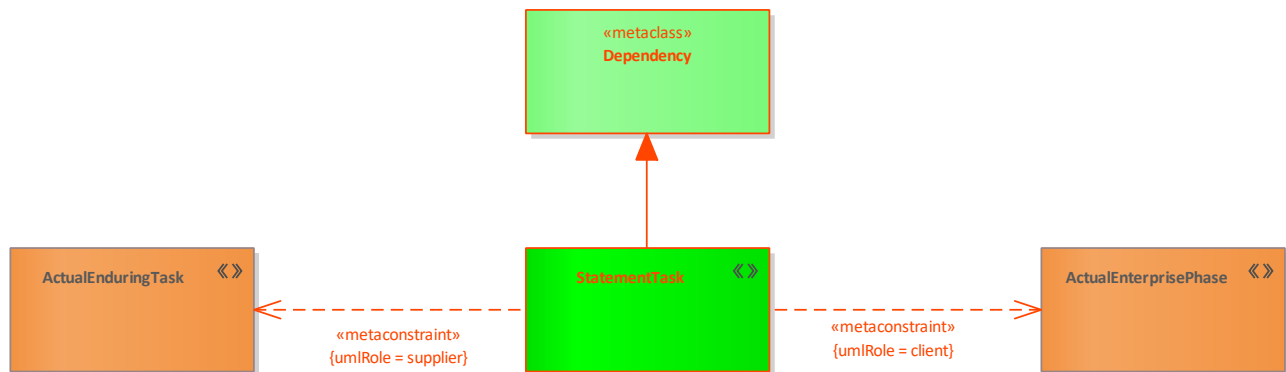


Figure 345: StatementTask

Elements in Diagram

Name	Definition
ActualEnduringTask	An actual undertaking recognized by an enterprise as being essential to achieving its goals - i.e. a strategic specification of what the enterprise does.
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
StatementTask	A relationship that expresses that an actual enterprise phase fulfills a actual enduring task.

Tagged Values

Relevant Viewpoints

- [C2 - Enterprise Vision](#)

3.290 StemsFrom

Definition

Relationship that states that one requirement stems from another.

Meta Model

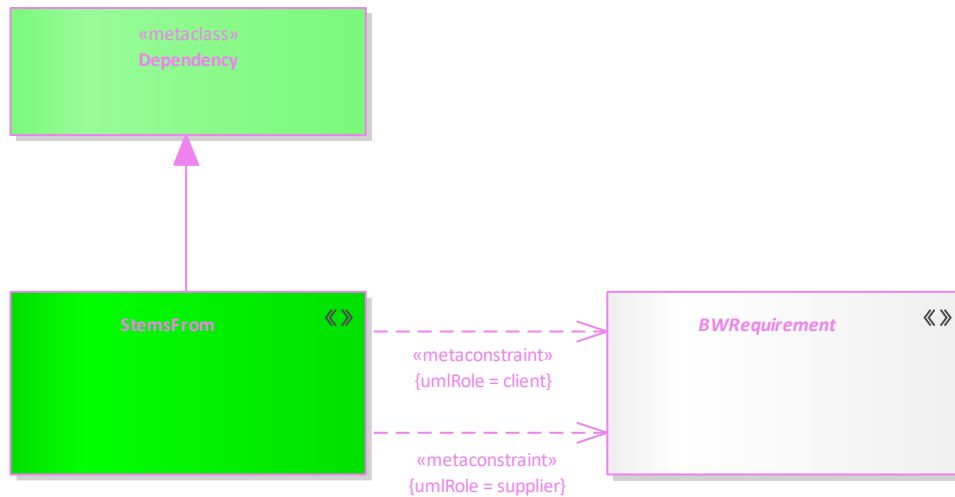


Figure 346: StemsFrom

Elements in Diagram

Name	Definition
BWRequirement	Abstract base class for requirements.
StemsFrom	Relationship that states that one requirement stems from another.

Tagged Values

Relevant Viewpoints

- [R3 - Requirement Dependencies](#)

3.291 StoredIn

Definition

Relation states that a digital form or data is stored in software.

Meta Model

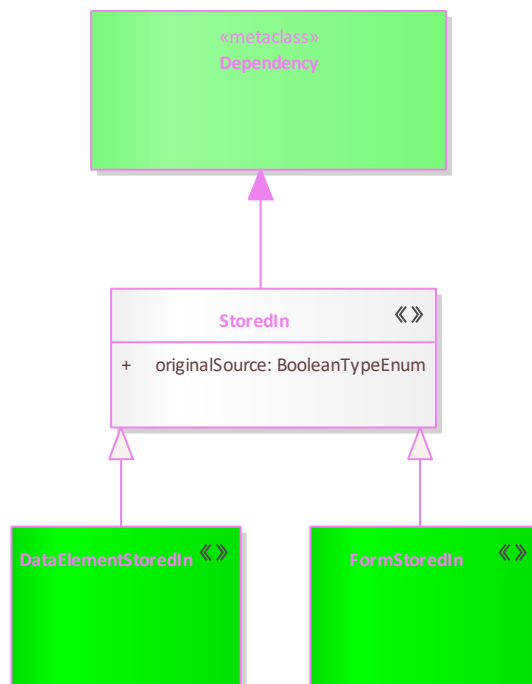


Figure 347: StoredIn

Elements in Diagram

Name	Definition
DataElementStoredIn	Relation says that a data is stored in software.
FormStoredIn	Relation states that a digital form is stored in software.
StoredIn	Relation states that a digital form or data is stored in software.

Tagged Values

Tag Name	Valid Values
originalSource	true, false, unknown, not set

Relevant Viewpoints

3.292 StrategicConstraint

Definition

A Rule governing a capability.

Meta Model

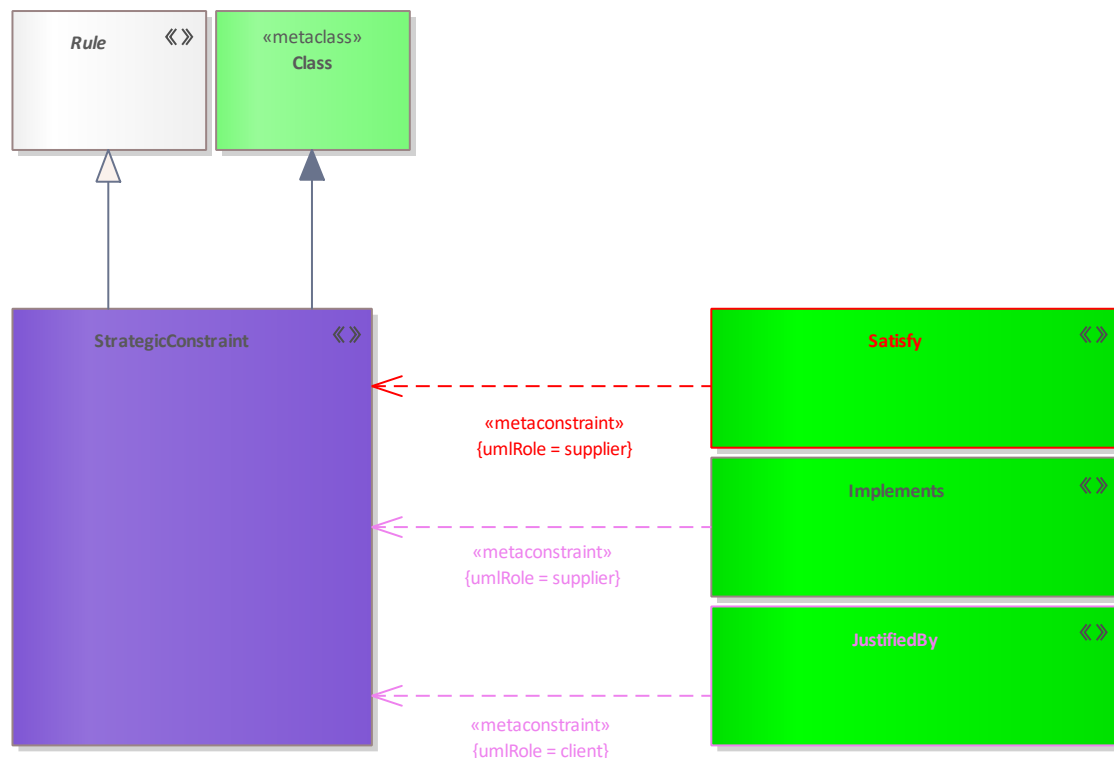


Figure 348: StrategicConstraint

Elements in Diagram

Name	Definition
Implements	A tuple that defines how an element in the upper layer of abstraction is implemented by a semantically equivalent element (i.e. tracing the OperationalActivities to the Functions that implement them) in the lower level of abstraction.
JustifiedBy	Relation states that an Constraint is derived from a reference (Reference, DocumentReference, SMEReference).
Rule	An abstract type for all types of constraint (i.e. an OperationalConstraint could detail the rules of accountancy best practice).
Satisfy	This relation states that an constraint affects an element.
StrategicConstraint	A Rule governing a capability.

Tagged Values

Tag Name	Valid Values
ruleKind	StructuralAssertion, ActionAssertion, Derivation, Contract, Constraint, Guidance, SecurityPolicy, Caveat
URI	String

Relevant Viewpoints

- [C1 - Capability Taxonomy](#)
- [C2 - Enterprise Vision](#)
- [C3 - Capability Dependencies](#)
- [C4 - Standard Processes](#)
- [C5 - Effects](#)
- [C7 - Performance Parameters](#)

- [C8 - Planning Assumption](#)
- [L8 - Logical Constraints](#)
- [P8 - Resource Constraints](#)
- [S8 - Service Policy](#)

3.293 SubjectOfForecast

Definition

An abstract type grouping elements that can be the subject of a Forecast.

Meta Model

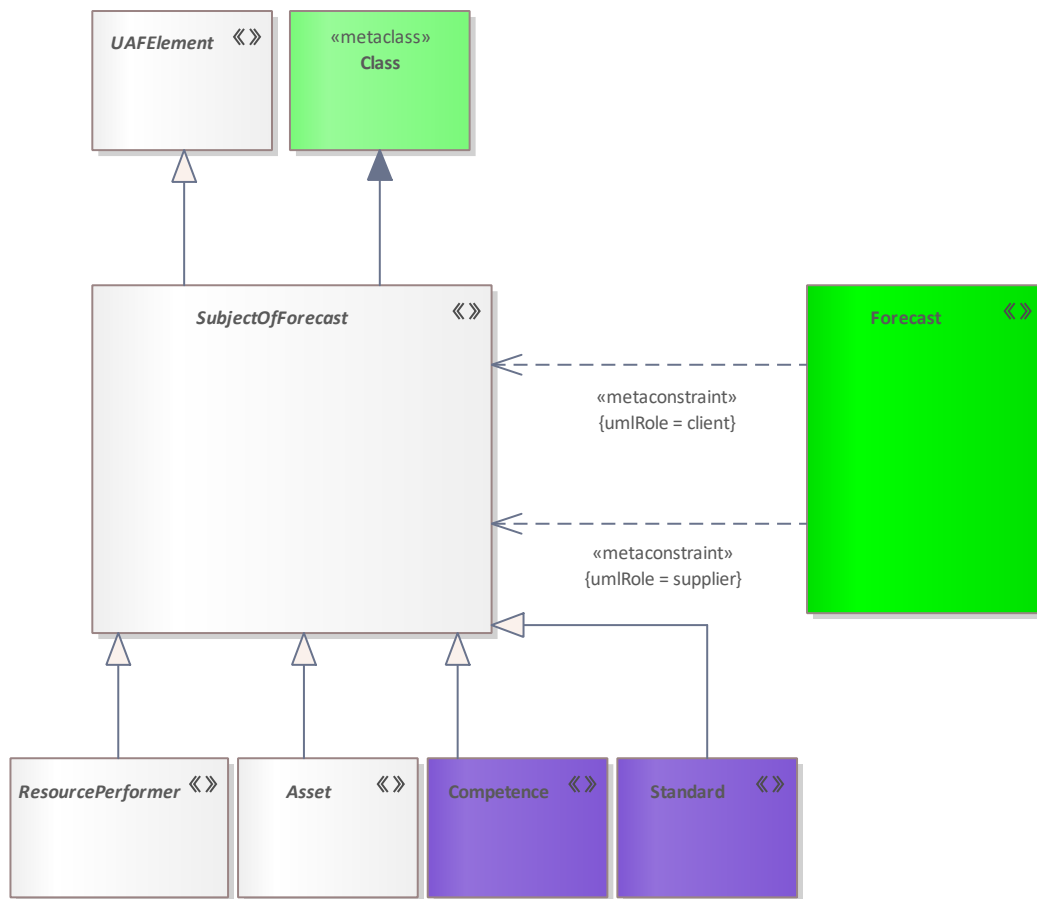


Figure 349: SubjectOfForecast

Elements in Diagram

Name	Definition
Asset	Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.
Competence	A specific set of abilities defined by knowledge, skills and aptitude.
Forecast	A tuple that specifies a transition from one Asset, Standard, Competence to another future one. It is related to an ActualEnterprisePhase to give it a temporal context.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.
SubjectOfForecast	An abstract type grouping elements that can be the subject of a Forecast.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
----------	--------------

URI	String
-----	--------

Relevant Viewpoints

3.294 SubjectOfOperationalConstraint

Definition

An abstract type grouping elements that can be the subject of an OperationalConstraint.

Meta Model

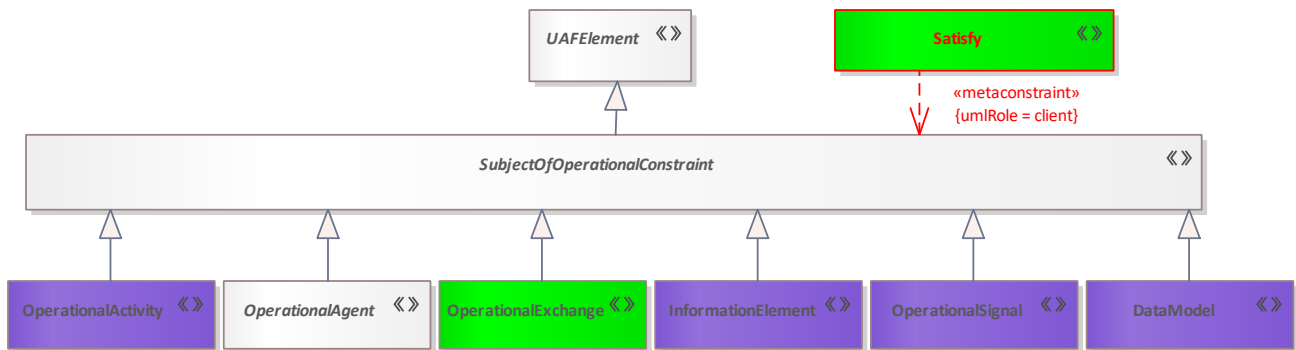


Figure 350: SubjectOfOperationalConstraint

Elements in Diagram

Name	Definition
DataModel	A structural specification of data types, showing relationships between them that is devoid of implementation detail. The type of data captured in the DataModel is described using the enumeration DataModelKind (Conceptual, Logical and Physical).
InformationElement	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable to perform (see IsCapableToPerform).
OperationalActivity	An Activity that captures a logical process, specified independently of how the process is carried out.
OperationalAgent	An abstract type grouping Operational Architecture and Operational Performer.
OperationalExchange	Asserts that a flow can exist between OperationalPerformers (i.e. flows of information, people, materiel, or energy).
OperationalSignal	An item of information that flows between OperationalPerformers and is produced and consumed by the OperationalActivities that the OperationalPerformers are capable of performing (see IsCapableToPerform).
Satisfy	This relation states that an constraint affects an element.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.295 SubjectOfResourceConstraint

Definition

An abstract type grouping elements that can be the subject of a ResourceConstraint.

Meta Model



Figure 351: SubjectOfResourceConstraint

Elements in Diagram

Name	Definition
ActualResource	Role in an Organisation, where the role carries the authority to undertake a function - through the ActualOrganizationalResource given the role has the responsibility.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
DataModel	A structural specification of data types, showing relationships between them that is devoid of implementation detail. The type of data captured in the DataModel is described using the enumeration DataModelKind (Conceptual, Logical and Physical).
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
Satisfy	This relation states that an constraint affects an element.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.296 SubjectOfSecurityConstraint

Definition

An abstract grouping of elements that can be the subject of a SecurityConstraint.
Element is not used in the current version of the framework and reserved for future developments.

Meta Model

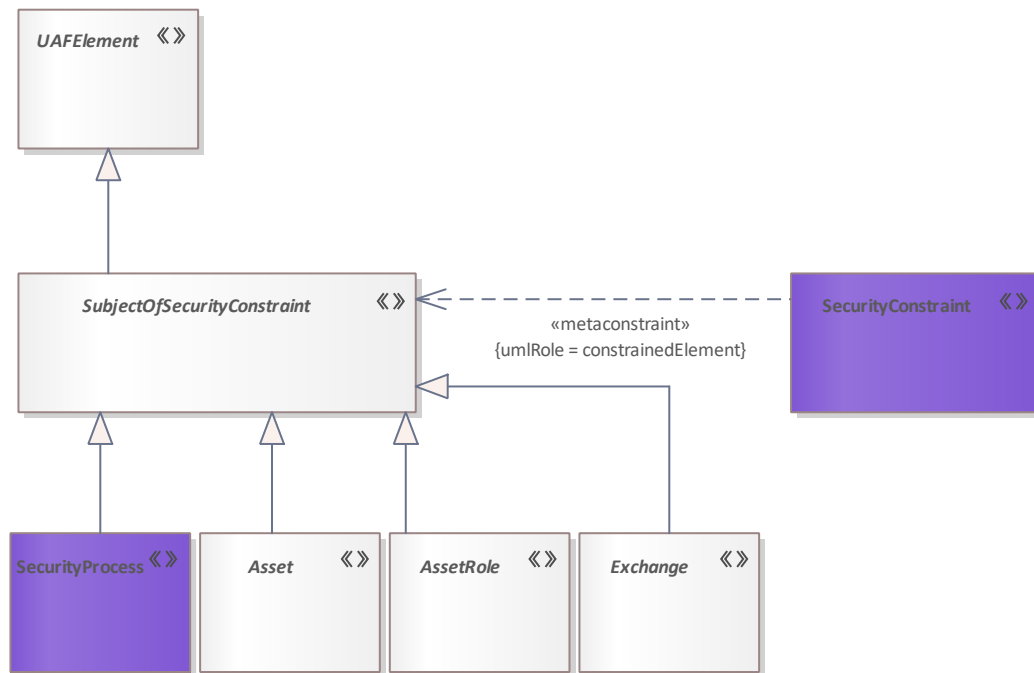


Figure 352: SubjectOfSecurityConstraint

Elements in Diagram

Name	Definition
Asset	Asset as applied to Security views, an abstract type that indicates the types of elements that can be considered as a subject for security analysis.
AssetRole	AssetRole as applied to Security views, an abstract element that indicates the type of elements that can be considered as a subject for security analysis in the particular context (currently no security viewpoints in the framework).
Exchange	Abstract tuple, grouping OperationalExchanges and ResourceExchanges that exchange Resources.
SecurityConstraint	A type of rule that captures a formal statement to define security laws, regulations, guidances, and policy. Element is not used in the current version of the framework and reserved for future developments.
SecurityProcess	The security-related procedure that satisfies the security control requirement. Element is not used in the current version of the framework and reserved for future developments.
SubjectOfSecurityConstraint	An abstract grouping of elements that can be the subject of a SecurityConstraint. Element is not used in the current version of the framework and reserved for future developments.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Tagged Values

Tag Name	Valid Values
----------	--------------

URI	String
-----	--------

Relevant Viewpoints

3.297 SubOrganization

Definition

A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).

Meta Model

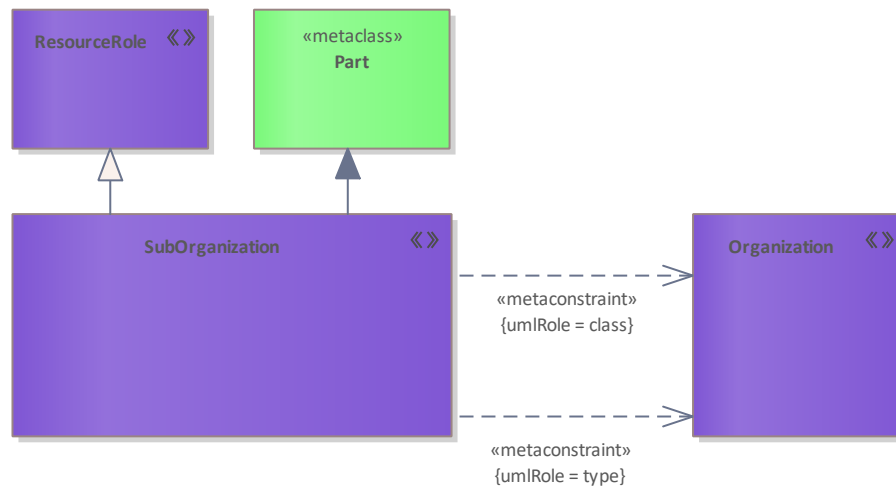


Figure 353: SubOrganization

Elements in Diagram

Name	Definition
Organization	A group of OrganizationalResources (Persons, Posts, Organizations and Responsibilities) associated for a particular purpose.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
SubOrganization	A type of a human being used to define the characteristics that need to be described for ActualPersons (e.g. properties such as address, telephone number, nationality, etc).

Tagged Values

Tag Name	Valid Values
roleKind	Part, Component, Used Configuration, Used Physical Architecture, Human Resource, Platform, System, Sub Organisation, Post Role, Responsibility Role, Equipment, Sub System Part, Hosted Software, Artifact Component, Natural Resource Component, Other
Virtualization level	vollständige Virtualisierung, Paravirtualisierung, Betriebssystemvirtualisierung, nicht virtualisiert, keine Relevanz, not set
Virtualization location	Bare Metal, Hosted, keine Virtualisierung, keine Relevanz, not set
SecurityDomain	String
IT security accreditation	akkreditiert VS-NfD, akkreditiert Geheim, konform VS-NfD, konform Geheim, nicht akkreditiert, keine Relevanz, not set
Programming language	ABAP, Java, PHP, C++, C#, Python, keine Relevanz, not set
x86 processor architecture	Ja, Nein, begründete Abweichung, keine Relevanz, not set
URI	String

Relevant Viewpoints

- [L3 - Node Interaction](#)

- [P2 - Resource Structure](#)

3.298 SuccessorOf

Definition

A relationship between two elements that indicates that one element is the successor of the other.

Meta Model

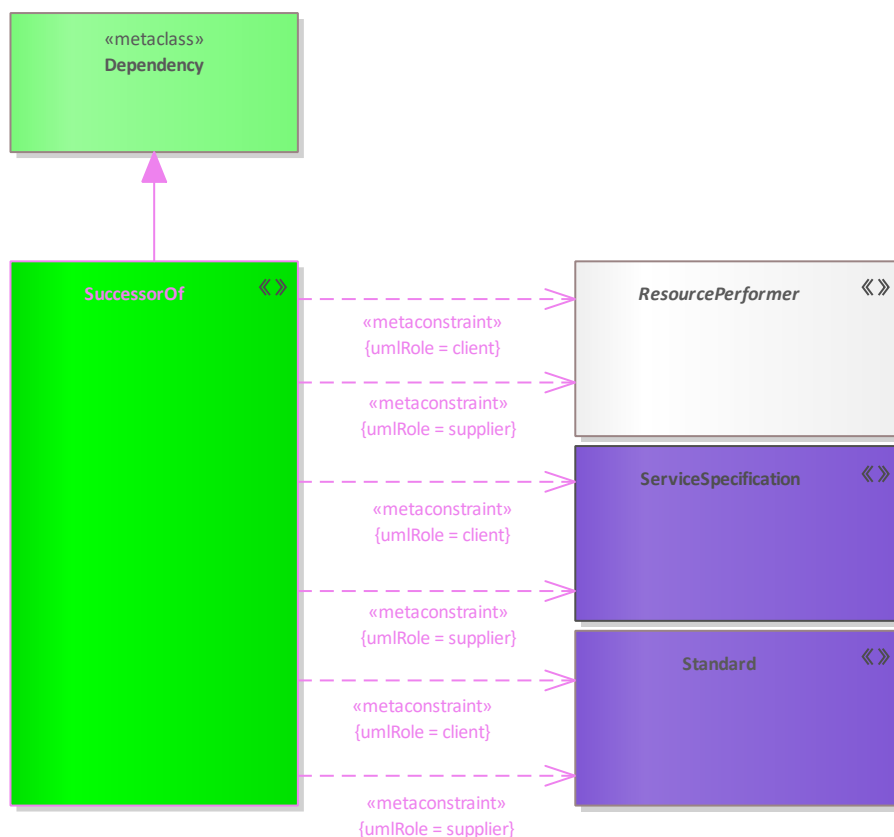


Figure 354: SuccessorOf

Elements in Diagram

Name	Definition
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.
SuccessorOf	A relationship between two elements that indicates that one element is the successor of the other.

Tagged Values

Relevant Viewpoints

- [Pr - Configuration Management](#)

3.299 System

Definition

An integrated set of elements, subsystems, or assemblies that accomplish a defined objective. These elements include products (hardware, software, firmware), processes, people, information, techniques, facilities, services, and other support elements (INCOSE SE Handbook V4, 2015).

Meta Model

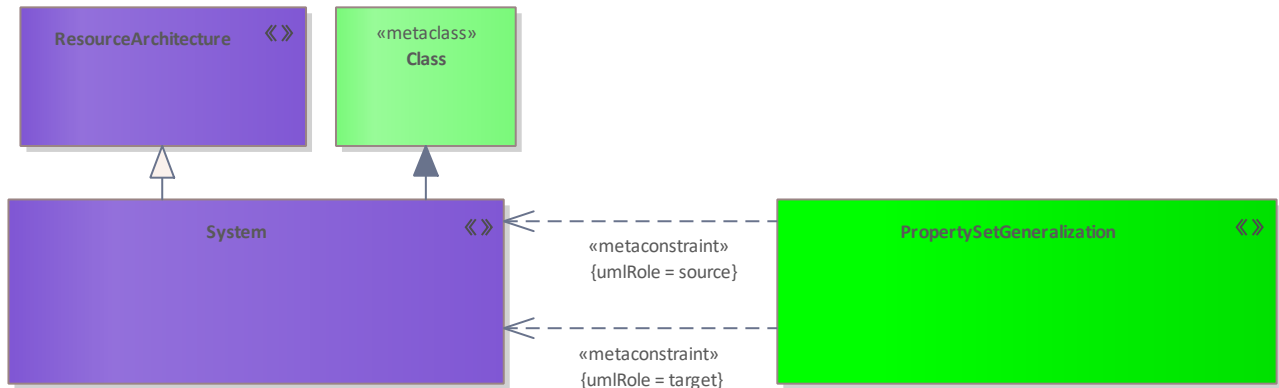


Figure 355: System

Elements in Diagram

Name	Definition
ResourceArchitecture	A type used to denote a model of the Architecture, described from the ResourcePerformer perspective.
System	An integrated set of elements, subsystems, or assemblies that accomplish a defined objective. These elements include products (hardware, software, firmware), processes, people, information, techniques, facilities, services, and other support elements (INCOSE SE Handbook V4, 2015).

Tagged Values

Tag Name	Valid Values
materialPlanningNumber	
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [L2-L3 - Logical Concept Viewpoint](#)
- [P1- Resource Types](#)
- [P2 - Resource Structure](#)
- [P3 - Resource Connectivity](#)
- [Rr - Requirement Realization](#)
- [S2 - Service Structure](#)

3.300 Technology

Definition

A sub type of ResourceArtifact that indicates a technology domain, i.e. nuclear, mechanical, electronic, mobile telephony etc.

Meta Model

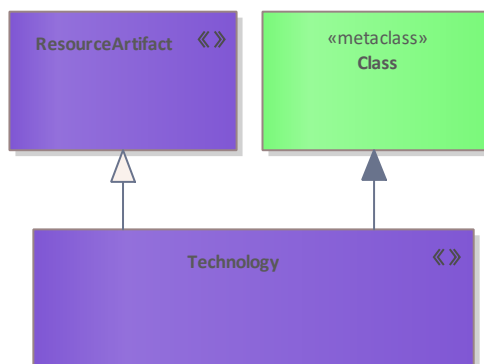


Figure 356: Technology

Elements in Diagram

Name	Definition
ResourceArtifact	A type of man-made object that contains no human beings (i.e. satellite, radio, petrol, gasoline, etc.).
Technology	A sub type of ResourceArtifact that indicates a technology domain, i.e. nuclear, mechanical, electronic, mobile telephony etc.

Tagged Values

Tag Name	Valid Values
Scalability	scale up (vertikal), scale out (horizontal), keine Skalierung, keine Relevanz, not set
Scaling method	Sharding, Clustering, Partitionierung, keine, keine Relevanz, not set
Type of scalability	keine Skalierung, Lastskalierbarkeit, räumliche Skalierung, zeitlich-räumliche Skalierung, strukturelle Skalierung, keine Relevanz, not set
materialPlanningNumber	
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [P1- Resource Types](#)

3.301 TemporalPart

Definition

A current or future state of the wholeLifeEnterprise or another EnterprisePhase.

Meta Model

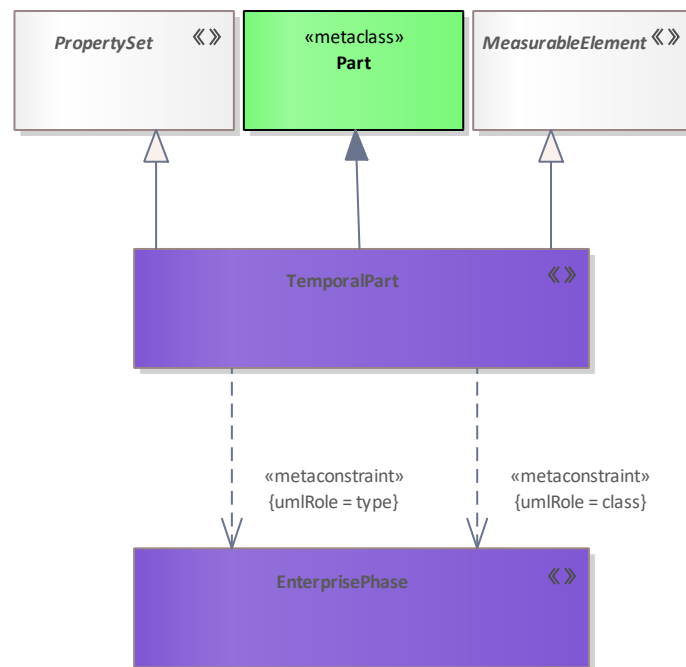


Figure 357: TemporalPart

Elements in Diagram

Name	Definition
EnterprisePhase	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
TemporalPart	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [C2 - Enterprise Vision](#)

3.302 ToBeRealizedBy

Definition

Relation states that a functional or non-functional requirement should be realized through this element.

Meta Model

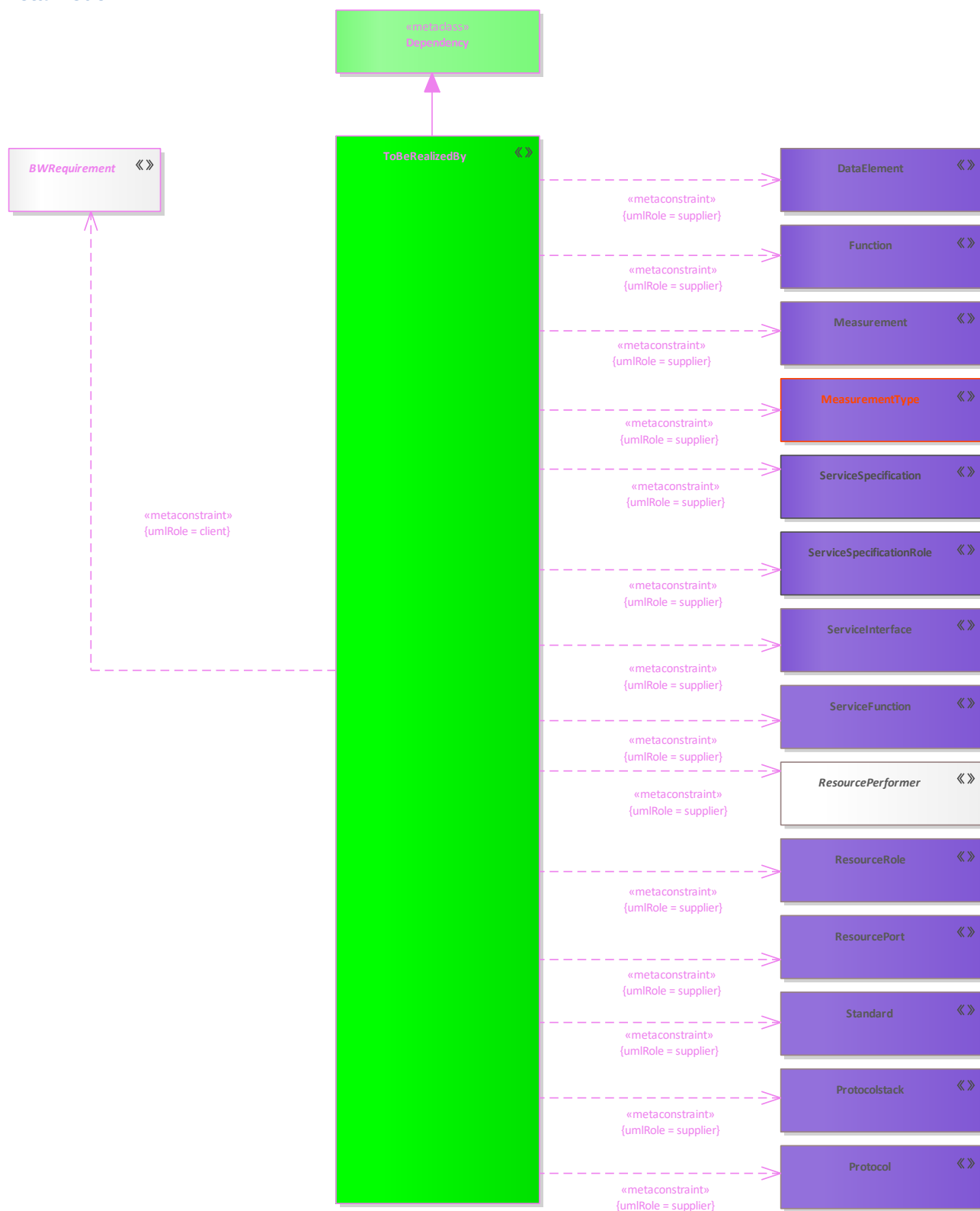


Figure 358: ToBeRealizedBy

Elements in Diagram

Name	Definition
BWRequirement	Abstract base class for requirements.
DataElement	A formalized representation of data that is managed by or exchanged between resources.
Function	An Activity which is specified in the context to the ResourcePerformer (human or machine) that IsCapableToPerform it.
Measurement	A property of an element representing something in the physical world, expressed in amounts of a unit of measure.
MeasurementType	A type of a property representing something in the physical world, expressed in amounts of a unit of measure.
Protocol	A Standard for communication over a network. Protocols may be composite, represented as a ProtocolStack made up of ProtocolLayers.
Protocolstack	A sub type of Protocol that contains the ProtocolLayers, defining a complete stack.
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ResourcePort	An interaction point for a ResourcePerformer through which it can interact with the outside environment and which is defined by a ResourceInterface.
ResourceRole	Usage of a ResourcePerformer in the context of another ResourcePerformer. Creates a whole-part relationship.
ServiceFunction	An Activity that describes the abstract behavior of ServiceSpecifications, regardless of the actual implementation.
ServiceInterface	A contract that defines the ServiceMethods and ServiceMessageHandlers that the ServiceSpecification realizes.
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
ServiceSpecificationRole	An assertion that a ServiceSecification calls upon another ServiceSpecification in order to deliver its stated functionality.
Standard	A ratified and peer-reviewed specification that is used to guide or constrain the architecture. A Standard may be applied to any element in the architecture.
ToBeRealizedBy	Relation states that a functional or non-functional requirement should be realized through this element.

Tagged Values

Relevant Viewpoints

- [R7 - Requirement Derivation](#)

3.303 UAFElement

Definition

Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.

Meta Model

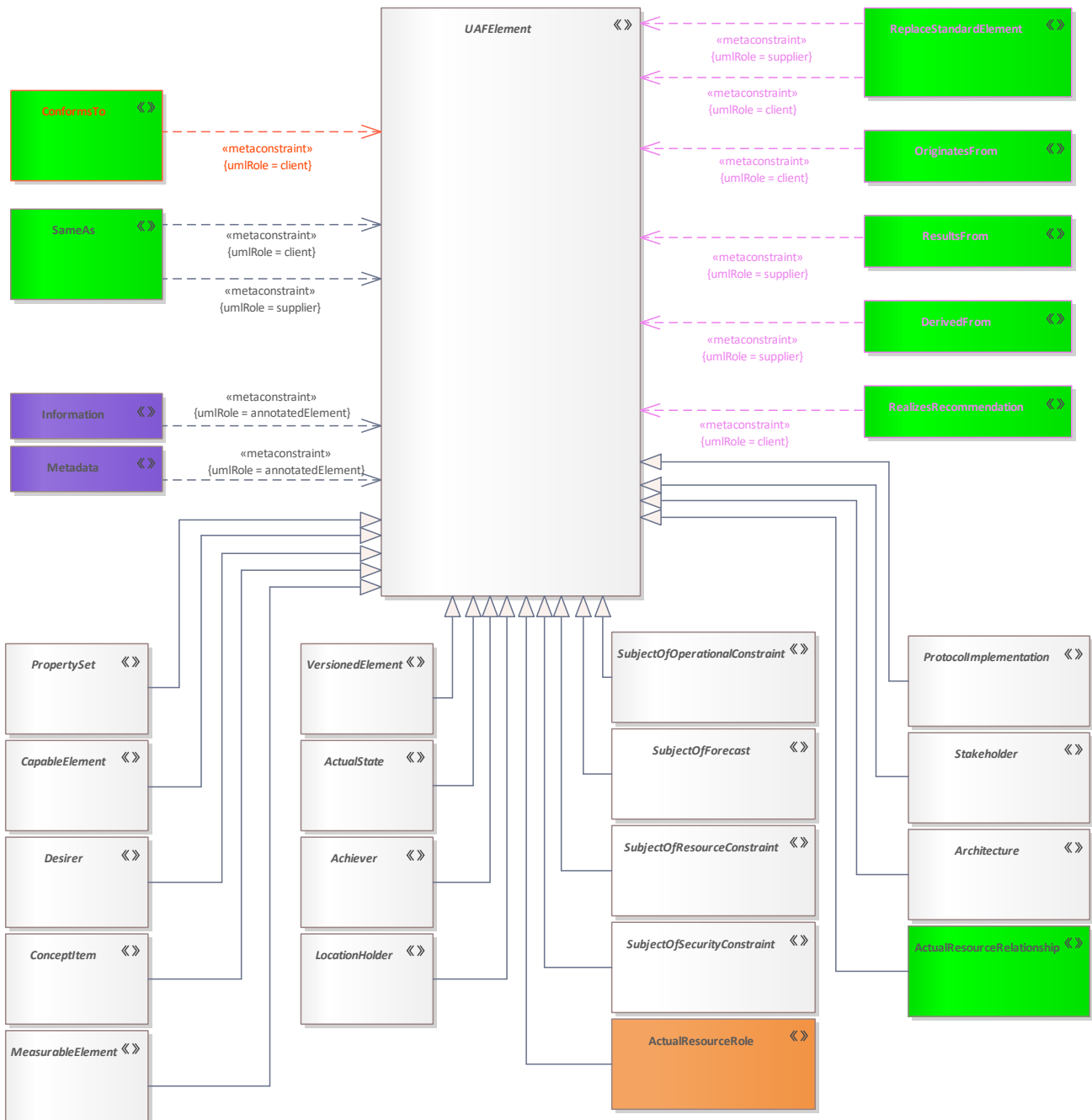


Figure 359: UAFElement

Elements in Diagram

Name	Definition
Achiever	An ActualResource, ActualProject or ActualEnterprisePhase that can deliver a DesiredEffect.
ActualResourceRelationship	An actual resource flow existing between ActualResources (i.e. flow of data, people, materiel, or energy).
ActualResourceRole	An instance of a ResourcePerformer.
ActualState	Abstract element that applies temporal extent to a set of elements realized as Instance Specifications.

Name	Definition
Architecture	An abstract type that represents a generic architecture. Subtypes are OperationalArchitecture and ResourceArchitecture.
CapableElement	An abstract type that represents a structural element that can perform behaviors (i.e. OperationalActivity).
ConceptItem	Abstract, an item which may feature in a HighLevelOperationalConcept.
ConformsTo	A relationship that expresses that an UAFElement conforms to a standard.
DerivedFrom	Relation that shows that a functional or non-functional requirement is based on a process, role and task carrier, information element or other element.
Desirer	Abstract type used to group architecture elements that might desire a particular effect.
Information	A comment that describes the state of an item of interest in any medium or form -- and is communicated or received.
LocationHolder	Abstract type, used to group elements that are allowed to be associated with a Location.
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
Metadata	A comment that can be applied to any element in the architecture. The attributes associated with this element details the relationship between the element and its related dublinCoreElement, metaDataScheme, category and name. This allows the element to be referenced using the Semantic Web.
OriginatesFrom	Relation that derives an element in the architectural model from a reference (Reference, DocumentReference, SMEReference).
PropertySet	An abstract type grouping architectural elements that can own Measurements.
ProtocolImplementation	An abstract type grouping architectural elements that can implement Protocols.
RealizesRecommendation	Relation states that a Recommendation is realized through this element.
ReplaceStandardElement	Relation that represents a replacement of a standard element with another standard element
ResultsFrom	Relationship expresses that an element of architecture is the reason for a finding.
SameAs	A tuple that asserts that two elements refer to the same real-world thing.
Stakeholder	individual, team, organization, or classes thereof, having an interest in an EnterprisePhase [ISO/IEC/IEEE 42010:2011].
SubjectOfForecast	An abstract type grouping elements that can be the subject of a Forecast.
SubjectOfOperationalConstraint	An abstract type grouping elements that can be the subject of an OperationalConstraint.
SubjectOfResourceConstraint	An abstract type grouping elements that can be the subject of a ResourceConstraint.
SubjectOfSecurityConstraint	An abstract grouping of elements that can be the subject of a SecurityConstraint. Element is not used in the current version of the framework and reserved for future developments.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.
VersionedElement	An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.304 VersionedElement

Definition

An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.

Meta Model

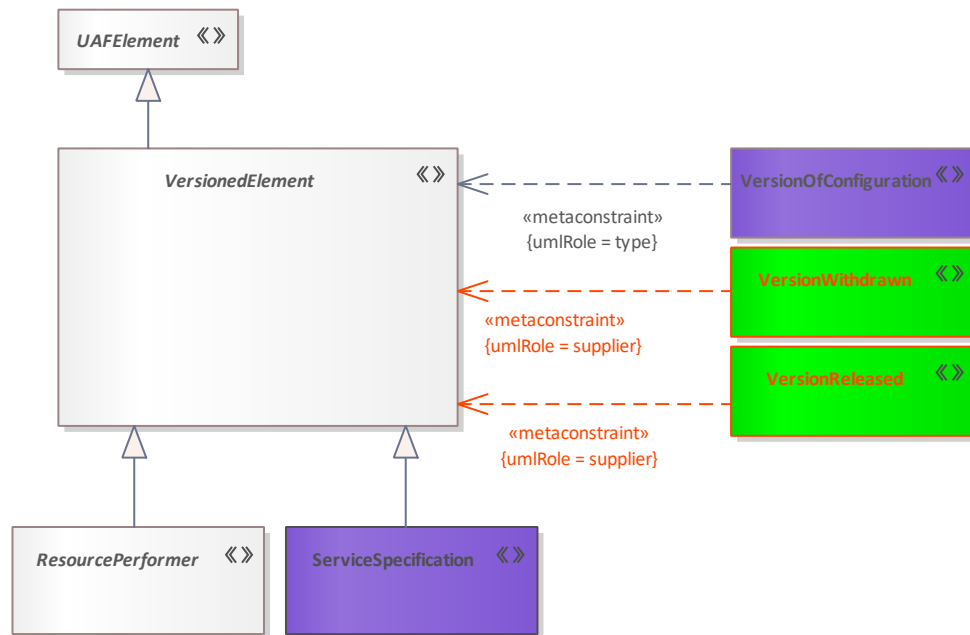


Figure 360: VersionedElement

Elements in Diagram

Name	Definition
ResourcePerformer	An abstract type grouping elements that can be the subject of a SecurityConstraint (there are currently no security viewpoints in the NAF).
ServiceSpecification	The specification of a set of functionality provided one element for the use of others.
UAFElement	Abstract super type for all of the UAF elements. It provides a way for all of the UAF elements to have a common set of properties.
VersionedElement	An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.
VersionOfConfiguration	A property of a WholeLifeConfiguration, used in version control of a VersionedElement. It asserts that a VersionedElement is a version of a WholeLifeConfiguration.
VersionReleased	A relationship that expresses that an actual project milestone releases an versioned element.
VersionWithdrawn	A relationship that expresses that an actual project milestone withdraws an versioned element.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

3.305 VersionOfConfiguration

Definition

A property of a WholeLifeConfiguration, used in version control of a VersionedElement. It asserts that a VersionedElement is a version of a WholeLifeConfiguration.

Meta Model

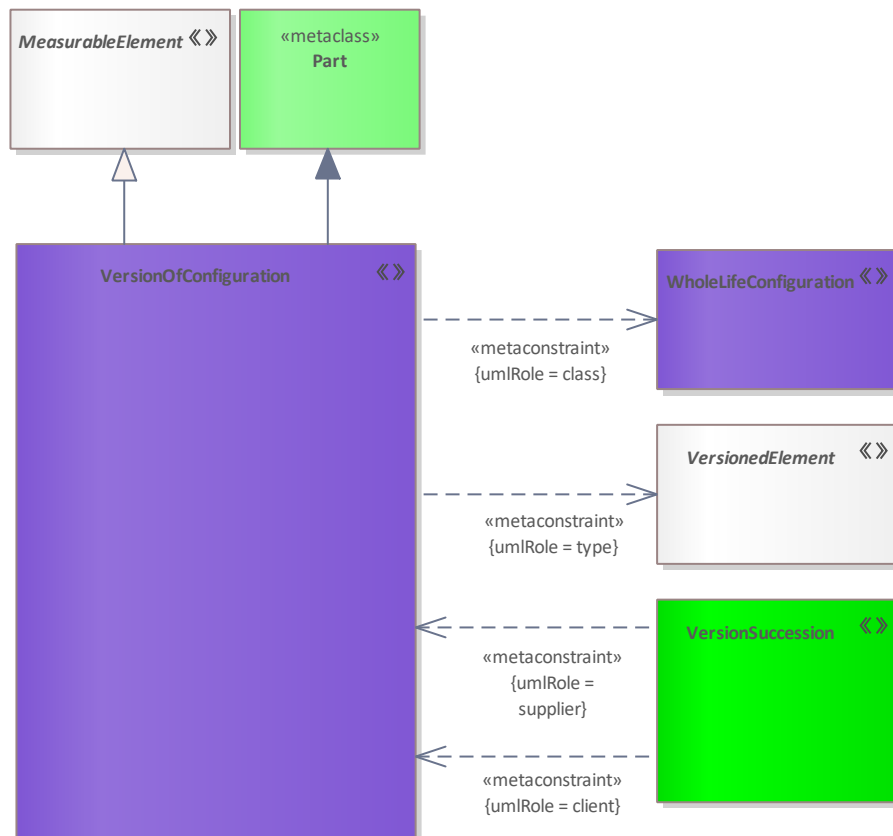


Figure 361: VersionOfConfiguration

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
VersionedElement	An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.
VersionOfConfiguration	A property of a WholeLifeConfiguration, used in version control of a VersionedElement. It asserts that a VersionedElement is a version of a WholeLifeConfiguration.
VersionSuccession	A tuple between two VersionOfConfigurations that denotes that one VersionOfConfiguration follows from another.
WholeLifeConfiguration	A set of VersionedElements.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [Pr - Configuration Management](#)

3.306 VersionReleased

Definition

A relationship that expresses that an actual project milestone releases an versioned element.

Meta Model

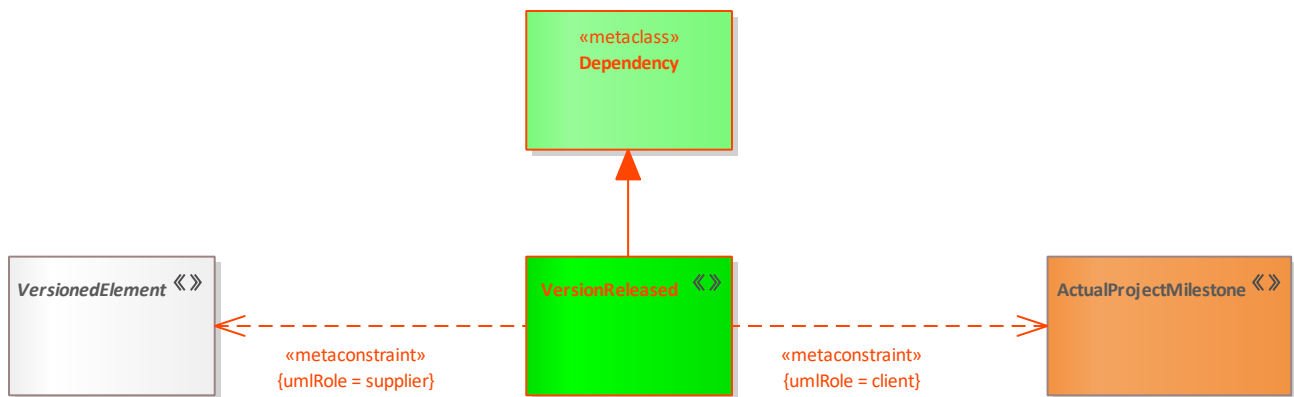


Figure 362: VersionReleased

Elements in Diagram

Name	Definition
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
VersionedElement	An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.
VersionReleased	A relationship that expresses that an actual project milestone releases an versioned element.

Tagged Values

Relevant Viewpoints

- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.307 VersionSuccession

Definition

A tuple between two VersionOfConfigurations that denotes that one VersionOfConfiguration follows from another.

Meta Model

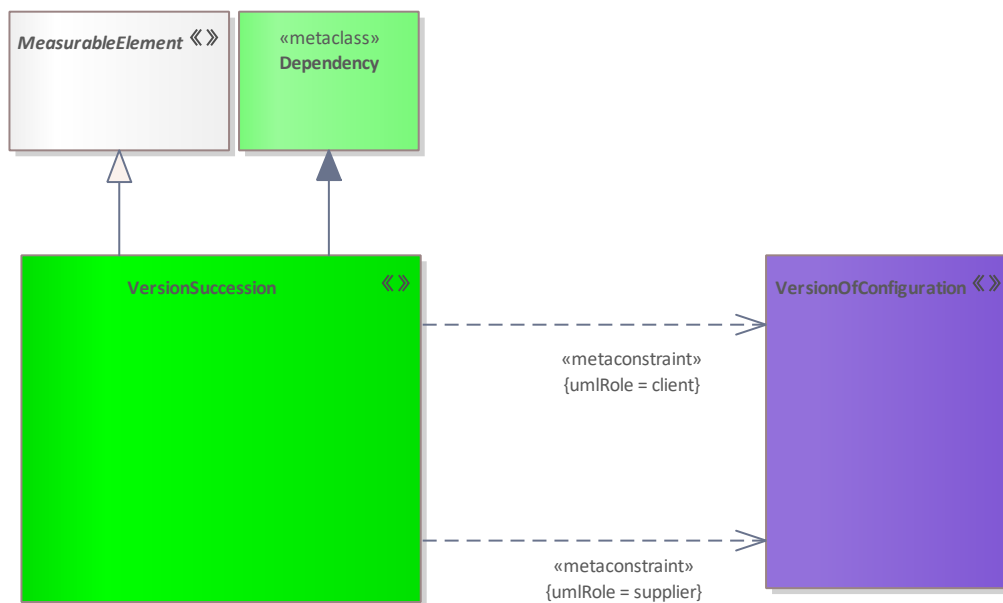


Figure 363: VersionSuccession

Elements in Diagram

Name	Definition
MeasurableElement	Abstract type, grouping elements that can be measured by applying MeasurementSets to them.
VersionOfConfiguration	A property of a WholeLifeConfiguration, used in version control of a VersionedElement. It asserts that a VersionedElement is a version of a WholeLifeConfiguration.
VersionSuccession	A tuple between two VersionOfConfigurations that denotes that one VersionOfConfiguration follows from another.

Tagged Values

Tag Name	Valid Values
URI	String

Relevant Viewpoints

- [Pr - Configuration Management](#)

3.308 VersionWithdrawn

Definition

A relationship that expresses that an actual project milestone withdraws an versioned element.

Meta Model

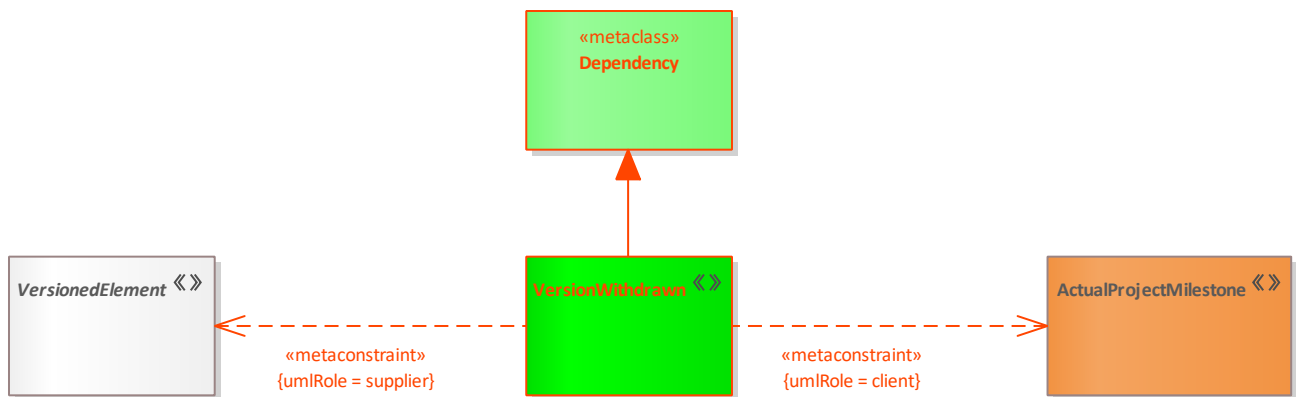


Figure 364: VersionWithdrawn

Elements in Diagram

Name	Definition
ActualProjectMilestone	An event with a start date in a ActualProject from which progress is measured.
VersionedElement	An abstract type grouping ResourcePerformer and ServiceSpecification that allows VersionOfConfiguration to be related to ActualProjectMilestones.
VersionWithdrawn	A relationship that expresses that an actual project milestone withdraws an versioned element.

Tagged Values

Relevant Viewpoints

- [Cr - Capability Roadmap](#)
- [Lr - Lines of Development](#)
- [Pr - Configuration Management](#)
- [Sr - Service Roadmap](#)

3.309 View

Definition

An architecture view expresses the architecture of the system-of-interest in accordance with an architecture viewpoint (or simply, viewpoint). [ISO/IEC/IEEE 42010:2011(E)].

Meta Model

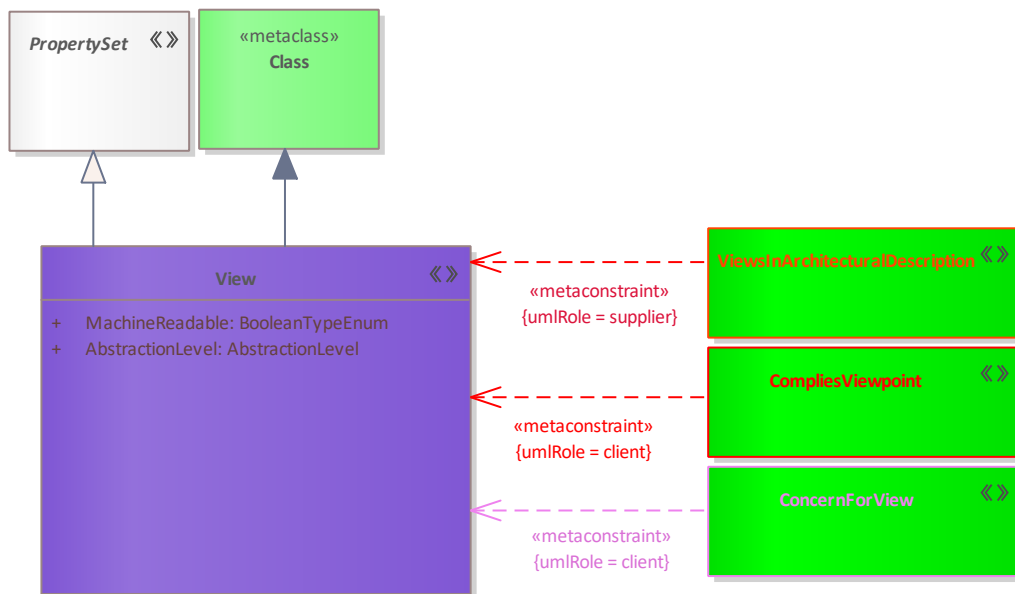


Figure 365: View

Elements in Diagram

Name	Definition
CompliesViewpoint	Relationship that expresses that a view has been created according to the specifications of a viewpoint.
ConcernForView	A relationship that expresses which concerns are covered by view.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
View	An architecture view expresses the architecture of the system-of-interest in accordance with an architecture viewpoint (or simply, viewpoint). [ISO/IEC/IEEE 42010:2011(E)].
ViewsInArchitecturalDescription	A relationship that expresses that an architectural description includes the following views.

Tagged Values

Tag Name	Valid Values
MachineReadable	true, false, unknown, not set
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [A2 - Architecture Products](#)

3.310 Viewpoint

Definition

An architecture viewpoint frames (to formulate or construct in a particular style or language) one or more concerns. A concern can be framed by more than one viewpoint. [ISO/IEC/IEEE 42010:2011(E)].

Meta Model

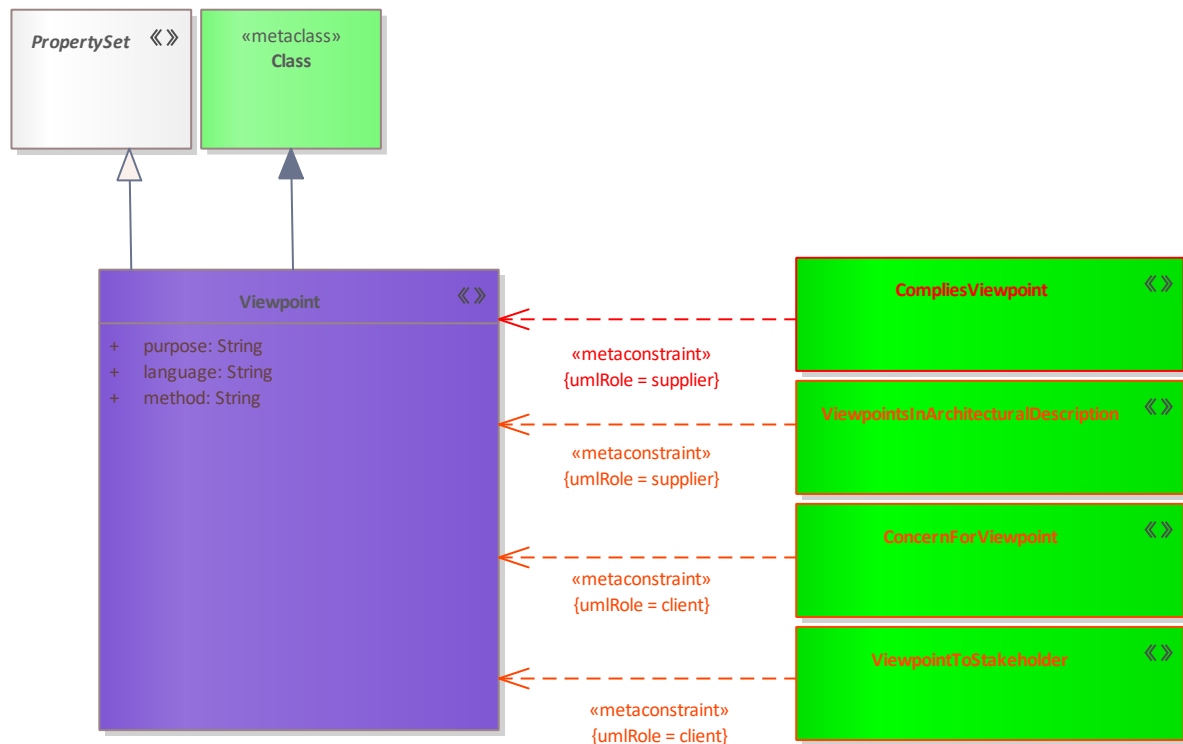


Figure 366: Viewpoint

Elements in Diagram

Name	Definition
CompliesViewpoint	Relationship that expresses that a view has been created according to the specifications of a viewpoint.
ConcernForViewpoint	A relationship that expresses which concerns are covered by viewpoint.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
Viewpoint	An architecture viewpoint frames (to formulate or construct in a particular style or language) one or more concerns. A concern can be framed by more than one viewpoint. [ISO/IEC/IEEE 42010:2011(E)].
ViewpointsInArchitecturalDescription	A relationship that expresses that an architectural description includes the following viewpoints.
ViewpointToStakeholder	A relationship that expresses which stakeholder needs viewpoint.

Tagged Values

Tag Name	Valid Values
purpose	String
language	String
method	String
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [A2 - Architecture Products](#)

3.311 ViewpointsInArchitecturalDescription

Definition

A relationship that expresses that an architectural description includes the following viewpoints.

Meta Model

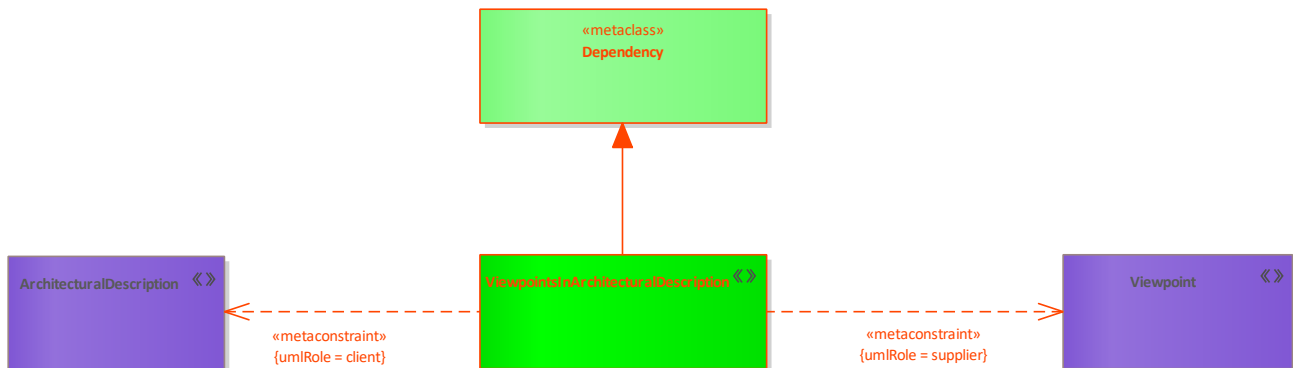


Figure 367: ViewpointsInArchitecturalDescription

Elements in Diagram

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
Viewpoint	An architecture viewpoint frames (to formulate or construct in a particular style or language) one or more concerns. A concern can be framed by more than one viewpoint. [ISO/IEC/IEEE 42010:2011(E)].
ViewpointsInArchitecturalDescription	A relationship that expresses that an architectural description includes the following viewpoints.

Tagged Values

Relevant Viewpoints

- [A2 - Architecture Products](#)

3.312 ViewpointToStakeholder

Definition

A relationship that expresses which stakeholder needs viewpoint.

Meta Model

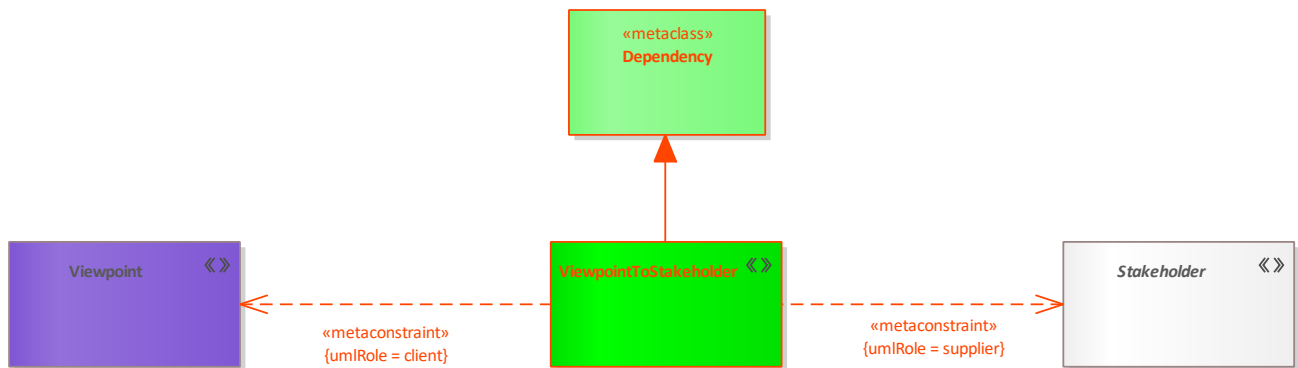


Figure 368: ViewpointToStakeholder

Elements in Diagram

Name	Definition
Stakeholder	individual, team, organization, or classes thereof, having an interest in an EnterprisePhase [ISO/IEC/IEEE 42010:2011].
Viewpoint	An architecture viewpoint frames (to formulate or construct in a particular style or language) one or more concerns. A concern can be framed by more than one viewpoint. [ISO/IEC/IEEE 42010:2011(E)].
ViewpointToStakeholder	A relationship that expresses which stakeholder needs viewpoint.

Tagged Values

Relevant Viewpoints

- [A2 - Architecture Products](#)

3.313 ViewsInArchitecturalDescription

Definition

A relationship that expresses that an architectural description includes the following views.

Meta Model

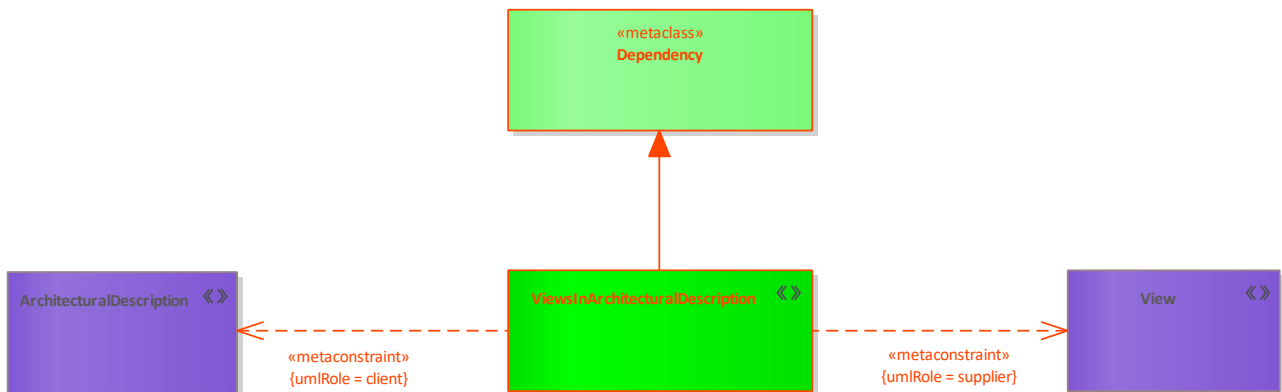


Figure 369: ViewsInArchitecturalDescription

Elements in Diagram

Name	Definition
ArchitecturalDescription	An Architecture Description is a work product used to express the Architecture of some System Of Interest. It provides executive-level summary information about the architecture description in a consistent form to allow quick reference and comparison between architecture descriptions -- It includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program.
View	An architecture view expresses the architecture of the system-of-interest in accordance with an architecture viewpoint (or simply, viewpoint). [ISO/IEC/IEEE 42010:2011(E)].
ViewsInArchitecturalDescription	A relationship that expresses that an architectural description includes the following views.

Tagged Values

Relevant Viewpoints

- [A2 - Architecture Products](#)

3.314 VisionForActualEnterprisePhase

Definition

A relationship that expresses which actual enterprisephase implements an enterprisevision.

Meta Model

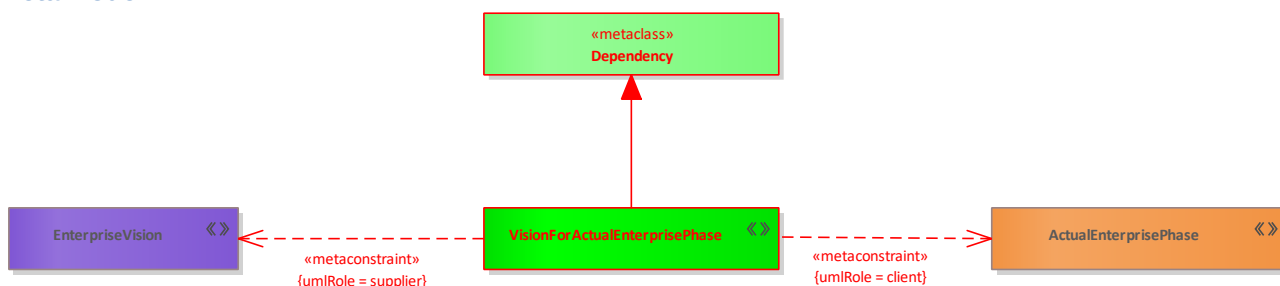


Figure 370: VisionForActualEnterprisePhase

Elements in Diagram

Name	Definition
ActualEnterprisePhase	The ActualState that describes the phase of an Enterprise endeavor.
EnterpriseVision	A Vision describes the future state of the enterprise, without regard to how it is to be achieved.
VisionForActualEnterprisePhase	A relationship that expresses which actual enterprisephase implements an enterprisevision.

Tagged Values

Relevant Viewpoints

- [C2 - Enterprise Vision](#)

3.315 WholeLifeConfiguration

Definition

A set of VersionedElements.

Meta Model

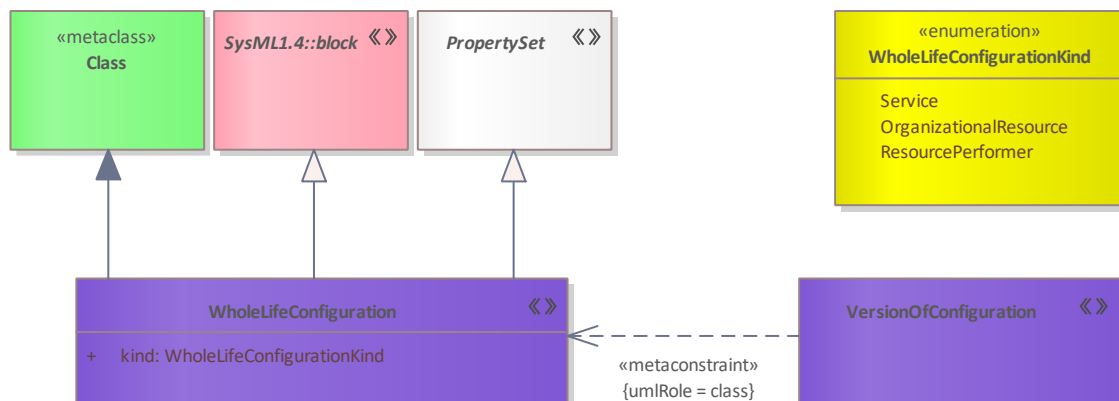


Figure 371: WholeLifeConfiguration

Elements in Diagram

Name	Definition
PropertySet	An abstract type grouping architectural elements that can own Measurements.
VersionOfConfiguration	A property of a WholeLifeConfiguration, used in version control of a VersionedElement. It asserts that a VersionedElement is a version of a WholeLifeConfiguration.
WholeLifeConfiguration	A set of VersionedElements.

Tagged Values

Tag Name	Valid Values
kind	Service, OrganizationalResource, ResourcePerformer
URI	String

Relevant Viewpoints

- [Pr - Configuration Management](#)

3.316 WholeLifeEnterprise

Definition

A WholeLifeEnterprise is a purposeful endeavor of any size involving people, organizations and supporting systems. It is made up of TemporalParts and StructuralParts.

Meta Model

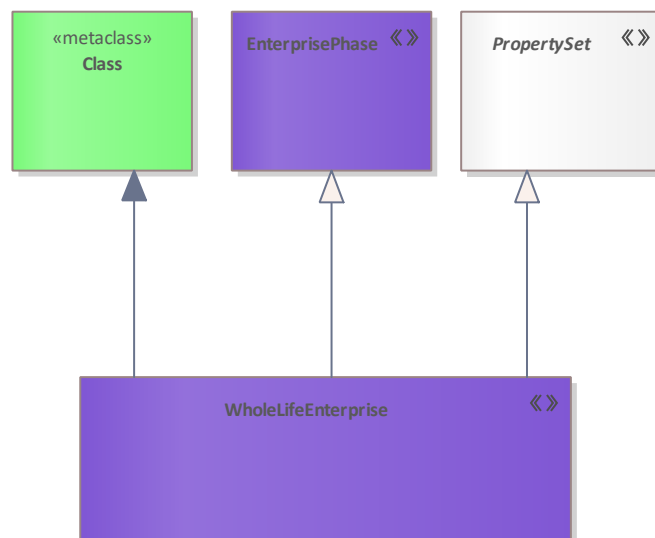


Figure 372: WholeLifeEnterprise

Elements in Diagram

Name	Definition
EnterprisePhase	A current or future state of the wholeLifeEnterprise or another EnterprisePhase.
PropertySet	An abstract type grouping architectural elements that can own Measurements.
WholeLifeEnterprise	A WholeLifeEnterprise is a purposeful endeavor of any size involving people, organizations and supporting systems. It is made up of TemporalParts and StructuralParts.

Tagged Values

Tag Name	Valid Values
toBe	true, false, unknown, not set
AbstractionLevel	not set, 0, 1, 2, 3, 4, 5, 6, R
URI	String

Relevant Viewpoints

- [A2 - Architecture Products](#)
- [C2 - Enterprise Vision](#)