«dataType» NEN3610ID
+ namespace: CharacterString
+ localId: CharacterString
+ versionId: CharacterString [0..1]

«dataType» VersionMetadata
+ aeriusVersion: CharacterString
+ databaseVersion: CharacterString

«dataType» AeriusCalculatorMetadata
+ project: ProjectMetadata
+ situation: SituationMetadata [0..1]
+ calculation: CalculationMetadata [0..1]
+ version: VersionMetadata [0..1]
+ gmlCreator: CharacterString [0..1]

«union» EmissionSourceGeometry
+ GM_Point: GM_Point
+ GM_Curve: GM_Curve
+ GM_Surface: GM_Surface

«dataType» ProjectMetadata
+ year: Integer
+ temporaryPeriod: Integer [0..1]
+ permitCalculationRadiusType: CharacterString [0..1]
+ name: CharacterString [0..1]
+ corporation: CharacterString [0..1]
+ facilityLocation: Address [0..1]
+ description: CharacterString [0..1]

«dataType» SituationMetadata
+ name: CharacterString [0..1]
+ reference: CharacterString [0..1]
+ situationType: SituationType
+ nettingFactor: Real [0..1]

«union» BuildingGeometry
+ GM_Point: GM_Point
+ GM_Surface: GM_Surface

«dataType» Address
+ streetAddress: CharacterString
+ postcode: CharacterString
+ city: CharacterString

«dataType» CalculationMetadata
+ type: CalculationType [0..1]
+ method: CharacterString [0..1]
+ jobType: CharacterString [0..1]
+ substance: Substance [1..*]
+ resultType: ResultType [1..*]
+ maximumRange: Real [0..1]
+ researchArea: Boolean [0..1]
+ monitorSrm2Year: Integer [0..1]
+ option: CalculationOption [0..*]
+ otherSituation: OtherSituationMetadata [0..*]

«dataType» CalculationOption
+ key: CharacterString
+ value: CharacterString

«dataType» OtherSituationMetadata
+ situationType: SituationType
+ name: CharacterString
+ reference: CharacterString

«dataType» SpecifiedHeatContent
+ value: Real

«dataType» HeatContent

«dataType» CalculatedHeatContent
+ emissionTemperature: Real [0..1]
+ outflowDiameter: Real
+ outflowVelocity: Real
+ outflowDirection: OutflowDirectionType
+ outflowVelocityType: OutflowVelocityType

«dataType» StandardDiurnalVariation
+ standardType: CharacterString

«dataType» DiurnalVariation

«dataType» ReferenceDiurnalVariation

«dataType» Definitions
+ customDiurnalVariation: CustomDiurnalVariation [0..*]

+connection   0..*
+customDiurnalVariation   1

«type» CustomDiurnalVariation
+ label: CharacterString [0..1]
+ customType: CharacterString
+ value: Real [1..*]

«dataType» EmissionSourceCharacteristics
+ heatContent: HeatContent
+ emissionHeight: Real
+ spread: Real [0..1]
+ diurnalVariation: DiurnalVariation [0..1]

«dataType» SourceCharacteristicsType

+connection   0..*
+building   0..1

GeoObject
«featureType» Building
+ label: CharacterString [0..1]
+ height: Real
+ geometry: BuildingGeometry
+ diameter: Real [0..1]
«identificatie»
+ identifier: NEN3610ID

«dataType» ADMSSourceCharacteristics
+ height: Real
+ specificHeatCapacity: Real
+ sourceType: ADMSSourceType
+ diameter: Real [0..1]
+ elevationAngle: Real [0..1]
+ horizontalAngle: Real [0..1]
+ width: Real [0..1]
+ verticalDimension: Real [0..1]
+ buoyancyType: ADMSBuoyancyType
+ density: Real [0..1]
+ temperature: Real [0..1]
+ effluxType: ADMSEffluxType
+ verticalVelocity: Real [0..1]
+ volumetricFlowRate: Real [0..1]
+ diurnalVariation: DiurnalVariation [0..1]

«enumeration» Substance
- NH3
- NOX
- NO2
- PM10
- PM25
- EC

«enumeration» TimeUnit
- HOUR
- DAY
- MONTH
- YEAR

«enumeration» ResultType
- DEPOSITION
- CONCENTRATION
- EXCEEDANCE_DAYS
- EXCEEDANCE_HOURS

«enumeration» CalculationType
- PERMIT
- NATURE_AREA
- RADIUS
- CUSTOM_POINTS

«enumeration» RoadSideBarrierType
- SCREEN
- WALL

«enumeration» RoadElevation
- NORMAL
- NORMAL_DYKE
- STEEP_DYKE
- VIADUCT
- TUNNEL

«enumeration» MaritimeShippingMovementType
- INLAND
- MARITIME

«enumeration» OutflowDirectionType
- VERTICAL
- HORIZONTAL

«enumeration» RejectionGrounds
- NONE
- COMPLIANCE_CRITERION
- EXPOSURE_CRITERION
- OTHER

«enumeration» MonitorSubstance
- NONE
- PM10_ONLY
- ALL

«enumeration» WaterwayDirectionType
- IRRELEVANT
- UPSTREAM
- DOWNSTREAM

«enumeration» InlandRouteDirectionType
- ARRIVE
- DEPART

«enumeration» TreeProfile
- NONE_OR_FEW
- SEPARATED
- PACKED

«enumeration» RoadProfile
- WIDE_STREET_CANYON
- NARROW_STREET_CANYON
- ONE_SIDE_BUILDINGS
- OTHER

«enumeration» RoadManager
- MUNICIPALITY
- PROVINCE
- STATE
- WATER_AUTHORITY
- PRIVATE

«enumeration» SituationType
- REFERENCE
- PROPOSED
- TEMPORARY
- NETTING
- COMBINATION_REFERENCE
- COMBINATION_PROPOSED

«enumeration» TrafficDirection
- BOTH
- A_TO_B
- B_TO_A

«enumeration» OutflowVelocityType
- ACTUAL_FLOW
- NORMALISED_FLOW

«enumeration» ADMSSourceType
- POINT
- AREA
- VOLUME
- LINE
- ROAD
- JET

«enumeration» ADMSBuoyancyType
- AMBIENT
- DENSITY
- TEMPERATURE

«enumeration» ADMSEffluxType
- VELOCITY
- VOLUME
- MASS

«enumeration» ADMSRoadSideBarrierType
- NOISE_BARRIER
- BRICK_WALL
- STREET_CANYON_TERRACED_HOUSES
- STREET_CANYON_SEMIDETACHED_HOUSES
- STREET_CANYON_DETACHED_HOUSES
- TREE_BARRIER_OPEN
- TREE_BARRIER_DENSE
- OTHER

«featureType» ManureStorageEmissionSource
+ emission: Emission [0..*]
+ manureStorage: ManureStorage [1..*]

«featureType» OffRoadMobileSourceEmissionSource
+ emission: Emission [0..*]
+ offRoadMobileSource: OffRoadMobileSource [0..*]

«featureType» EmissionSource
+ emission: Emission [1..*]

«featureType» EmissionSourceType *(GeoObject)*
+ label: CharacterString [0..1]
+ description: CharacterString [0..1]
+ emissionSourceCharacteristics: SourceCharacteristicsType [0..1]
+ sectorId: Integer
+ jurisdictionId: Integer [0..1]
+ geometry: EmissionSourceGeometry
«identificatie»
+ identifier: NEN3610ID

«featureType» PlanEmissionSource
+ emission: Emission [0..*]
+ plan: Plan [1..*]

«featureType» FarmLodgingEmissionSource
+ emission: Emission [0..*]
+ farmLodging: FarmLodging [0..*]
+ established: Date [0..1]

«featureType» MaritimeShippingEmissionSource
+ emission: Emission [0..*]
+ maritimeShipping: MaritimeShipping [1..*]
+ movementType: MaritimeShippingMovementType

+connection 0..* +connection 0..*
+mooringA 0..1 +mooringB 0..1

«featureType» FarmlandEmissionSource
+ emission: Emission [0..*]
+ activity: AbstractFarmlandActivity [1..*]

«featureType» MooringMaritimeShippingEmissionSource
+ emission: Emission [0..*]
+ mooringMaritimeShipping: MooringMaritimeShipping [1..*]

«featureType» ADMSRoad
+ width: Real
+ elevation: Real
+ gradient: Real
+ coverage: Real
+ barrierLeft: ADMSRoadSideBarrier [0..1]
+ barrierRight: ADMSRoadSideBarrier [0..1]
+ diurnalVariation: DiurnalVariation [0..1]

«featureType» RoadEmissionSource
+ emission: Emission [0..*]
+ vehicles: Vehicle [1..*]
+ roadManager: RoadManager [0..1]
+ trafficDirection: TrafficDirection [0..1]
+ roadAreaType: CharacterString
+ roadType: CharacterString

«featureType» InlandShippingEmissionSource
+ emission: Emission [0..*]
+ inlandShipping: InlandShipping [1..*]
+ waterway: InlandWaterway

+connection 0..* +connection 0..*
+mooringA 0..1 +mooringB 0..1

«featureType» MooringInlandShippingEmissionSource
+ emission: Emission [0..*]
+ mooringInlandShipping: MooringInlandShipping [1..*]

«featureType» SRM2Road
+ tunnelFactor: Real [0..1]
+ elevation: RoadElevation [0..1]
+ elevationHeight: Integer [0..1]
+ barrierLeft: RoadSideBarrier [0..1]
+ barrierRight: RoadSideBarrier [0..1]
+ partialChange: SRM2LinearReference [0..1]

«featureType» SRM1Road
+ tunnelFactor: Real [0..1]
+ partialChange: SRM1LinearReference [0..*]

+road
1
+connection
0..*

«featureType» SRM1RoadDispersionLine *(GeoObject)*
+ label: CharacterString [0..1]
+ description: CharacterString [0..1]
+ jurisdictionId: Integer [0..1]
+ roadProfile: RoadProfile
+ treeProfile: TreeProfile
+ geometry: GM_Curve [0..1]
«identificatie»
+ identifier: NEN3610ID

+connection
0..*
+calculationPoint
1

«dataType» CalculationPointCorrection
+ label: CharacterString [0..1]
+ description: CharacterString [0..1]
+ jurisdictionId: Integer [0..1]
+ substance: Substance
+ resultType: ResultType
+ value: Real

«dataType» CalculationResult
+ substance: Substance
+ resultType: ResultType
+ sourceCategory: CharacterString [0..1]
+ value: Real

«featureType» SubPoint
+ subPointId: Integer
+ receptorPointId: Integer
+ level: Integer

«featureType» CalculationPointType *(GeoObject / GeoObject)*
+ GM_Point: GM_Point
+ representation: GM_Surface [0..1]
+ result: CalculationResult [0..*]
+ label: CharacterString [0..1]
+ description: CharacterString [0..1]
+ jurisdictionId: Integer [0..1]
+ correction: CalculationPointCorrection [0..*]
+ height: Real [0..1]
+ assessmentCategory: CharacterString [0..1]
«identificatie»
+ identifier: NEN3610ID

«featureType» ReceptorPoint
+ receptorPointId: Integer
+ edgeEffect: Boolean [0..1]

«featureType» CalculationPoint

«featureType» NcaCustomCalculationPoint
+ roadLocalFractionNO2: Real [0..1]

«featureType» NSLCalculationPoint
+ rejectionGrounds: RejectionGrounds [0..1]
+ monitorSubstance: MonitorSubstance [0..1]

«dataType» SRM2LinearReference

+ tunnelFactor: Real [0..1]
+ elevation: RoadElevation [0..1]
+ elevationHeight: Integer [0..1]
+ barrierLeft: RoadSideBarrier [0..1]
+ barrierRight: RoadSideBarrier [0..1]

«dataType» SimpleLinearReference

+ fromPosition: Real
+ toPosition: Real

«dataType» SRM1LinearReference

+ tunnelFactor: Real [0..1]

«dataType» LodgingFodderMeasure

+ fodderMeasureType: CharacterString

«dataType» ReductiveLodgingSystem

«dataType» InlandWaterway

+ type: CharacterString
+ direction: WaterwayDirectionType [0..1]

«dataType» AdditionalLodgingSystem

+ numberOfAnimals: Integer

«dataType» LodgingSystem

+ lodgingSystemType: CharacterString
+ farmLodgingSystemDefinitionType: CharacterString [0..1]

«dataType» CustomInlandShippingEmissionProperties

+ emissionFactorEmpty: Emission [1..*]
+ emissionFactorLaden: Emission [1..*]
+ heatContentEmpty: Real
+ heatContentLaden: Real
+ emissionHeightEmpty: Real
+ emissionHeightLaden: Real

«dataType» CustomMaritimeShippingEmissionProperties

+ emissionFactor: Emission [1..*]
+ heatContent: Real
+ emissionHeight: Real

«dataType» RoadSideBarrier

+ barrierType: RoadSideBarrierType
+ height: Real
+ distance: Real

«dataType» ADMSRoadSideBarrier

+ barrierType: ADMSRoadSideBarrierType
+ distance: Real
+ averageHeight: Real
+ maximumHeight: Real
+ minimumHeight: Real
+ porosity: Real

«dataType» StandardFarmlandActivity
+ standardActivityType: CharacterString
+ numberOfAnimals: Integer [0..1]
+ numberOfDays: Integer [0..1]
+ tonnes: Real [0..1]
+ metersCubed: Real [0..1]
+ numberOfApplications: Integer [0..1]

«dataType» CustomOffRoadMobileSource
+ emission: Emission [1..*]
+ emissionSourceCharacteristics: SourceCharacteristicsType
+ offRoadVehicleSpecification: OffRoadVehicleSpecification [0..1]

«dataType» FarmlandActivity
+ emission: Emission [1..*]

«dataType» StandardOffRoadMobileSource
+ offRoadMobileSourceType: CharacterString
+ literFuelPerYear: Integer [0..1]
+ operatingHoursPerYear: Integer [0..1]
+ literAdBluePerYear: Integer [0..1]

«dataType» StandardVehicle
+ stagnationFactor: Real
+ vehicleType: CharacterString
+ maximumSpeed: Integer [0..1]
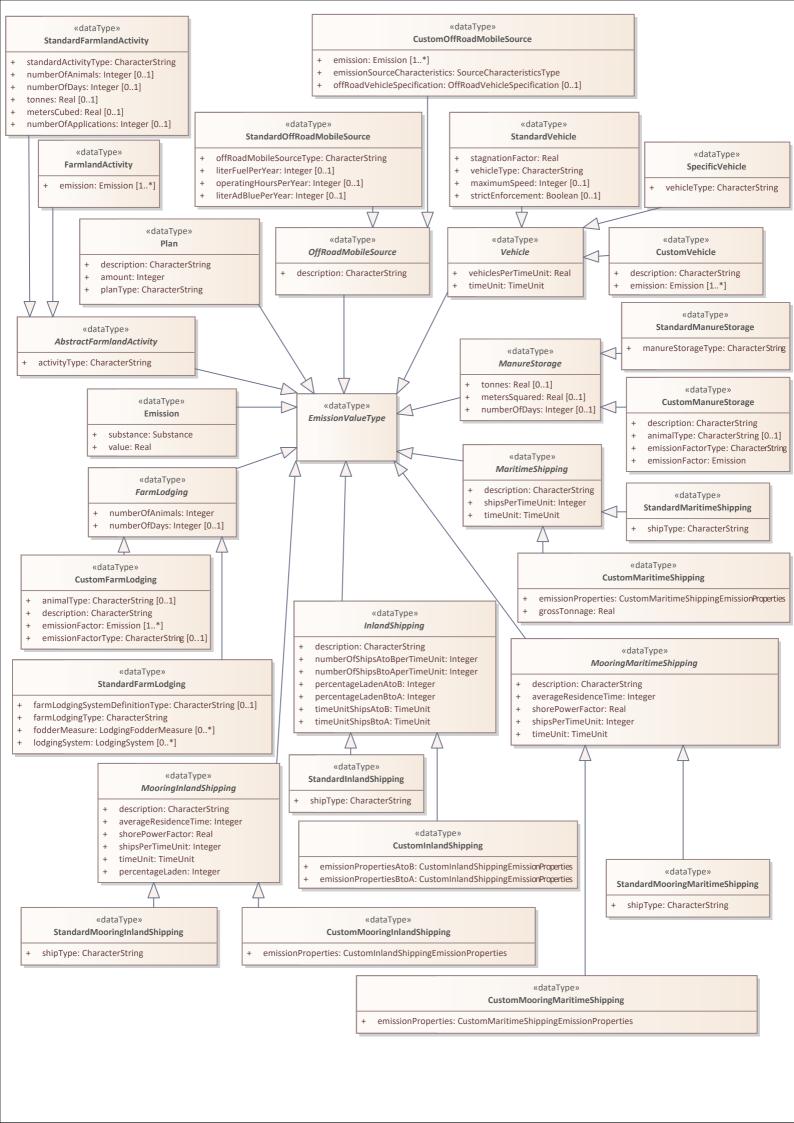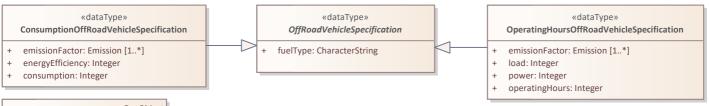+ strictEnforcement: Boolean [0..1]

«dataType» SpecificVehicle
+ vehicleType: CharacterString

«dataType» Plan
+ description: CharacterString
+ amount: Integer
+ planType: CharacterString

«dataType» OffRoadMobileSource
+ description: CharacterString

«dataType» Vehicle
+ vehiclesPerTimeUnit: Real
+ timeUnit: TimeUnit

«dataType» CustomVehicle
+ description: CharacterString
+ emission: Emission [1..*]

«dataType» StandardManureStorage
+ manureStorageType: CharacterString

«dataType» AbstractFarmlandActivity
+ activityType: CharacterString

«dataType» Emission
+ substance: Substance
+ value: Real

«dataType» EmissionValueType

«dataType» ManureStorage
+ tonnes: Real [0..1]
+ metersSquared: Real [0..1]
+ numberOfDays: Integer [0..1]

«dataType» CustomManureStorage
+ description: CharacterString
+ animalType: CharacterString [0..1]
+ emissionFactorType: CharacterString
+ emissionFactor: Emission

«dataType» FarmLodging
+ numberOfAnimals: Integer
+ numberOfDays: Integer [0..1]

«dataType» MaritimeShipping
+ description: CharacterString
+ shipsPerTimeUnit: Integer
+ timeUnit: TimeUnit

«dataType» StandardMaritimeShipping
+ shipType: CharacterString

«dataType» CustomFarmLodging
+ animalType: CharacterString [0..1]
+ description: CharacterString
+ emissionFactor: Emission [1..*]
+ emissionFactorType: CharacterString [0..1]

«dataType» CustomMaritimeShipping
+ emissionProperties: CustomMaritimeShippingEmissionProperties
+ grossTonnage: Real

«dataType» StandardFarmLodging
+ farmLodgingSystemDefinitionType: CharacterString [0..1]
+ farmLodgingType: CharacterString
+ fodderMeasure: LodgingFodderMeasure [0..*]
+ lodgingSystem: LodgingSystem [0..*]

«dataType» InlandShipping
+ description: CharacterString
+ numberOfShipsAtoBperTimeUnit: Integer
+ numberOfShipsBtoAperTimeUnit: Integer
+ percentageLadenAtoB: Integer
+ percentageLadenBtoA: Integer
+ timeUnitShipsAtoB: TimeUnit
+ timeUnitShipsBtoA: TimeUnit

«dataType» MooringMaritimeShipping
+ description: CharacterString
+ averageResidenceTime: Integer
+ shorePowerFactor: Real
+ shipsPerTimeUnit: Integer
+ timeUnit: TimeUnit

«dataType» MooringInlandShipping
+ description: CharacterString
+ averageResidenceTime: Integer
+ shorePowerFactor: Real
+ shipsPerTimeUnit: Integer
+ timeUnit: TimeUnit
+ percentageLaden: Integer

«dataType» StandardInlandShipping
+ shipType: CharacterString

«dataType» StandardMooringInlandShipping
+ shipType: CharacterString

«dataType» CustomMooringInlandShipping
+ emissionProperties: CustomInlandShippingEmissionProperties

«dataType» CustomInlandShipping
+ emissionPropertiesAtoB: CustomInlandShippingEmissionProperties
+ emissionPropertiesBtoA: CustomInlandShippingEmissionProperties

«dataType» StandardMooringMaritimeShipping
+ shipType: CharacterString

«dataType» CustomMooringMaritimeShipping
+ emissionProperties: CustomMaritimeShippingEmissionProperties

«dataType»
ConsumptionOffRoadVehicleSpecification

+ emissionFactor: Emission [1..*]
+ energyEfficiency: Integer
+ consumption: Integer

«dataType»
OffRoadVehicleSpecification

+ fuelType: CharacterString

«dataType»
OperatingHoursOffRoadVehicleSpecification

+ emissionFactor: Emission [1..*]
+ load: Integer
+ power: Integer
+ operatingHours: Integer

GeoObject
«featureType»
SRM1RoadMeasureArea

+ label: CharacterString [0..1]
+ description: CharacterString [0..1]
+ jurisdictionId: Integer [0..1]
+ measure: SRM1RoadMeasure [1..*]
+ geometry: GM_Surface

«identificatie»
+ identifier: NEN3610ID

«dataType»
SRM1RoadMeasure

+ vehicleType: CharacterString
+ roadType: CharacterString
+ reduction: EmissionReduction [1..*]

«dataType»
EmissionReduction

+ substance: Substance
+ factor: Real