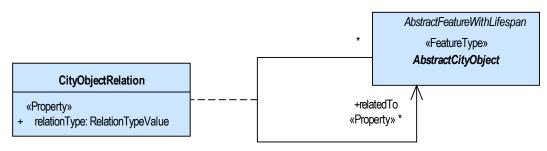
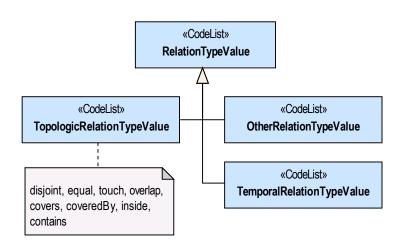
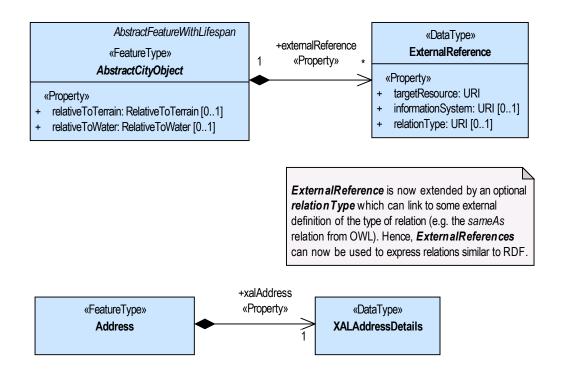


Core module - City object relations





Core module - Miscellaneous



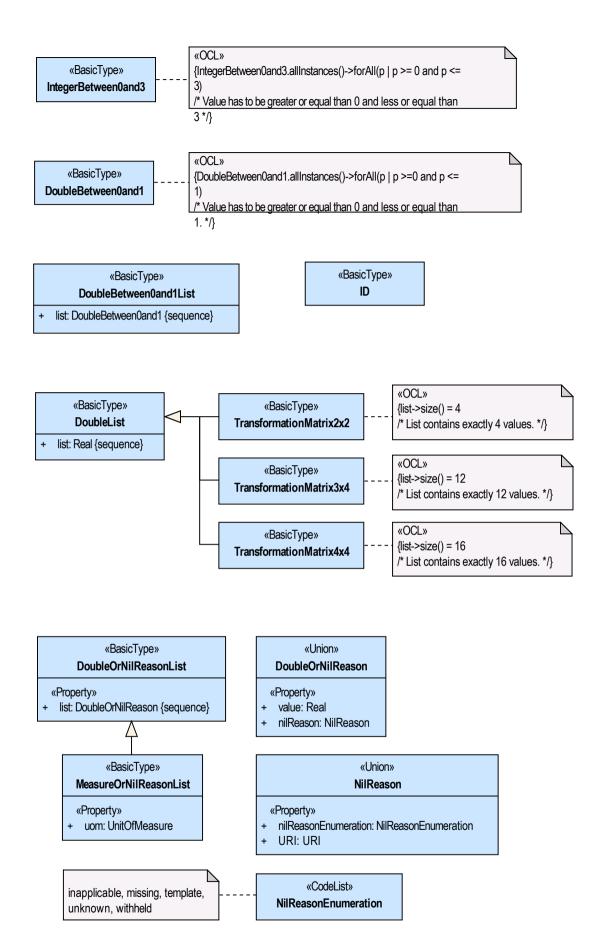
Core module - Basic Types, Enumerations, and Code lists

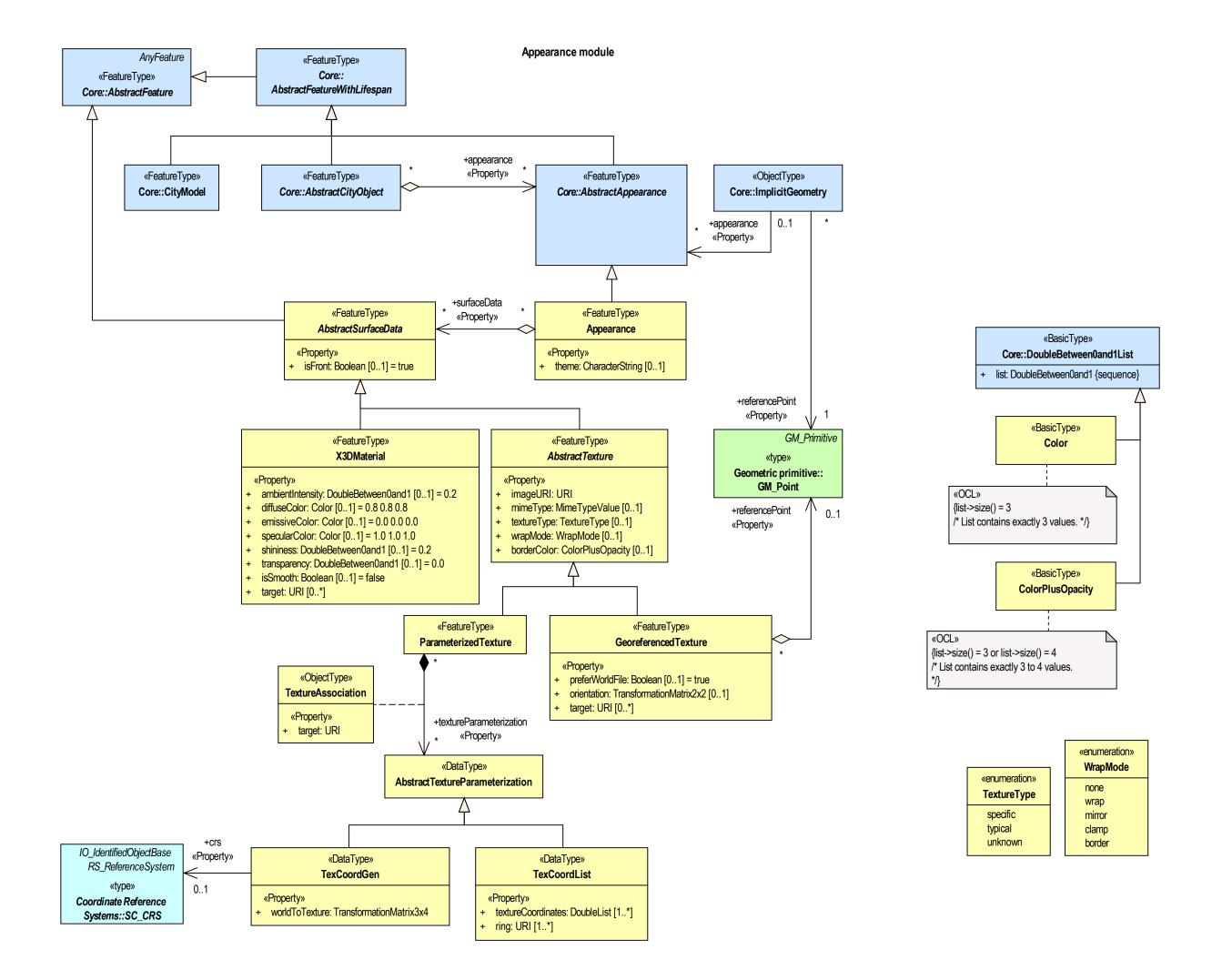
«enumeration» «enumeration» «enumeration» RelativeToTerrain RelativeToWater SpaceType entirelyAboveTerrain entirelyAboveWaterSurface dosed substantiallyAboveTerrain substantiallyAboveWaterSurface open substantiallyAboveAndBelowWaterSurface substantiallyAboveAndBelowTerrain semiOpen substantiallyBelowTerrain substantiallyBelowWaterSurface entirelyBelowTerrain entirelyBelowWaterSurface temporarilyAboveAndBelowWaterSurface «DataType» «CodeList» weekday, weekend, weekday_9to12, Occupancy IntervalValue weekday_12to17, weekday_8to16, daytime, nighttime, daily 9to12, ... «Property» numberOfOccupants: Integer interval: IntervalValue [0..1] «CodeList» occupantType: OccupantTypeValue [0..1] residents, workers, students, patients, OccupantTypeValue visitors, othersOrCombination «CodeList» RelationTypeValue «CodeList» «CodeList» TopologicRelationTypeValue OtherRelationTypeValue «CodeList» «CodeList» disjoint, equal, touch, overlap, MimeTypeValue **TemporalRelationTypeValue** covers, coveredBy, inside, contains «CodeList» grossVolume, QualifiedVolumeTypeValue netVolume, ... surfaceArea, wallSurfaceArea, sharedWallSurfaceArea, «CodeList»

roofSurfaceArea, wallWindowArea, roofWindowArea,

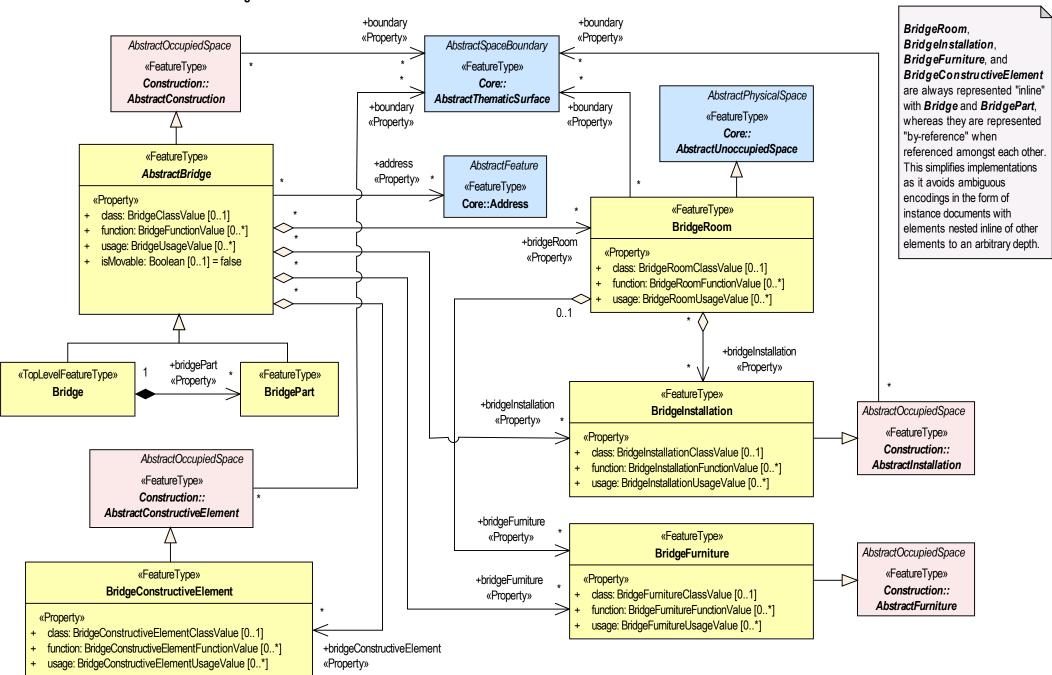
wallGlazingArea, ...

QualifiedAreaTypeValue





Bridge module



Bridge module - Code lists

«CodeList»

BridgeClassValue

«CodeList»

BridgeFurnitureClassValue

BridgeInstallationClassValue

«CodeList»

BridgeFunctionValue

«CodeList»

«CodeList»

BridgeFurnitureFunctionValue

BridgeInstallationFunctionValue

«CodeList»

«CodeList»

BridgeUsageValue

«CodeList»

BridgeFurnitureUsageValue

«CodeList»

BridgeInstallationUsageValue

«CodeList»

BridgeRoomClassValue

«CodeList»

BridgeConstructiveElementClassValue

«CodeList»

BridgeRoomFunctionValue

«CodeList»

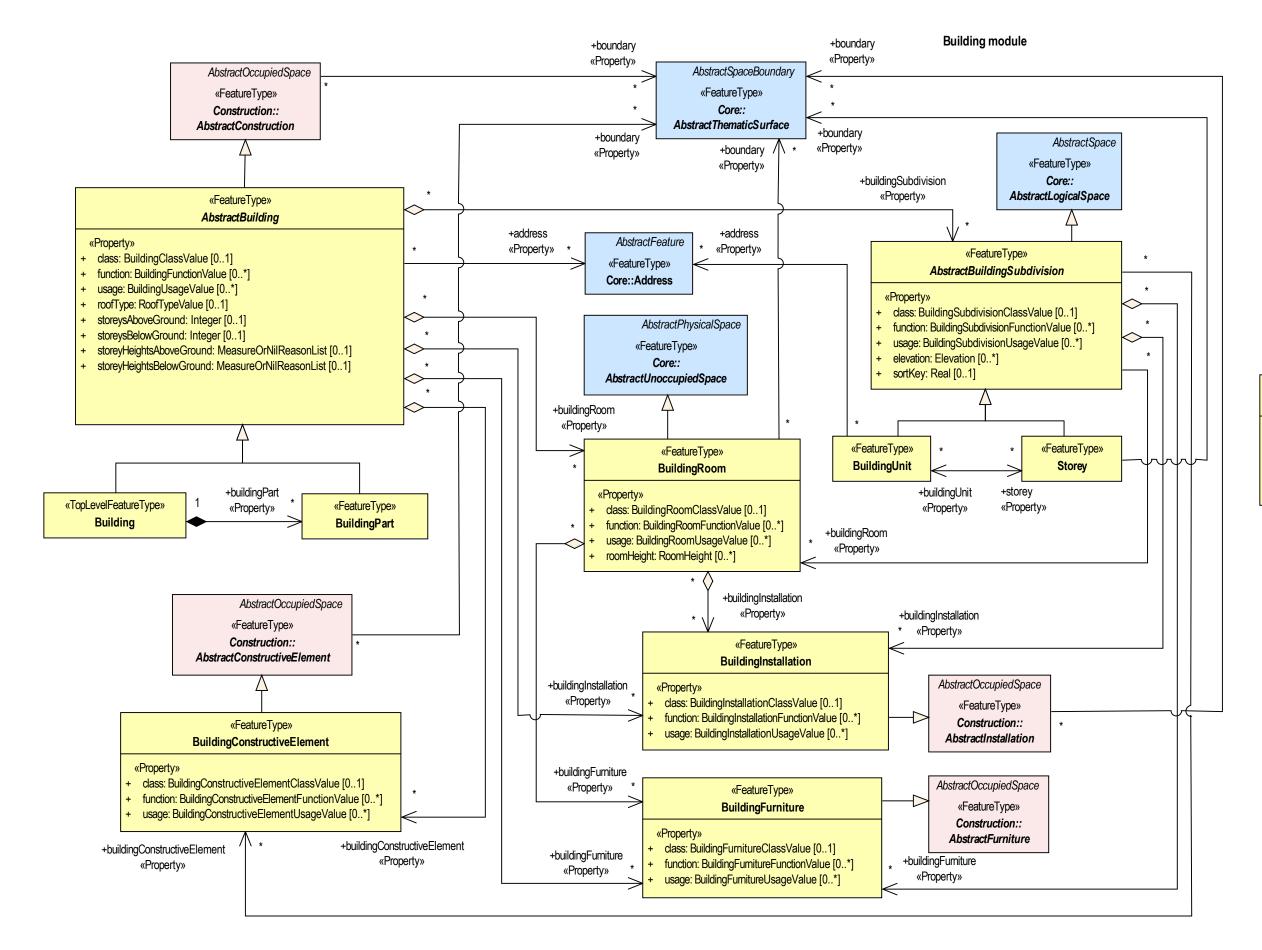
BridgeConstructiveElementFunctionValue

«CodeList»

BridgeRoomUsageValue

«CodeList»

BridgeConstructiveElementUsageValue



BuildingRoom, BuildingInstallation, BuildingFurniture, and BuildingConstructiveElement are always represented "inline" with Building and BuildingPart, whereas they are represented "by-reference" when referenced amongst each other

This simplifies implementations as it avoids ambiguous encodings in the form of instance documents with elements nested inline of other elements to an arbitrary depth.

«DataType» RoomHeight

«Property»

- + highReference: RoomElevationReferenceValue
- lowReference: RoomElevationReferenceValue
- + status: HeightStatusValue
- + value: Length

Building module - Code lists

«CodeList»

BuildingClassValue

«CodeList»

BuildingInstallationClassValue

«CodeList»

BuildingFurnitureClassValue

«CodeList»

RoofTypeValue

«CodeList»

BuildingFunctionValue

«CodeList»

BuildingInstallationFunctionValue

«CodeList»

BuildingFurnitureFunctionValue

«CodeList»

RoomElevationReferenceValue

«CodeList»

BuildingUsageValue

«CodeList»

BuildingInstallationUsageValue

«CodeList»

BuildingFurnitureUsageValue

«CodeList»

BuildingRoomClassValue

«CodeList»

BuildingConstructiveElementClassValue

«CodeList»

BuildingSubdivisionClassValue

«CodeList»

BuildingRoomFunctionValue

«CodeList»

BuildingConstructiveElementFunctionValue

«CodeList»

BuildingSubdivisionFunctionValue

«CodeList»

BuildingRoomUsageValue

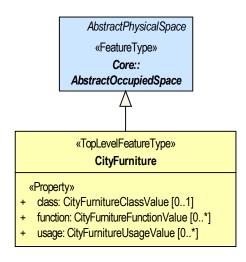
«CodeList»

BuildingConstructiveElementUsageValue

«CodeList»

BuildingSubdivisionUsageValue

CityFurniture module



CityFurniture module - Code lists

«CodeList»

CityFurnitureClassValue

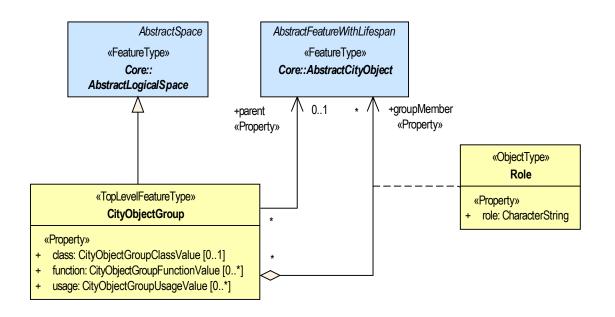
«CodeList»

CityFurnitureFunctionValue

«CodeList»

CityFurnitureUsageValue

CityObjectGroup module



CityObjectGroup module - Code lists

«CodeList»

CityObjectGroupClassValue

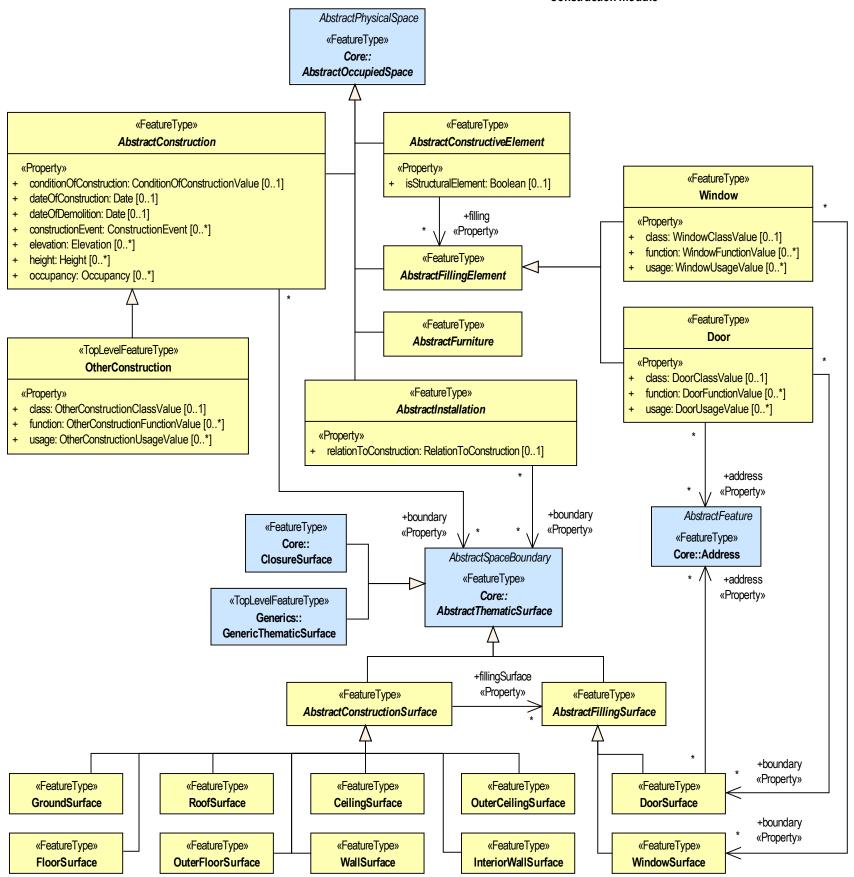
«CodeList»

CityObjectGroupFunctionValue

«CodeList»

CityObjectGroupUsageValue

Construction module



«enumeration»

ConditionOfConstructionValue

declined demolished functional projected ruin underConstruction

«enumeration»

RelationToConstruction

inside outside bothInsideAndOutside

«DataType» Elevation

«Property»

- elevationReference: ElevationReferenceValue
- elevationValue: DirectPosition

«DataType» **Height**

«Property»

- highReference: ElevationReferenceValue
- lowReference: ElevationReferenceValue
- status: HeightStatusValue
- value: Length

«enumeration» HeightStatusValue

estimated

measured

«DataType» ConstructionEvent

«Property»

- event: EventValue
- dateOfEvent: Date
- description: CharacterString [0..1]

Construction module - Code lists

«CodeList»

OtherConstructionClassValue

«CodeList»

OtherConstructionFunctionValue

«CodeList»

OtherConstructionUsageValue

«CodeList»
WindowClassValue

«CodeList»

WindowFunctionValue

«CodeList»

WindowUsageValue

«CodeList»

DoorClassValue

«CodeList»

DoorFunctionValue

«CodeList»

DoorUsageValue

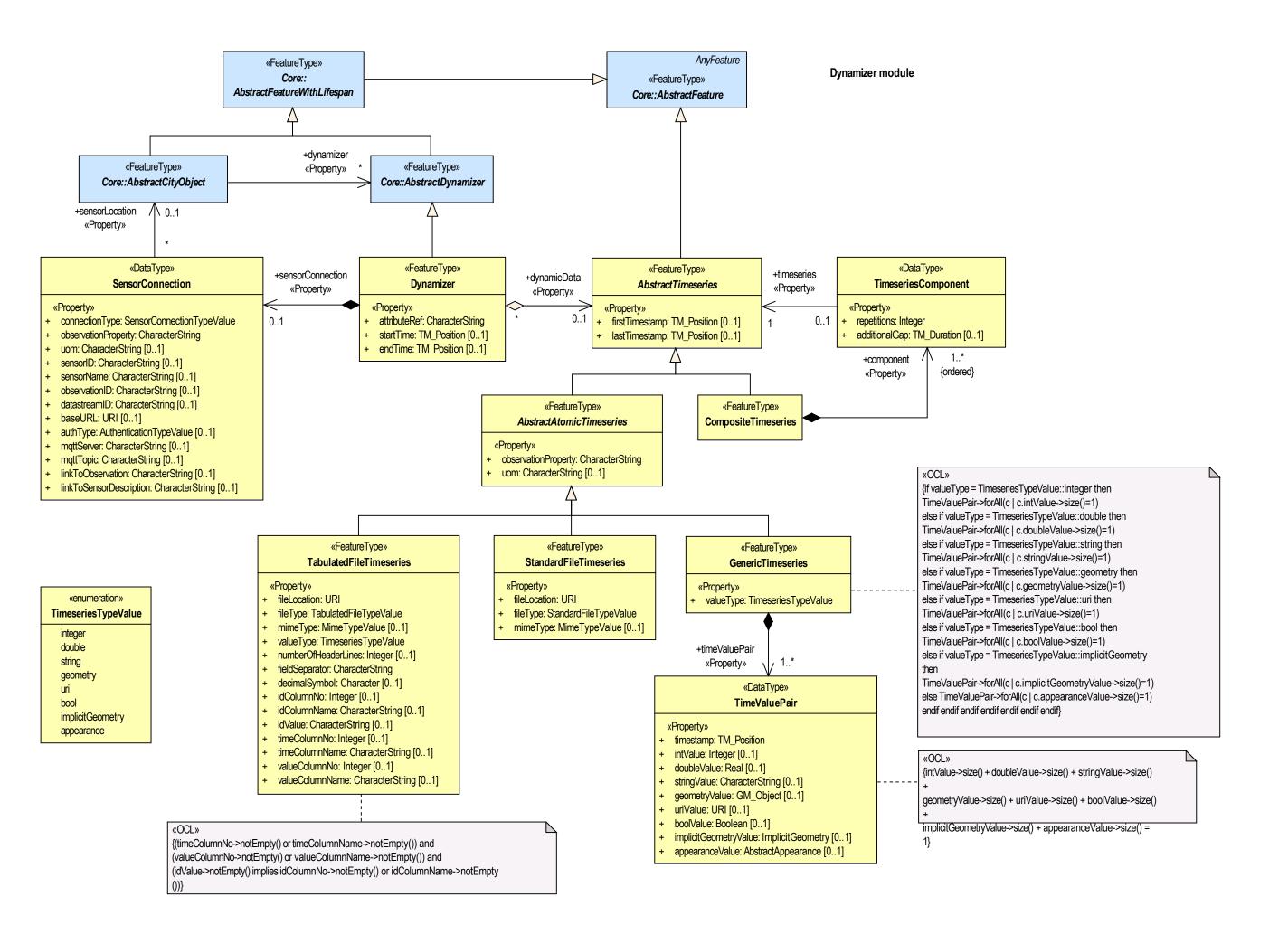
wCodeList>
EventValue

buildingPermit,
startOfRenovation,
endOfRenovation, ...

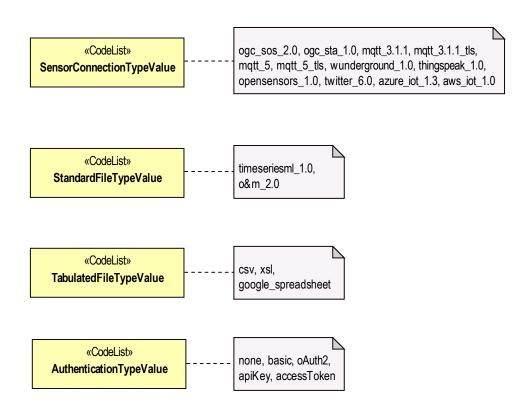
«CodeList»

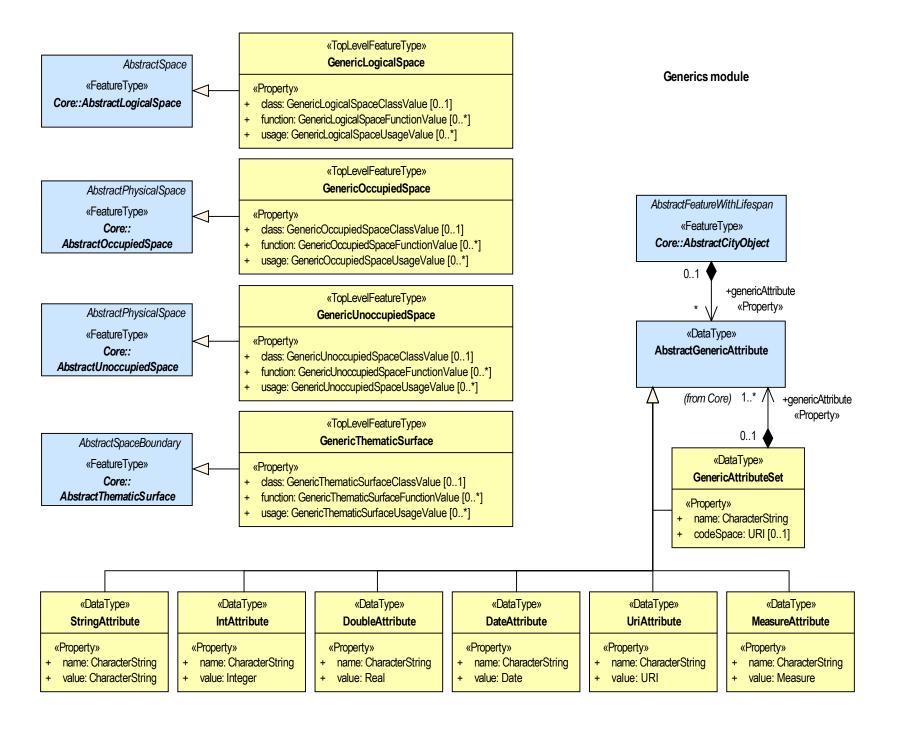
ElevationReferenceValue

aboveGroundEnvelope, bottomOfConstruction, entrancePoint, generalEave, generalGround, generalRoof, generalRoofEdge, highestEave, highestGroundPoint, highestPoint, highestRoofEdge, lowestEave, lowestFloorAboveGround, lowestGroundPoint, lowestRoofEdge, topOfConstruction



Dynamizer module - Code lists





Generics module - Code lists

«CodeList»

GenericLogicalSpaceClassValue

«CodeList»

GenericLogicalSpaceFunctionValue

GenericLogicalSpaceUsageValue

«CodeList»

GenericOccupiedSpaceClassValue

«CodeList»

GenericOccupiedSpaceFunctionValue

«CodeList» «CodeList»

GenericOccupiedSpaceUsageValue

«CodeList»

GenericUnoccupiedSpaceClassValue

«CodeList»

GenericUnoccupiedSpaceFunctionValue

«CodeList»

GenericUnoccupiedSpaceUsageValue

«CodeList»

GenericThematicSurfaceClassValue

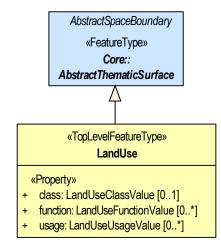
«CodeList»

GenericThematicSurfaceFunctionValue

«CodeList»

GenericThematicSurfaceUsageValue

LandUse module



LandUse module - Code lists

«CodeList»

LandUseClassValue

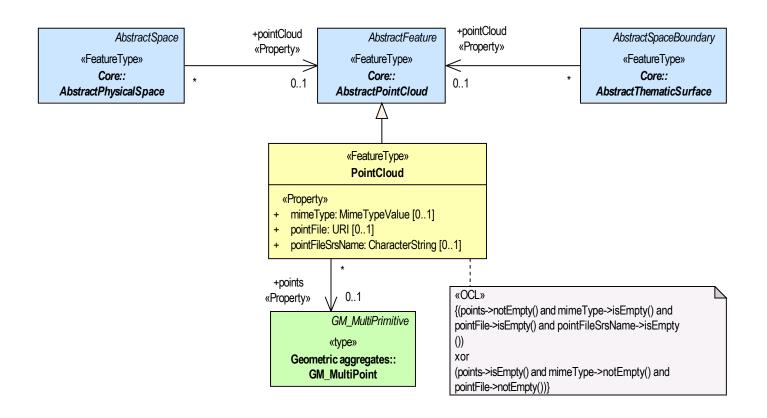
«CodeList»

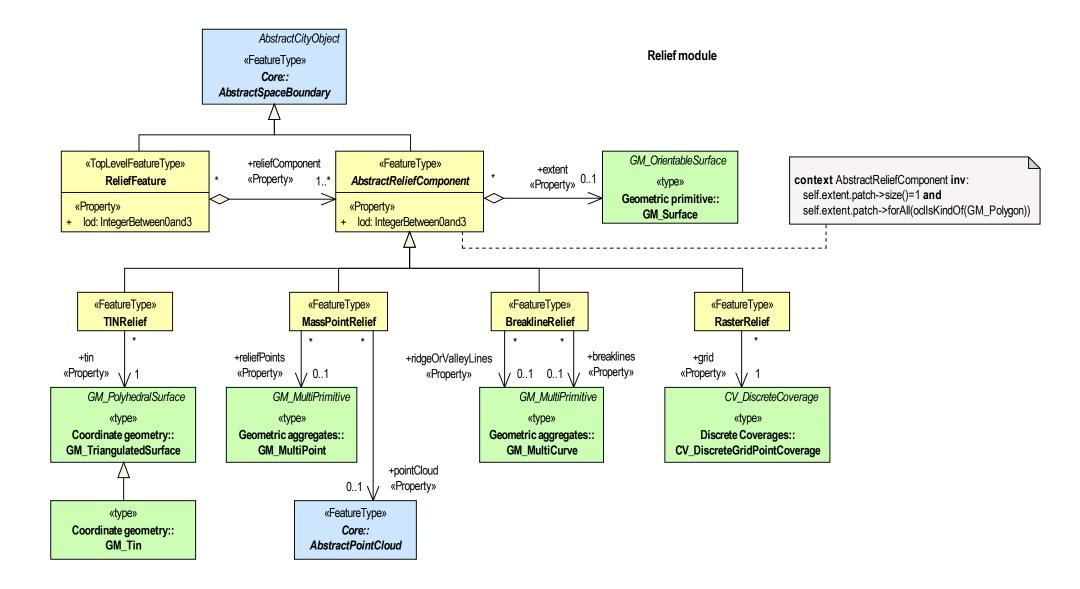
LandUseFunctionValue

«CodeList»

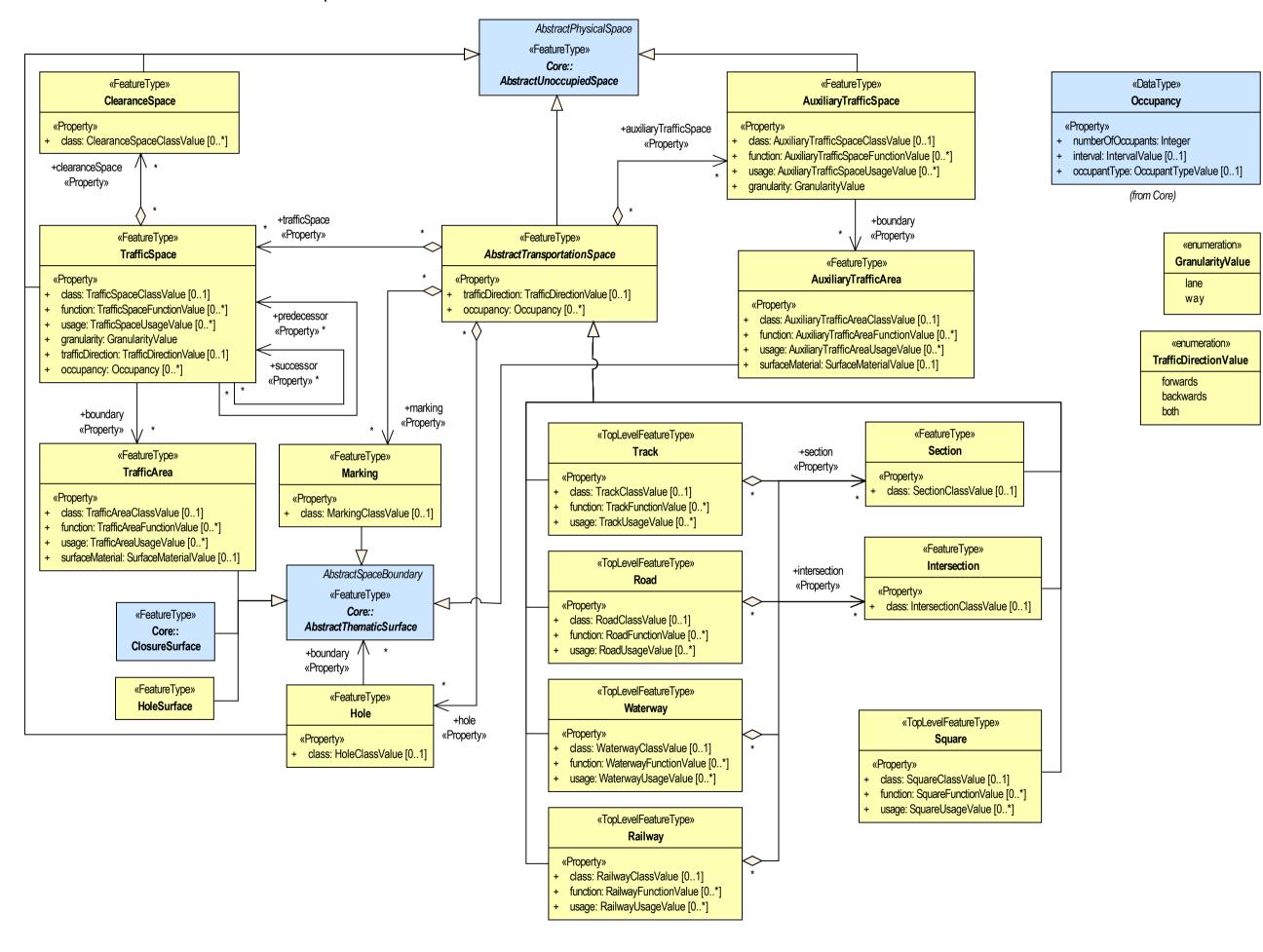
LandUseUsageValue

PointCloud module





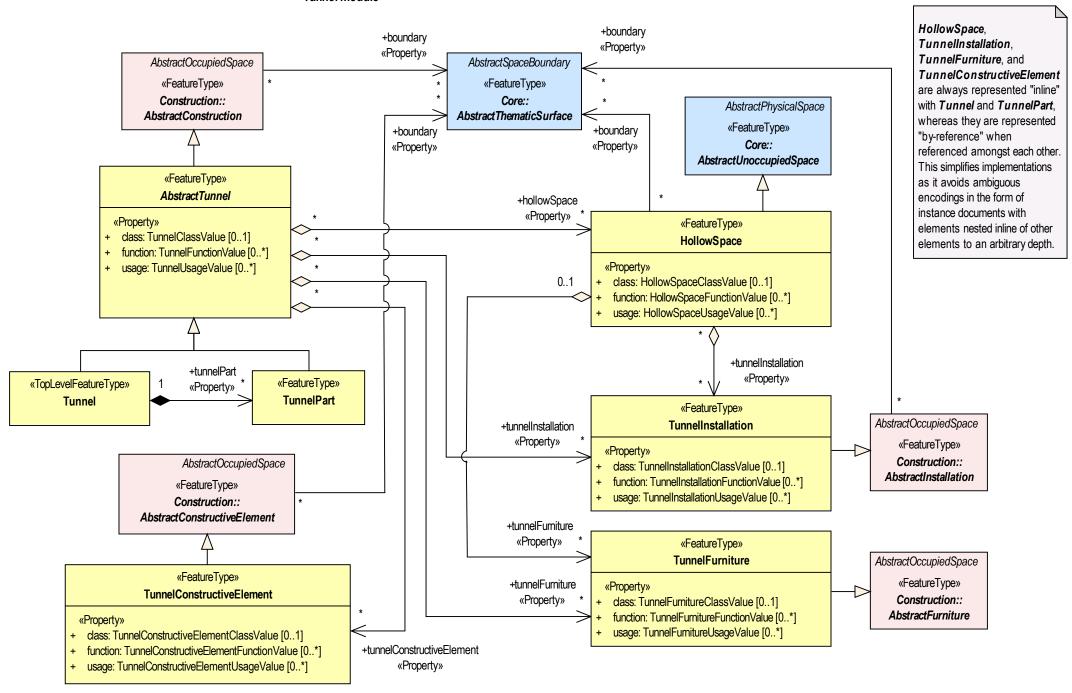
Transportation module



Transportation module - Code lists

«CodeList» «CodeList» «CodeList» «CodeList» **TransportationSpaceClassValue TrafficSpaceClassValue** ClearanceSpaceClassValue TrafficAreaClassValue «CodeList» «CodeList» «CodeList» TransportationSpaceFunctionValue **TrafficSpaceFunctionValue TrafficAreaFunctionValue** «CodeList» «CodeList» Drain, Manhole, MarkingClassValue HoleClassValue RoadwayDamage «CodeList» «CodeList» «CodeList» **TransportationSpaceUsageValue TrafficSpaceUsageValue** TrafficAreaUsageValue «Codel ist» «Codel ist» «Codel ist» «Codel ist» AuxiliaryTrafficSpaceClassValue AuxiliaryTrafficAreaClassValue SectionClassValue SurfaceMaterialValue «CodeList» «CodeList» AuxiliaryTrafficSpaceFunctionValue AuxiliaryTrafficAreaFunctionValue «CodeList» IntersectionClassValue «Codel ist» «Codel ist» **AuxiliaryTrafficSpaceUsageValue** AuxiliaryTrafficAreaUsageValue «CodeList» «CodeList» «CodeList» «CodeList» «CodeList» WaterwayClassValue RailwayClassValue **TrackClassValue** RoadClassValue SquareClassValue «CodeList» «CodeList» «CodeList» «CodeList» «CodeList» WaterwayFunctionValue RailwayFunctionValue SquareFunctionValue **TrackFunctionValue** RoadFunctionValue «CodeList» «CodeList» «CodeList» «CodeList» «CodeList» **TrackUsageValue** RoadUsageValue WaterwayUsageValue RailwayUsageValue SquareUsageValue

Tunnel module



Tunnel module - Code lists

«CodeList»

TunnelClassValue

«CodeList»

TunnelInstallationClassValue

«CodeList»

TunnelFurnitureClassValue

«CodeList»

TunnelFunctionValue

«CodeList»

TunnelInstallationFunctionValue

«CodeList»

TunnelFurnitureFunctionValue

«CodeList»

TunnelUsageValue

«CodeList»

TunnelInstallationUsageValue

«CodeList»

TunnelFurnitureUsageValue

«CodeList»

HollowSpaceClassValue

«CodeList»

TunnelConstructiveElementClassValue

«CodeList»

HollowSpaceFunctionValue

«CodeList»

TunnelConstructiveElementFunctionValue

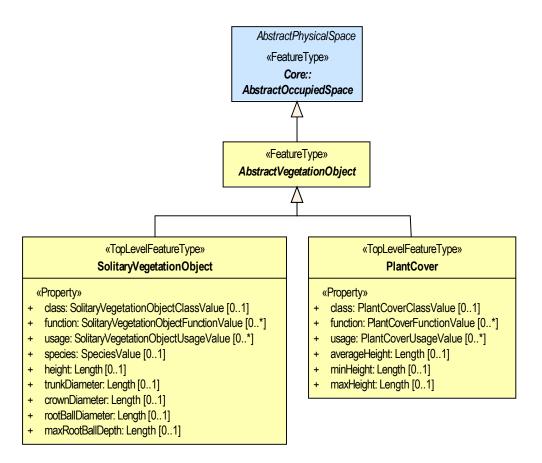
«CodeList»

HollowSpaceUsageValue

«CodeList»

TunnelConstructiveElementUsageValue

Vegetation module



Vegetation module - Code lists

«CodeList»

SolitaryVegetationObjectClassValue

«CodeList»

PlantCoverClassValue

«CodeList»

SpeciesValue

«CodeList»

SolitaryVegetationObjectFunctionValue

«CodeList»

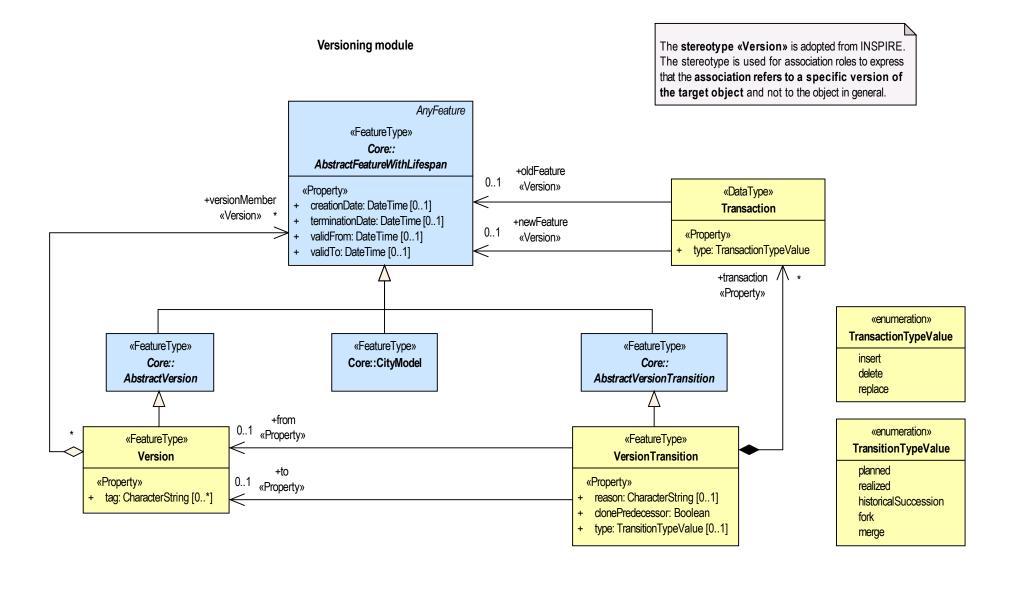
PlantCoverFunctionValue

«CodeList»

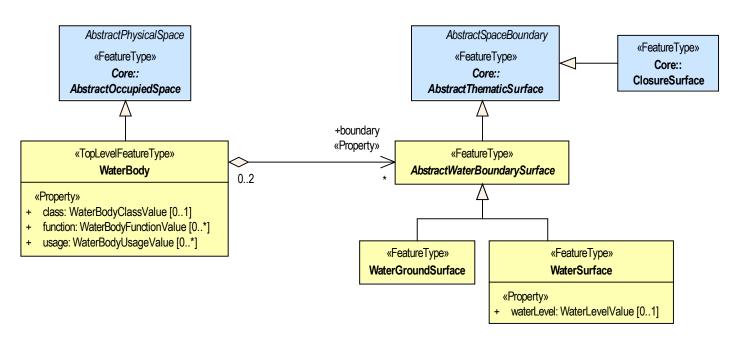
SolitaryVegetationObjectUsageValue

«CodeList»

PlantCoverUsageValue



WaterBody module



WaterBody module - Code lists

«CodeList»

WaterBodyClassValue

«CodeList»

WaterLevelValue

«CodeList»

WaterBodyFunctionValue

«CodeList»

WaterBodyUsageValue