

Color Scheme

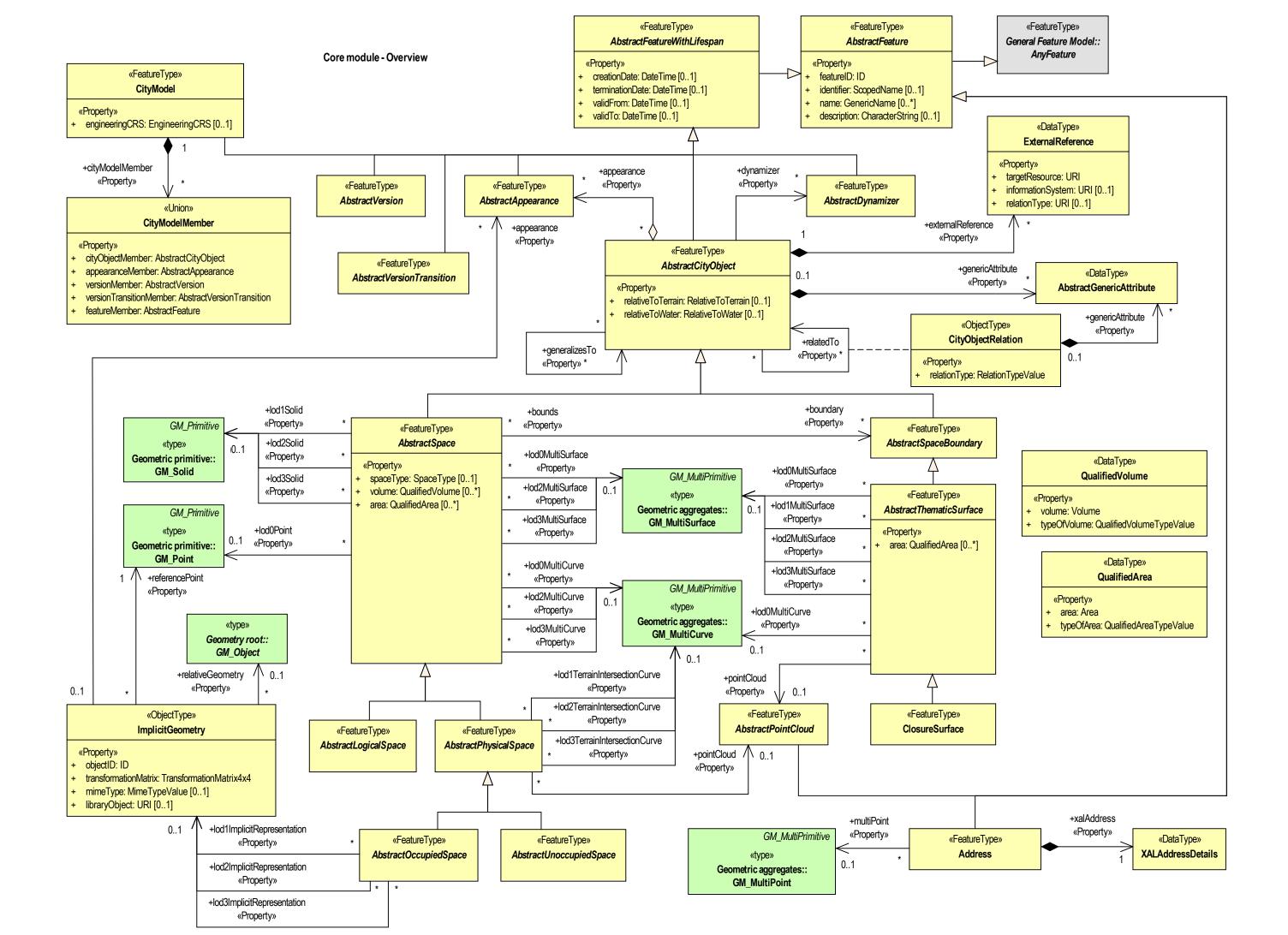
Class defined in this Requirements Class

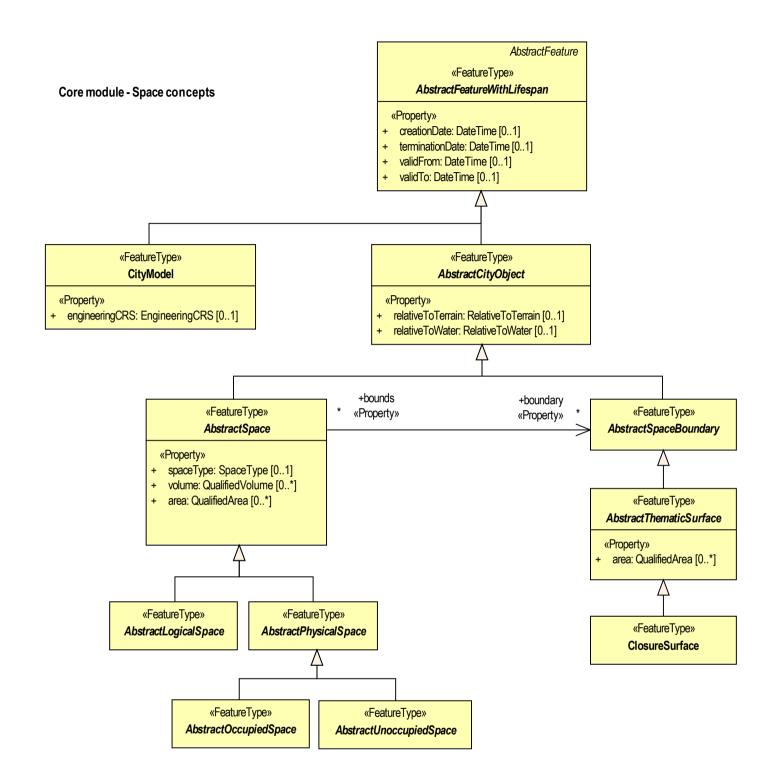
Class defined in another Requirements Class

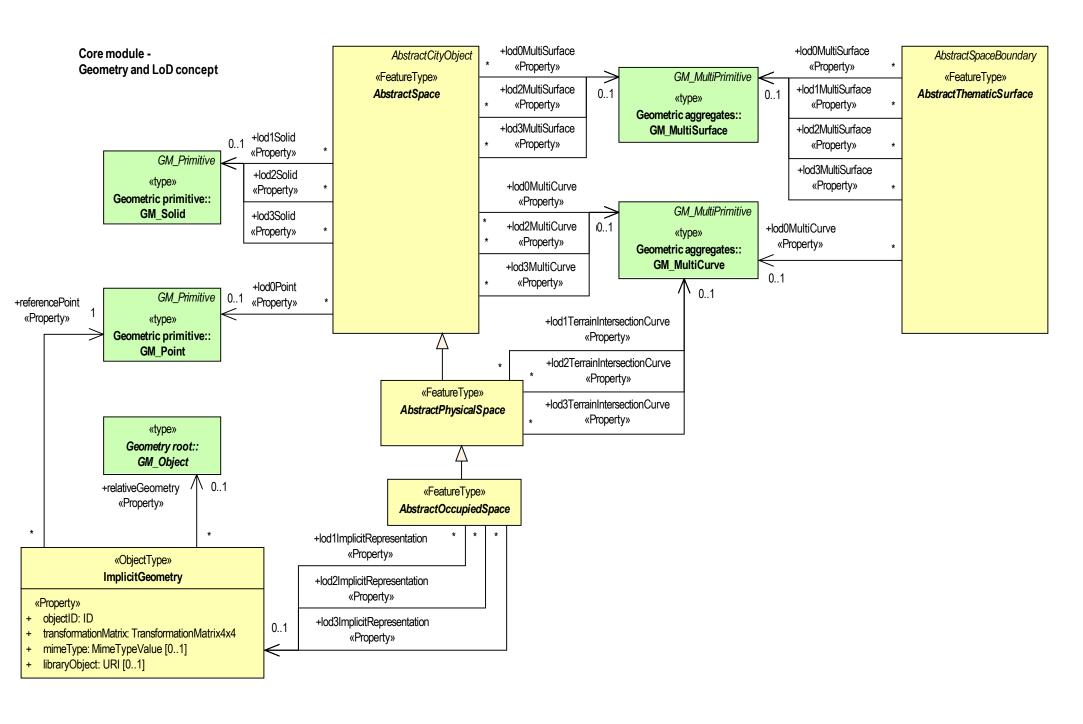
Class defined in ISO 19107, ISO 19111 or ISO 19123

Class defined in ISO 19109

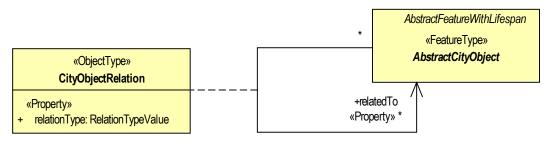
Notes and OCL constraints

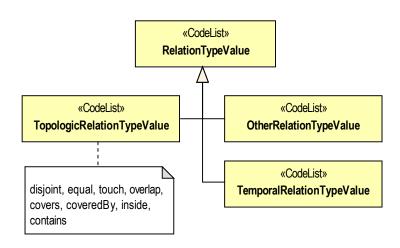




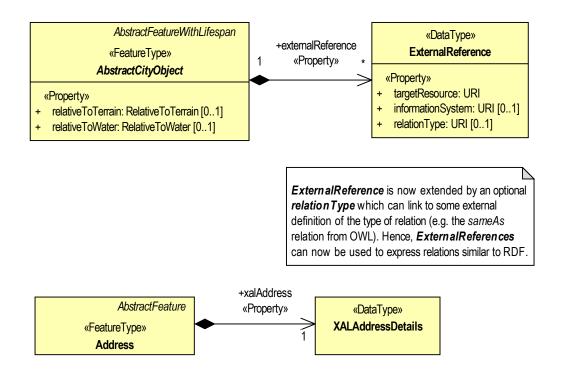


Core module - City object relations



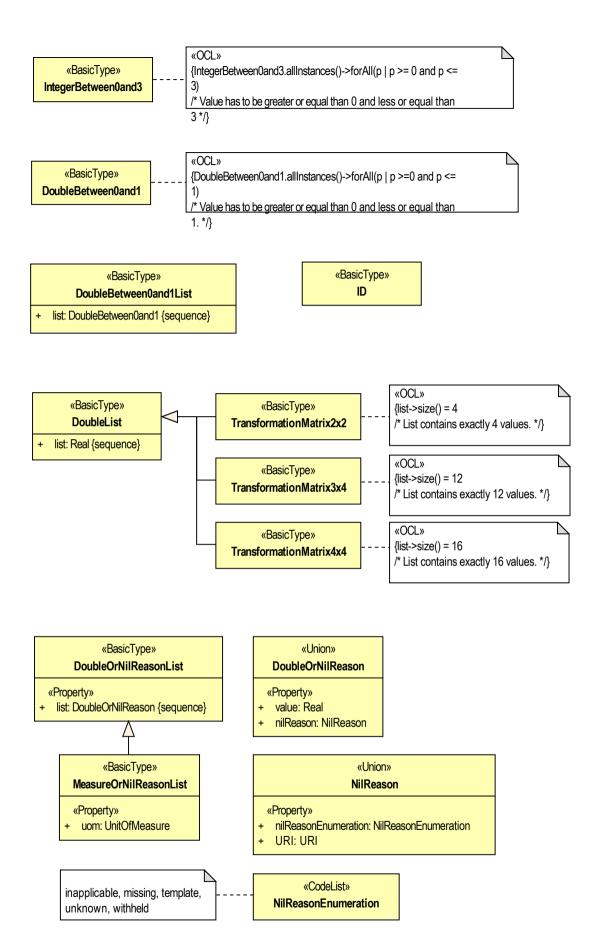


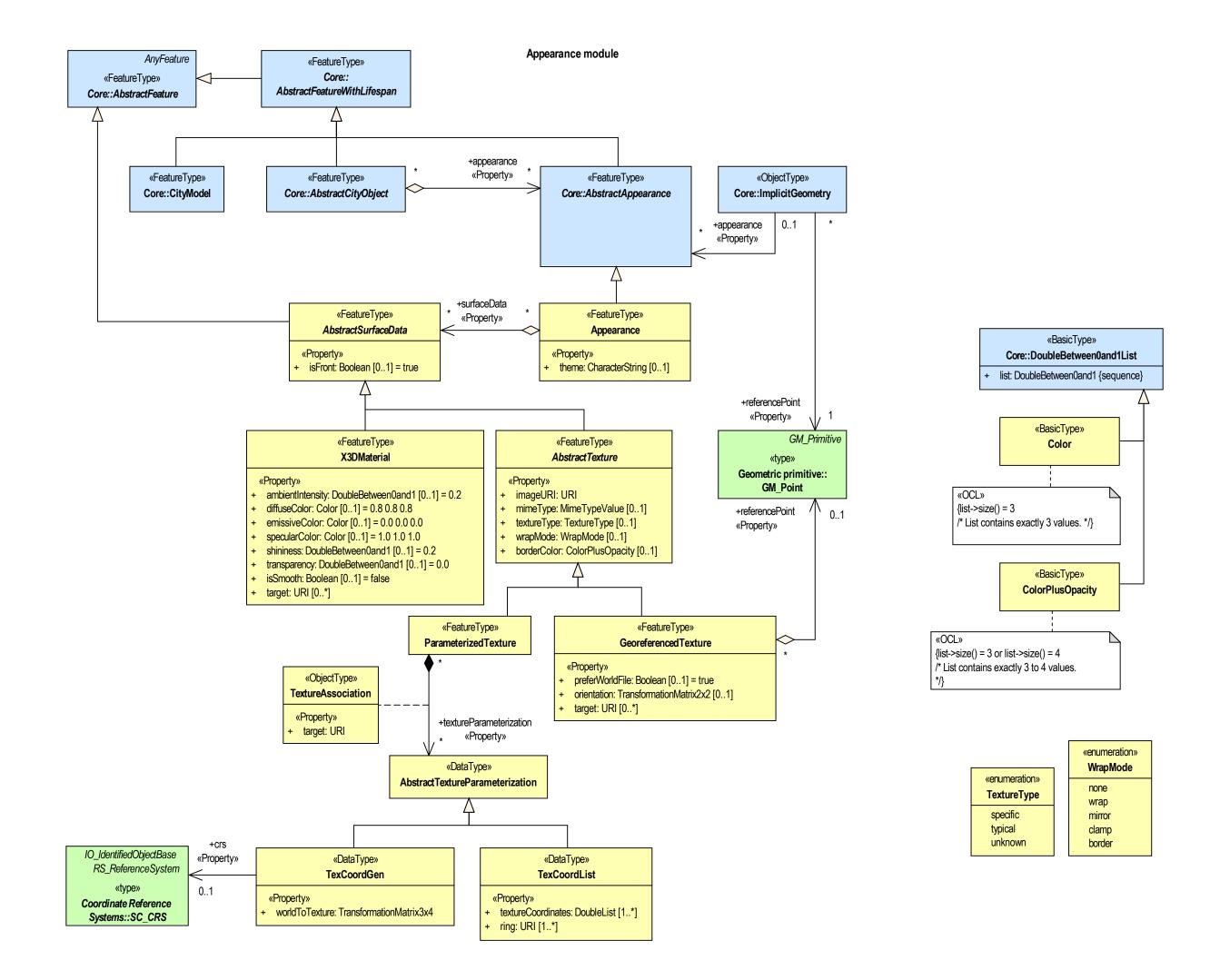
Core module - Miscellaneous



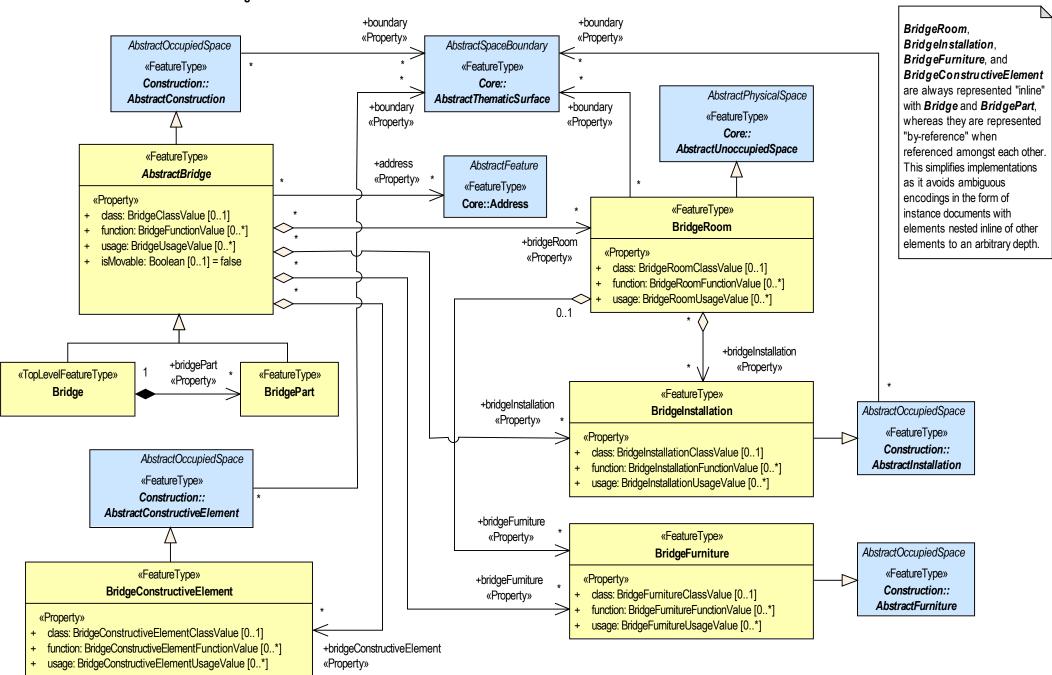
Core module - Basic Types, Enumerations, and Code lists

«enumeration» «enumeration» «enumeration» RelativeToTerrain RelativeToWater SpaceType entirelyAboveTerrain entirelyAboveWaterSurface dosed substantiallyAboveTerrain substantiallyAboveWaterSurface open substantiallyAboveAndBelowTerrain substantiallyAboveAndBelowWaterSurface 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, QualifiedAreaTypeValue wallGlazingArea, ...





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»

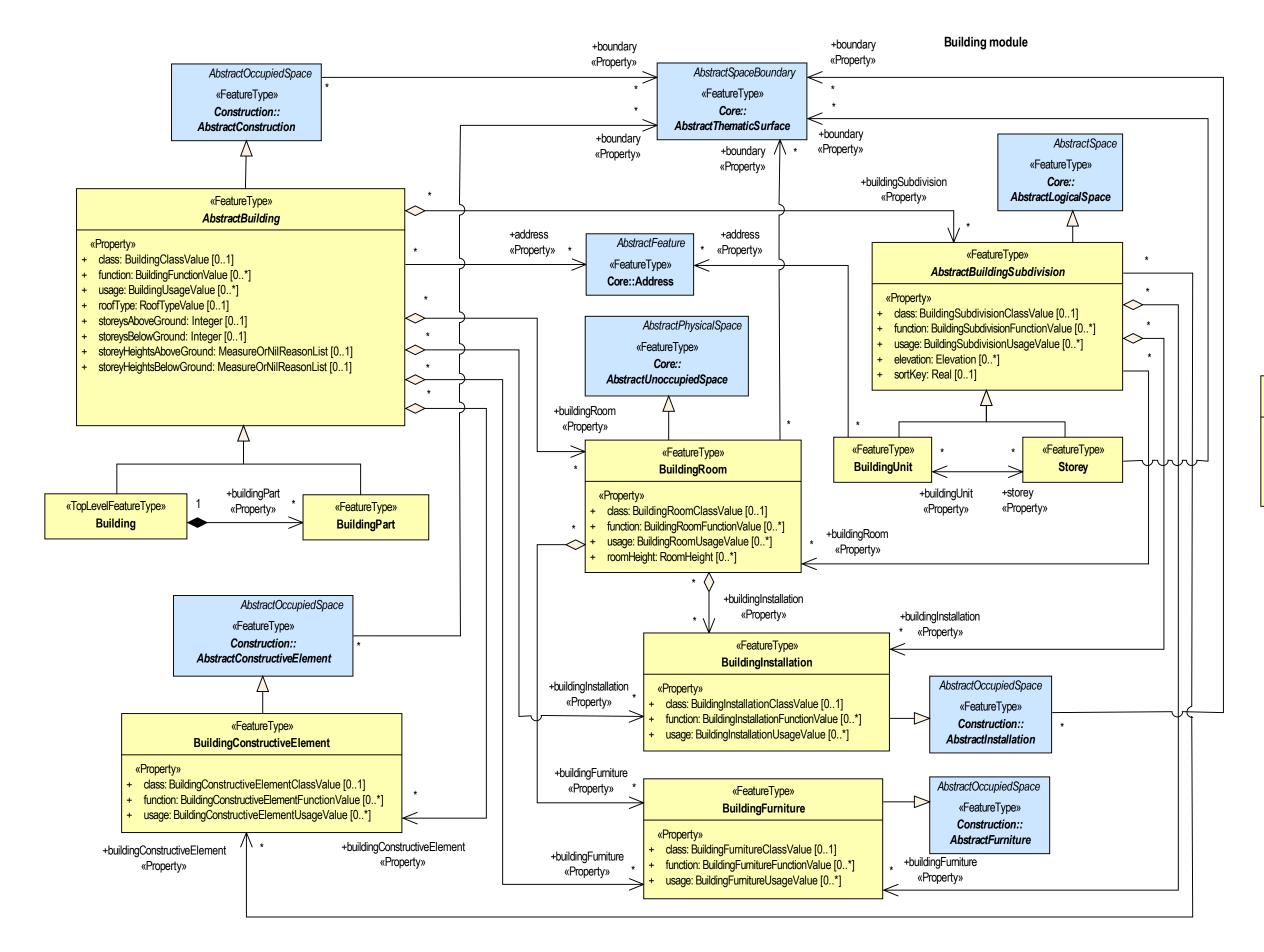
BridgeConstructiveElementFunctionValue

«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

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

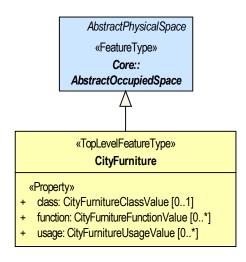
«CodeList»

BuildingConstructiveElementUsageValue

«CodeList»

BuildingSubdivisionUsageValue

CityFurniture module



CityFurniture module - Code lists

«CodeList»

CityFurnitureClassValue

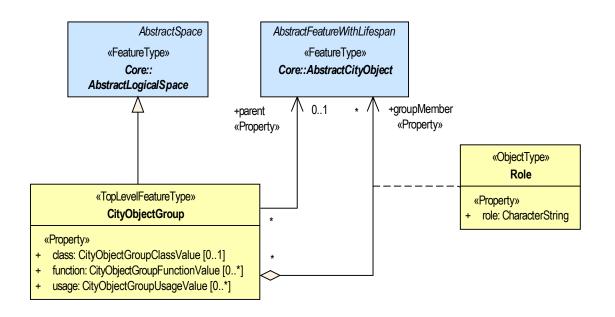
«CodeList»

CityFurnitureFunctionValue

«CodeList»

CityFurnitureUsageValue

CityObjectGroup module



CityObjectGroup module - Code lists

«CodeList»

CityObjectGroupClassValue

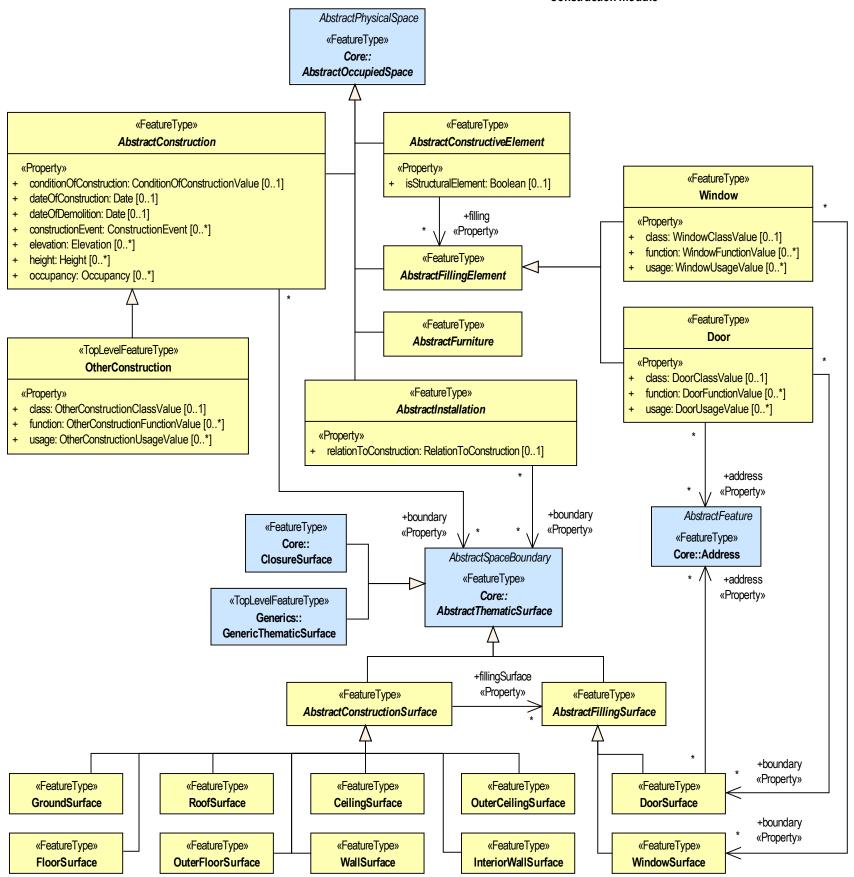
«CodeList»

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»

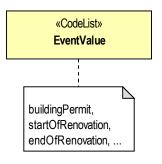
DoorClassValue

«CodeList»

DoorFunctionValue

«CodeList»

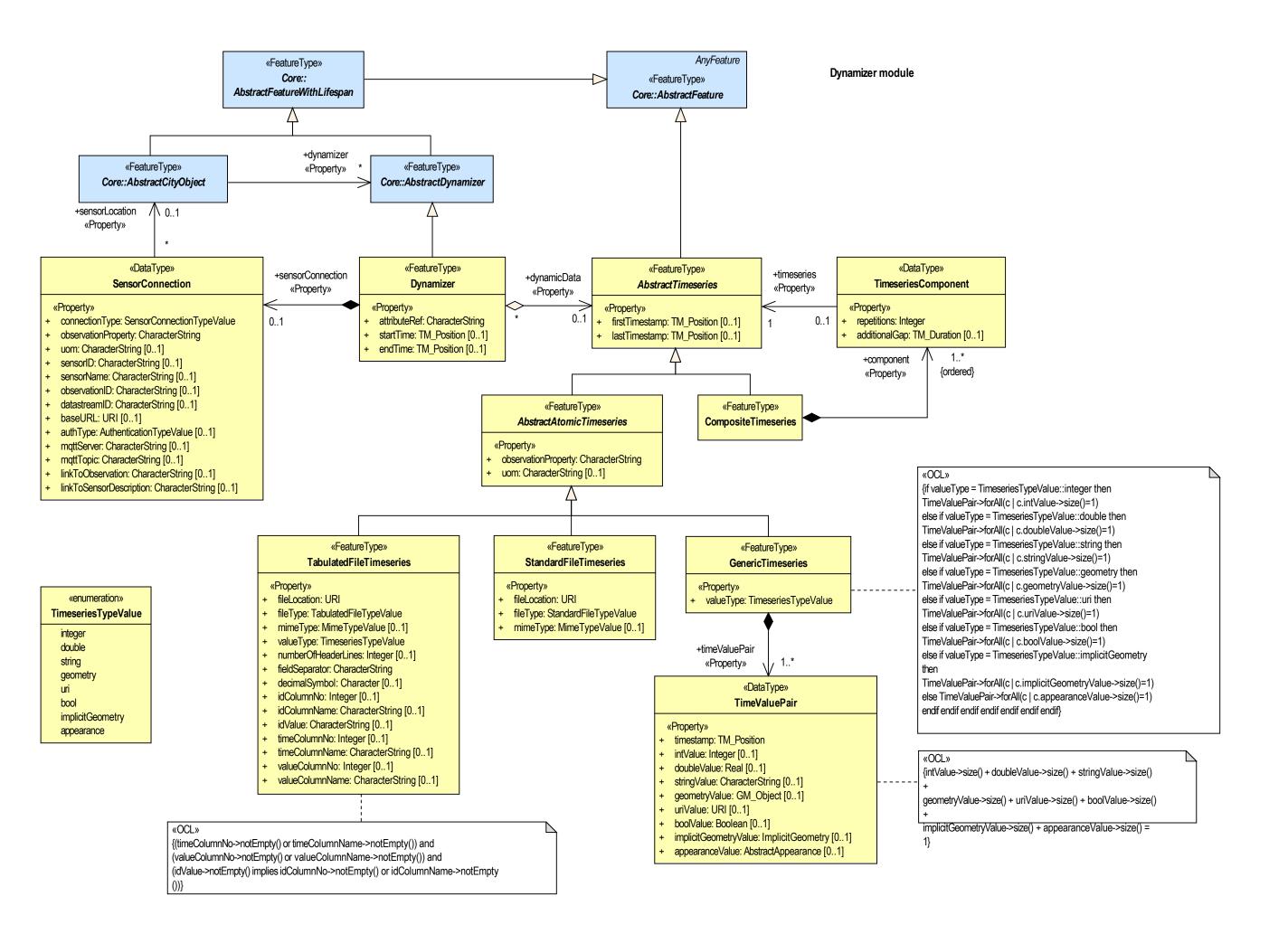
DoorUsageValue



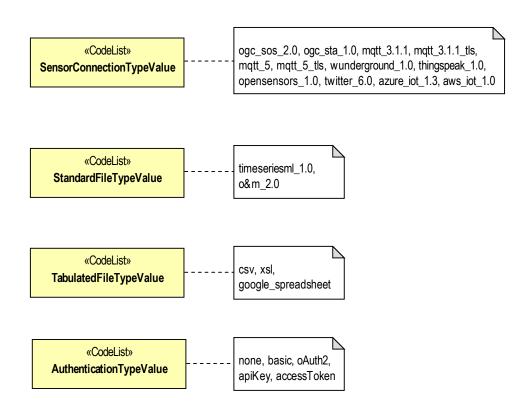
«CodeList»

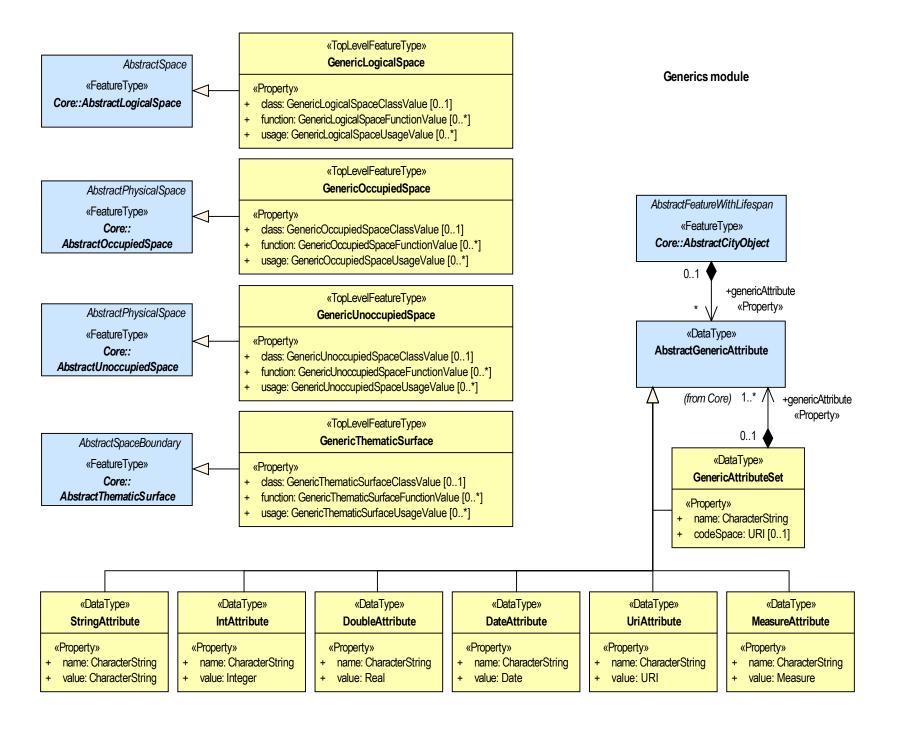
ElevationReferenceValue

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

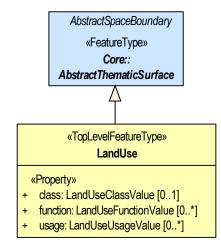
«CodeList»

GenericThematicSurfaceFunctionValue

«CodeList»

GenericThematicSurfaceUsageValue

LandUse module



LandUse module - Code lists

«CodeList»

LandUseClassValue

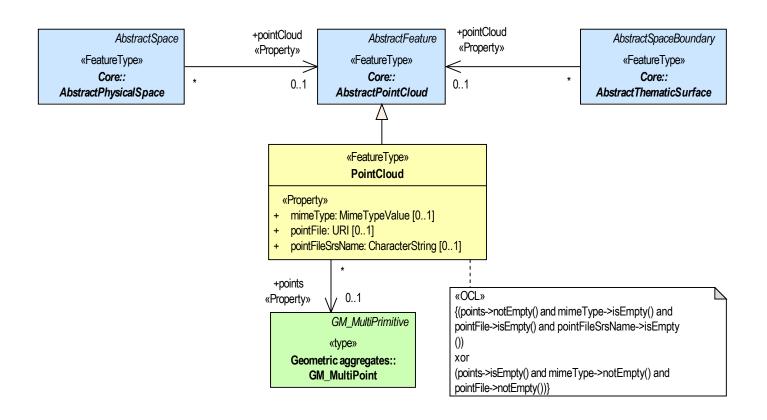
«CodeList»

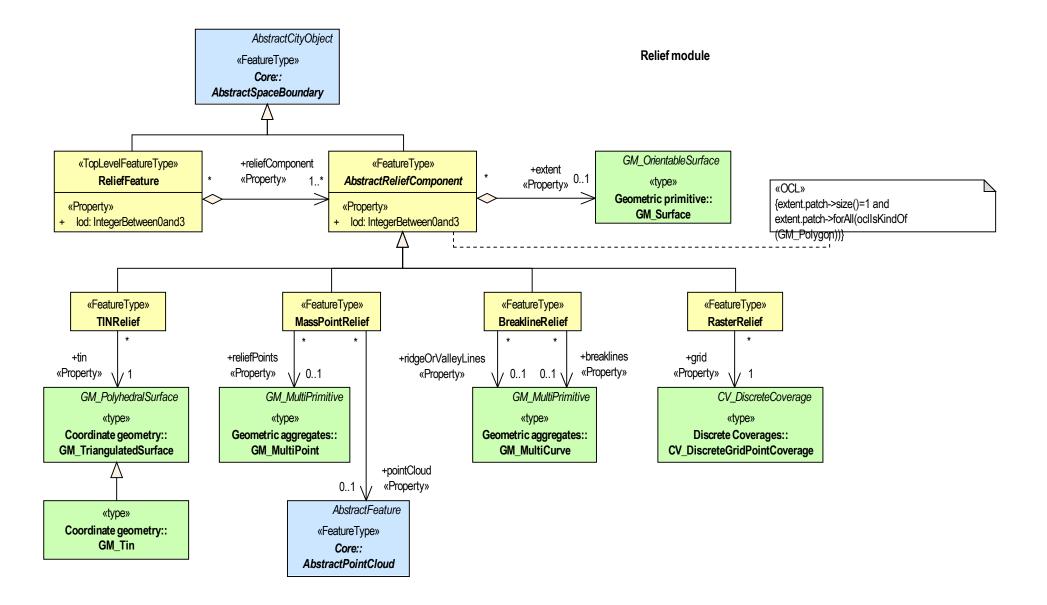
LandUseFunctionValue

«CodeList»

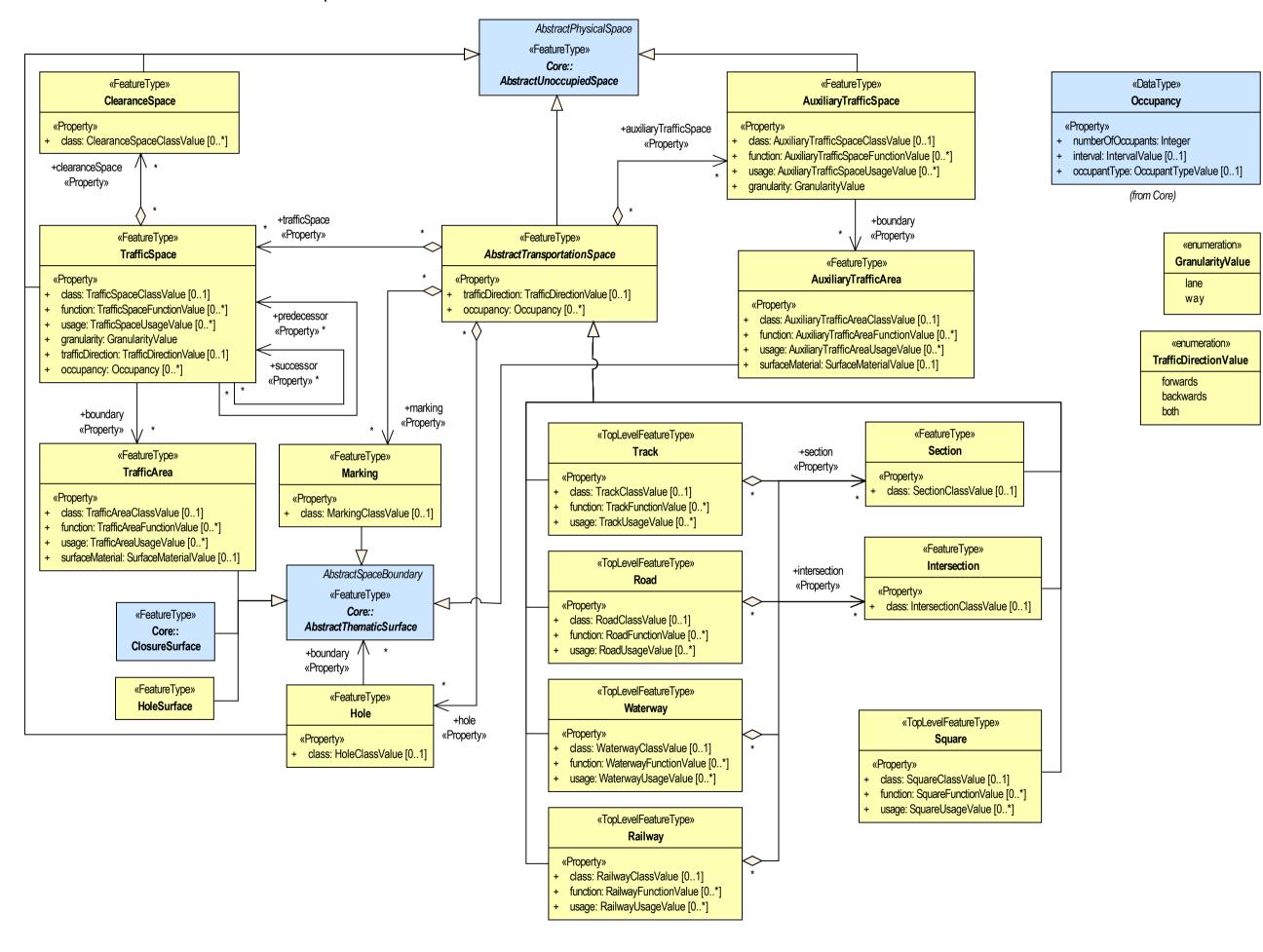
LandUseUsageValue

PointCloud module





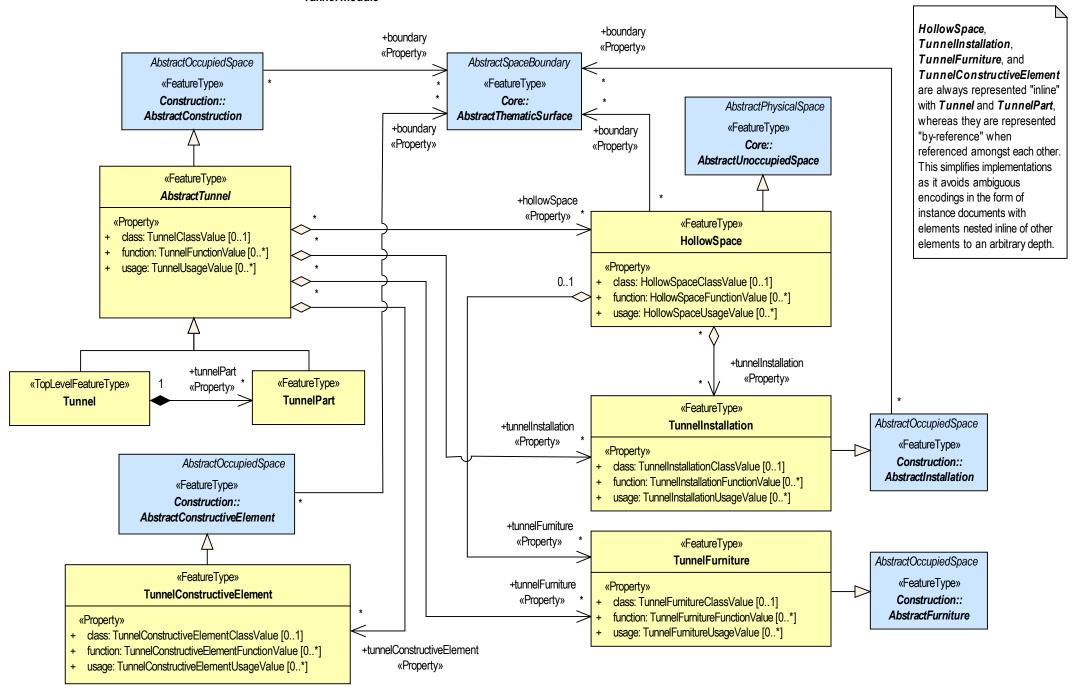
Transportation module



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

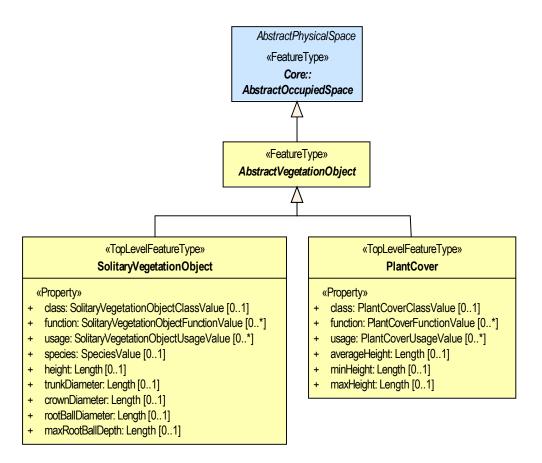
«CodeList»

HollowSpaceUsageValue

«CodeList»

TunnelConstructiveElementUsageValue

Vegetation module



Vegetation module - Code lists

«CodeList»

SolitaryVegetationObjectClassValue

«CodeList»

PlantCoverClassValue

«CodeList»

SpeciesValue

«CodeList»

SolitaryVegetationObjectFunctionValue

«CodeList»

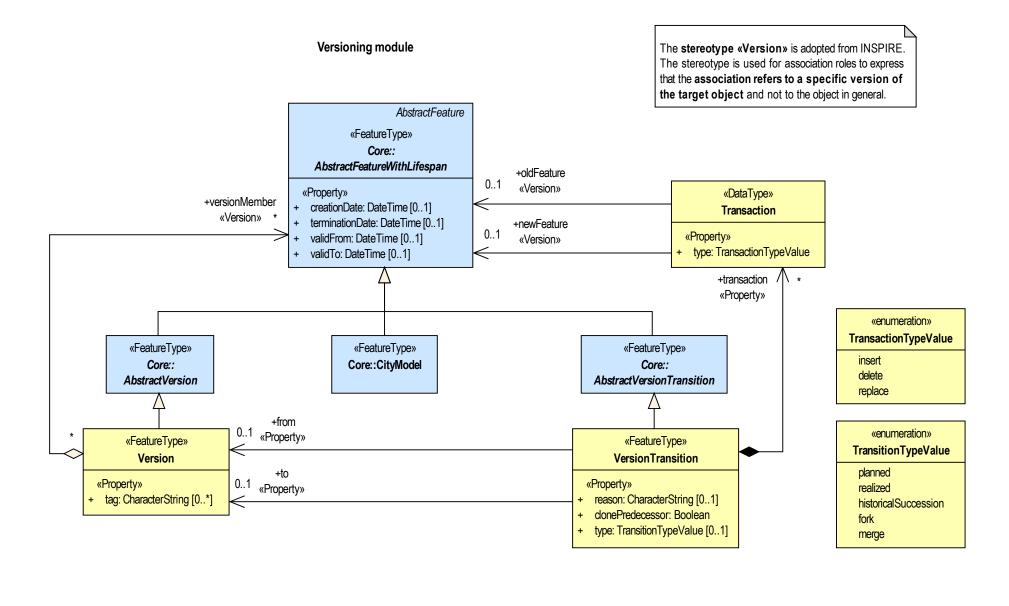
PlantCoverFunctionValue

«CodeList»

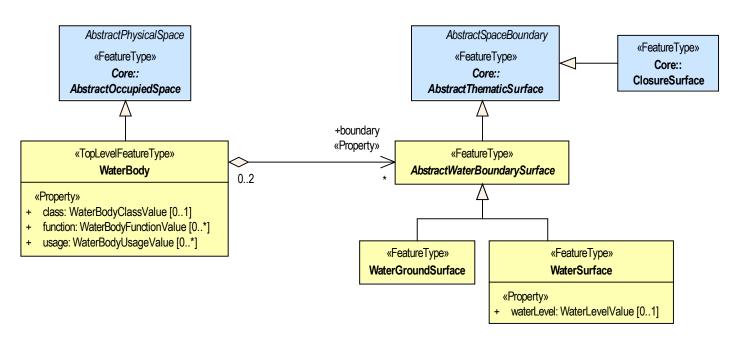
SolitaryVegetationObjectUsageValue

«CodeList»

PlantCoverUsageValue



WaterBody module



WaterBody module - Code lists

«CodeList»

WaterBodyClassValue

«CodeList»

WaterLevelValue

«CodeList»

WaterBodyFunctionValue

«CodeList»

WaterBodyUsageValue