Rapport

IMKL2015 - Objectcatalogus

onderdeel van IMKL2015 – Dataspecificatie Utiliteitsnetten



**rechtenbeleid**

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Versiebeheer

Dit document is aan verandering onderhevig. Het versiebeheer van het document geeft inzicht in wijzigen en de actualiteit ervan.

|  |  |  |  |
| --- | --- | --- | --- |
| **Versie** | **Datum** | **Status** | **Aanpassing** |
| 1.1 | 20160527 | publiek | Voor een paar constraints de OCL toegevoegd |
| 1.1RC1 | 20160514 | publiek | Update naar publieke RC1 versie |
| 1.1RC1 | 20160422 | concept | Inhoud vervangen als gevolg model aanpassingen |
| 1.0RC1 | 20151120 | publicatie |  |
| 099 | 20151111 | concept | Meerdere aanpassingen vanuit UML. Met geel aangeven nieuw toegevoegde elementen. |
| 096 | 20150619 | concept | Meerdere aanpassingen vanuit UML. Alle INSPIRE gerelateerde objecttypen en attributen zijn nu ook opgenomen. In de vorige versie waren die voor een gedeelte weggelaten. |
| 095 | 2015 02 02 | concept | Meerdere aanpassingen. Gepubliceerd op github |
| 09 | 2014 12 18 | concept |  |
| 02 | 2014 11 03 | concept | Aanvullende informatie |



**Applicatie schema IMKL2015: Objectcatalogus**

Dit document bevat alle objecttypen, hun attributen en relaties, waardelijsten die in IMKL2015 voorkomen. Voor de waardelijsten geldt dat de in de lijsten voorkomende waarden in een apart excel en RDF document zijn gepubliceerd. Alle informatie-elementen zijn voorzien van een definitie en eventueel een toelichting. Het document is daarmee een normatief onderdeel van de dataspecificatie IMKL2015.

De informatie-elementen zijn onderverdeeld in de volgende groepen:

* geo objecttypen: Een gestructureerd informatie element met identiteit. Specifiek voor geo-informatie een geografisch object;
* datatypen: Een gestructureerd data type zonder identiteit;
* enumeraties en codelijsten: waardelijsten. Van de codelijsten zijn de waarden niet in dit document opgenomen;
* kandidaattypes en placeholders: informatie-elementen die als kandidaat worden gebruikt en uitgebreid mogen worden;
* geïmporteerde types: informatie-elementen die worden geïmporteerd uit een ander package en daar worden beschreven.

### Objectcatalogus metadata

| Naam van objectcatalogus | IMKL2015 |
| --- | --- |
| Scope | IMKL2015 |
| Versienummer | IMKL2015 1.1 |
| Versiedatum | 2016-05-27 |
| Herkomst Definities | Dataspecificatie IMKL2015 |

### Types gedefinieerd in de objectcatalogus

| **Type** | **Package** | **Stereotypes** |
| --- | --- | --- |
| AanduidingEisVoorzorgsmaatregel | IMKL2015 | «featureType» |
| Adres | IMKL2015 | «dataType» |
| Annotatie | IMKL2015 | «featureType» |
| AnnotatieTypeValue | IMKL2015 | «codeList» |
| Appurtenance | IMKL2015 | «featureType» |
| BestandMediaTypeValue | IMKL2015 | «codeList» |
| Bijlage | IMKL2015 | «featureType» |
| BijlageTypeValue | IMKL2015 | «codeList» |
| BuisleidingTypeValue | IMKL2015 | «codeList» |
| BuisSpecifiek | IMKL2015 | «featureType» |
| ConditionOfFacilityIMKLValue | IMKL2015 | «codeList» |
| ContainerLeidingelement | IMKL2015 | «featureType» |
| Diepte | IMKL2015 | «featureType» |
| DiepteAangrijpingspuntValue | IMKL2015 | «codeList» |
| DiepteNAP | IMKL2015 | «featureType» |
| DiepteTovMaaiveld | IMKL2015 | «featureType» |
| Duct | IMKL2015 | «featureType» |
| EffectcontourDodelijk | IMKL2015 | «featureType» |
| EffectScenarioType | IMKL2015 | «codeList» |
| EigenTopografie | IMKL2015 | «featureType» |
| EigenTopografieStatusValue | IMKL2015 | «codeList» |
| EisVoorzorgsmaatregelBijlage | IMKL2015 | «featureType» |
| ElectricityAppurtenanceTypeIMKLValue | IMKL2015 | «codeList» |
| Elektriciteitskabel | IMKL2015 | «featureType» |
| ExtraDetailinfo | IMKL2015 | «featureType» |
| ExtraDetailInfoTypeValue | IMKL2015 | «codeList» |
| ExtraGeometrie | IMKL2015 | «featureType» |
| ExtraInformatie | IMKL2015 | «featureType» |
| IMKLBasis | IMKL2015 | «featureType» |
| Kabelbed | IMKL2015 | «featureType» |
| KabelEnLeidingContainer | IMKL2015 | «featureType» |
| KabelOfLeiding | IMKL2015 | «featureType» |
| KabelSpecifiek | IMKL2015 | «featureType» |
| Kast | IMKL2015 | «featureType» |
| Label | IMKL2015 | «featureType» |
| Labelpositie | IMKL2015 | «dataType» |
| LabelpositieValue | IMKL2015 | «codeList» |
| Leidingelement | IMKL2015 | «featureType» |
| Maatvoering | IMKL2015 | «featureType» |
| MaatvoeringsTypeValue | IMKL2015 | «codeList» |
| Mangat | IMKL2015 | «featureType» |
| Mantelbuis | IMKL2015 | «featureType» |
| Mast | IMKL2015 | «featureType» |
| NauwkeurigheidDiepteValue | IMKL2015 | «codeList» |
| NauwkeurigheidXYvalue | IMKL2015 | «codeList» |
| NEN3610ID | IMKL2015 | «dataType» |
| OilGasChemicalsAppurtenanceITypeIMKLValue | IMKL2015 | «codeList» |
| OilGasChemicalsProductTypeIMKLValue | IMKL2015 | «codeList» |
| OlieGasChemicalienPijpleiding | IMKL2015 | «featureType» |
| PipeMaterialTypeIMKLValue | IMKL2015 | «codeList» |
| Rioolleiding | IMKL2015 | «featureType» |
| RioolleidingTypeValue | IMKL2015 | «codeList» |
| SewerAppurtenanceTypeIMKLValue | IMKL2015 | «codeList» |
| StedelijkWaterSpecifiek | IMKL2015 | «featureType» |
| TechnischContactpersoon | IMKL2015 | «dataType» |
| TechnischGebouw | IMKL2015 | «featureType» |
| Telecommunicatiekabel | IMKL2015 | «featureType» |
| TelecommunicationsAppurtenanceTypeIMKLValue | IMKL2015 | «codeList» |
| Thema | IMKL2015 | «codeList» |
| ThermalAppurtenanceTypeIMKLValue | IMKL2015 | «codeList» |
| ThermischePijpleiding | IMKL2015 | «featureType» |
| TopografischObjectTypeValue | IMKL2015 | «codeList» |
| Toren | IMKL2015 | «featureType» |
| Transportroute | IMKL2015 | «featureType» |
| Transportroutedeel | IMKL2015 | «featureType» |
| TransportrouteRisico | IMKL2015 | «featureType» |
| Utiliteitsnet | IMKL2015 | «featureType» |
| UtilityNetworkTypeIMKLValue | IMKL2015 | «codeList» |
| WaterAppurtenanceTypeIMKLValue | IMKL2015 | «codeList» |
| Waterleiding | IMKL2015 | «featureType» |
| PipeMaterialTypeValue | Common Extended Utility Network Elements | «codeList» |
| UtilityNetwork | Common Utility Network Elements | «featureType» |
| Cabinet | Common Utility Network Elements | «featureType» |
| UtilityNetworkTypeValue | Common Utility Network Elements | «codeList» |
| Pipe | Common Utility Network Elements | «featureType» |
| Pole | Common Utility Network Elements | «featureType» |
| Duct | Common Utility Network Elements | «featureType» |
| Tower | Common Utility Network Elements | «featureType» |
| Cable | Common Utility Network Elements | «featureType» |
| Manhole | Common Utility Network Elements | «featureType» |
| AppurtenanceTypeValue | Common Utility Network Elements | «codeList» |
| Appurtenance | Common Utility Network Elements | «featureType» |
| SpecificAppurtenanceTypeValue | Common Utility Network Elements | «codeList» |
| ElectricityAppurtenanceTypeValue | Electricity Network | «codeList» |
| ElectricityCable | Electricity Network | «featureType» |
| OilGasChemicalsPipe | Oil-Gas-Chemicals Network | «featureType» |
| OilGasChemicalsProductTypeValue | Oil-Gas-Chemicals Network | «codeList» |
| OilGasChemicalsAppurtenanceTypeValue | Oil-Gas-Chemicals Network | «codeList» |
| SewerWaterTypeValue | Sewer Network | «codeList» |
| SewerPipe | Sewer Network | «featureType» |
| SewerAppurtenanceTypeValue | Sewer Network | «codeList» |
| TelecommunicationsAppurtenanceTypeValue | Telecommunications Network | «codeList» |
| TelecommunicationsCableMaterialTypeValue | Telecommunications Network | «codeList» |
| TelecommunicationsCable | Telecommunications Network | «featureType» |
| ThermalPipe | Thermal Network | «featureType» |
| ThermalAppurtenanceTypeValue | Thermal Network | «codeList» |
| WaterPipe | Water Network | «featureType» |
| WaterAppurtenanceTypeValue | Water Network | «codeList» |
| WaterTypeValue | Water Network | «codeList» |
| GeometryMethodValue | Addresses | «codeList» |
| AddressComponent | Addresses | «featureType» |
| LocatorLevelValue | Addresses | «codeList» |
| LocatorDesignatorTypeValue | Addresses | «codeList» |
| LocatorName | Addresses | «dataType» |
| LocatorDesignator | Addresses | «dataType» |
| StatusValue | Addresses | «codeList» |
| GeometrySpecificationValue | Addresses | «codeList» |
| LocatorNameTypeValue | Addresses | «codeList» |
| AddressLocator | Addresses | «dataType» |
| Address | Addresses | «featureType» |
| AddressRepresentation | Addresses | «dataType» |
| GeographicPosition | Addresses | «dataType» |
| TechnicalStatusValue | AdministrativeUnits |  |
| AdministrativeBoundary | AdministrativeUnits | «featureType» |
| AdministrativeUnit | AdministrativeUnits | «featureType» |
| AdministrativeHierarchyLevel | AdministrativeUnits | «codeList» |
| Condominium | AdministrativeUnits | «featureType» |
| ResidenceOfAuthority | AdministrativeUnits | «dataType» |
| LegalStatusValue | AdministrativeUnits |  |
| CadastralZoning | CadastralParcels | «featureType» |
| Measure | ProductionAndIndustrialFacilitiesExtension | «dataType» |
| CadastralParcel | CadastralParcels | «featureType» |
| CadastralZoningLevelValue | CadastralParcels | «codeList» |
| BasicPropertyUnit | CadastralParcels | «featureType» |
| GrammaticalNumberValue | Geographical Names | «codeList» |
| NameStatusValue | Geographical Names | «codeList» |
| NativenessValue | Geographical Names | «codeList» |
| PronunciationOfName | Geographical Names | «dataType» |
| SpellingOfName | Geographical Names | «dataType» |
| GrammaticalGenderValue | Geographical Names | «codeList» |
| GeographicalName | Geographical Names | «dataType» |
| ConditionOfConstructionValue | BuildingsBase | «codeList» |
| ElevationReferenceValue | BuildingsBase | «codeList» |
| HeightStatusValue | BuildingsBase | «codeList» |
| Elevation | BuildingsBase | «dataType» |
| DateOfEvent | BuildingsBase | «dataType» |
| ExternalReference | BuildingsBase | «dataType» |
| AbstractConstruction | BuildingsBase | «featureType» |
| HeightAboveGround | BuildingsBase | «dataType» |

### Geo object types

##### AanduidingEisVoorzorgsmaatregel

| **AanduidingEisVoorzorgsmaatregel** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Aanduiding van een netelement waarop een eis voorzorgsmaatregel van toepassing is. Dit is een wettelijke eis. | |  | Subtype van: | ExtraInformatie | |  | Omschrijving: | Een eis voorzorgsmaatregel is altijd gekoppeld aan een net of aan een element daarvan. Omdat de voorzorgsmaatregel van toepassing kan zijn op delen van een element is ze als apart geometrisch vlakobject gedefinieerd. | |  | Stereotypes: | «featureType» | |
| **Attribuut: eisVoorzorgsmaatregel**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Vermelding of er voorzorgsmaatregelen getroffen dienen te worden. Aangegeven wordt wat de voorzorgsmaatregel is. | |  | Omschrijving: | Dit attribuut is bij de aanlevering aan de LV niet ingevuld. Dit attribuut is verplicht bij de uitlevering. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: netbeheerderNetOmschrijving**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Omschrijving bij een risico classificering die aan (onderdeel van een) kabel- of leiding netwerk gegeven kan worden. Op basis van dit risico moeten mogelijk voorzorgsmaatregelen getroffen worden bij het uitvoeren van werkzaamheden. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: netbeheerderNetAanduiding**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Aanduiding van het risico dat aan een utiliteitsnet of netelement gegeven kan worden ten behoeve van de bepaling of en welke voorzorgsmaatregelen getroffen dienen te worden. | |  | Multipliciteit: | 1 | |
| **Attribuut: netbeheerderWerkAanduiding**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Aanduiding van het risico dat aan de soort werkzaamheden gegeven is bij de bepaling van de te nemen eis voorzorgsmaatregelen. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: aanvraagSoort**   |  | Naam: |  | | --- | --- | --- | |  | Type: | AanvraagSoort | |  | Definitie: | Aanduiding van het soort Klic-aanvraag (Klic-melding) waarvoor de bepaling van de voorzorgsmaatregel van toepassing is. Als deze niet is ingevuld, geldt de aanduiding ongeacht de soort Klic-aanvraag. | |  | Multipliciteit: | 0..\* | |
| **Attribuut: geometrie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_Surface | |  | Definitie: | Geometrie die aangeeft op welk element een eis voorzorgsmaatregel van toepassing is en of een strook aangeeft waar de maatregel van toepassing is. | |  | Omschrijving: | Als de geometrie alleen dient om het leidingelement aan te duiden is er een standaard strook van 1 meter aan weerszijden van de kabel of leiding of leidingelement. Indien nodig kan voor meer zichtbaarheid een bredere strook worden aangegeven. Als het een werkelijke strook betreft is de afstand afhankelijk van de specifieke situatie. | |  | Multipliciteit: | 1 | |
| **Constraint: BijUiteveringAttribuutEisVoorzorgsmaatregelVerplicht**   |  | Natuurlijke taal: | bij uitlevering is het attribuut EisVoorzorgsmaatregel ingevuld | | --- | --- | --- | |

##### Annotatie

| **Annotatie** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Teksten en symbolen weergegeven in het kaartbeeld. | |  | Subtype van: | ExtraInformatie | |  | Omschrijving: | Via het “annotatieType” attribuut kan het soort annotatie of maatvoering object worden bepaald – voor visualisatie - en via het attribuut “label” kan de tekst of numerieke waarde worden doorgegeven. | |  | Stereotypes: | «featureType» | |
| **Attribuut: annotatieType**   |  | Naam: |  | | --- | --- | --- | |  | Type: | AnnotatieTypeValue | |  | Definitie: | Aard van de opgenomen annotatie | |  | Omschrijving: | Annotatie kan voor o.a. maatvoering getypeerd zijn. | |  | Multipliciteit: | 1 | |
| **Attribuut: rotatiehoek**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Hoek waaronder een labeltekst of symbool wordt weergegeven. | |  | Omschrijving: | Voor een annotatie die gekoppeld is aan een puntgeometrie, geeft dit attribuut aan onder welke hoek de labeltekst of een puntsymbool moet worden weergegeven. Eenheid: booggraad; één booggraad is een 360e deel van een cirkelomtrek. Oriëntering: met de klok mee (positief) t.o.v. normale tekstrichting (horizontaal = 0 graden; voor een kaart die noord georiënteerd is.). Decimale precisie: 1 (= 1 cijfer achter de komma, ofwel 1/10 booggraad). Bereik (minimale/maximale waarden): [-180, +180].]. Verstekwaarde voor tekst is 0 (dus horizontaal weergegeven rechtopstaande tekst). Dit attribuut heeft een Measure als data type. De UOM wordt uitgedrukt via de volgende OGC URN code: urn:ogc:def:uom:OGC::deg | |  | Multipliciteit: | 0..1 | |
| **Attribuut: labelpositie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Labelpositie | |  | Definitie: | Plaats van de labeltekst t.o.v. plaatsingspunt. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: ligging**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_Object | |  | Definitie: | Positie of geometrie van de annotatie. | |  | Omschrijving: | Afhankelijk van het type annotatie betreft het een plaatsingspunt van het label of de geometrie van de annotatie. | |  | Multipliciteit: | 1 | |
| **Constraint: GeometrieLijnOfPunt**   |  | Natuurlijke taal: | GM\_Point, GM\_Curve | | --- | --- | --- | |  | OCL: | Inv: self.ligging.oclIsKindOf(GM\_Point) or self.ligging.oclIsKindOf(GM\_Curve) | |
| **Constraint: RotatiehoekBijPijlpuntLabel**   |  | Natuurlijke taal: | Rotatiehoek alleen bij pijlpunt en label | | --- | --- | --- | |  | OCL: | Inv: if (self.annotatieType= AnnotatieTypeValue::annotatiepijlpunt or self.annotatieType= AnnotatieTypeValue::annotatielabel) then self.rotatiehoek -> notEmpty() | |
| **Constraint: RotatiehoekEenheidDegrees**   |  | Natuurlijke taal: | Rotatiehoek is in graden | | --- | --- | --- | |  | OCL: | Inv: self.rotatiehoek.Measure.uom = 'urn:ogc:def:uom:OGC::deg' | |
| **Constraint: LabelwaardeVerplichtBijLabel**   |  | Natuurlijke taal: | er is een label waarde verplicht bij een label | | --- | --- | --- | |  | OCL: | Inv: if (self.annotatieType= AnnotatieTypeValue::annotatielabel) then self.label -> notEmpty() | |

##### Appurtenance

| **Appurtenance** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Een leidingelement dat door zijn type wordt beschreven (via het attribuut appurtenanceType). | |  | Herkomst: | Inspire | |  | Subtype van: | Leidingelement, Appurtenance | |  | Omschrijving: | Bijvoorbeeld objecten zoals een schakelkast, verdeelkast, kranen, afsluiters, versterkers, kabelmof, rioolput, (druk)rioolgemaal, kathodische bescherming, boorput, etc. | |  | Stereotypes: | «featureType» | |
| **Attribuut: hoogte**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Length | |  | Definitie: | De hoogte of lengte van het object. | |  | Omschrijving: | De hoogte betreft de lengte van het hele leidingelement in verticale richting ongeacht of er een deel onder of boven het maaiveld bevindt. Het datatype is ‘Length’ waarbij de meeteenheid apart wordt gespecificeerd. Voor WION wordt er altijd meters gebruikt met maximaal 2 decimalen. De UOM wordt uitgedrukt via 1 van de volgende OGC URN codes: • urn:ogc:def:uom:OGC::m • urn:ogc:def:uom:OGC::cm • urn:ogc:def:uom:OGC::mm | |  | Multipliciteit: | 0..1 | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### Bijlage

| **Bijlage** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Documentbijlage. | |  | Subtype van: | IMKLBasis | |  | Stereotypes: | «featureType» | |
| **Attribuut: bijlageType**   |  | Naam: |  | | --- | --- | --- | |  | Type: | BijlageTypeValue | |  | Definitie: | Beschrijft het type bijlage. | |  | Multipliciteit: | 1 | |
| **Attribuut: bestandLocatie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | URI | |  | Definitie: | Bestandsnaam van het bestand dat meegegeven wordt. | |  | Omschrijving: | De bestandsnaam omvat ook de locatie van het bestand. | |  | Multipliciteit: | 1 | |
| **Attribuut: bestandMediaType**   |  | Naam: |  | | --- | --- | --- | |  | Type: | BestandMediaTypeValue | |  | Definitie: | Media type van een bestand. | |  | Multipliciteit: | 1 | |
| **Attribuut: bestandIdentificator**   |  | Naam: |  | | --- | --- | --- | |  | Type: | URI | |  | Definitie: | Unieke identificator van een bestand. | |  | Omschrijving: | Deze identificator wordt beschreven via een URI. | |  | Multipliciteit: | 1 | |
| **Relatie: inNetwork**   |  | Type: | Utiliteitsnet | | --- | --- | --- | |  | Multipliciteit: | 1 | |

##### BuisSpecifiek

| **BuisSpecifiek (abstract)** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Abstract data object dat de buis-specifieke attributen bevat van de IMKL extensie. | |  | Stereotypes: | «featureType» | |
| **Attribuut: buismateriaalType**   |  | Naam: |  | | --- | --- | --- | |  | Type: | PipeMaterialTypeIMKLValue | |  | Definitie: | Materiaal waaruit de buis bestaat. | |  | Multipliciteit: | 0..1 | |

##### ContainerLeidingelement

| **ContainerLeidingelement (abstract)** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Abstract data object dat de gemeenschappelijke attributen en associaties bevat voor alle containerleidingelement objecten. | |  | Subtype van: | Label | |  | Omschrijving: | Containerleidingelementen kunnen bij meerdere thema’s geregistreerd staan. Ze moeten bij minstens één thema weergegeven worden maar het mag bij meerdere. Optioneel is er via het associatie-attribuut extraGeometrie een buitenbegrenzing of contour van het object op te nemen. De netbeheerder bepaalt zelf wanneer dat functioneel is. | |  | Stereotypes: | «featureType» | |
| **Attribuut: bovengrondsZichtbaar**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Boolean | |  | Definitie: | Aangegeven wordt of het containerleidingelement bovengronds vanaf het maaiveld zichtbaar is. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: geoNauwkeurigheidXY**   |  | Naam: |  | | --- | --- | --- | |  | Type: | NauwkeurigheidXYvalue | |  | Definitie: | Indicatie van de nauwkeurigheid in horizontaal vlak (x,y) waarmee de geometrie van de ligging van de leiding is aangegeven. | |  | Omschrijving: | De nauwkeurigheid voor WION is minimaal +/- 1 meter. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: BGT\_ID**   |  | Naam: |  | | --- | --- | --- | |  | Type: | NEN3610ID | |  | Definitie: | Verwijzing naar het ID van het overeenkomstige object uit de Basisregistratie Grootschalige Topografie of pluslaag. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: rotatiehoekSymbool**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Hoek waaronder een puntsymbool wordt weergegeven. | |  | Omschrijving: | Voor een symbool dat gekoppeld is aan een puntgeometrie, geeft dit attribuut aan onder welke hoek een puntsymbool moet worden weergegeven. Eenheid: booggraad; één booggraad is een 360e deel van een cirkelomtrek. Oriëntering: met de klok mee (positief) t.o.v. normale tekstrichting (horizontaal = 0 graden; voor een kaart die noord georiënteerd is.). Decimale precisie: 1 (= 1 cijfer achter de komma, ofwel 1/10 booggraad). Bereik (minimale/maximale waarden): [-180, +180].]. Dit attribuut heeft een Measure als data type. De UOM wordt uitgedrukt via de volgende OGC URN code: urn:ogc:def:uom:OGC::deg | |  | Multipliciteit: | 0..1 | |
| **Relatie: heeftExtraInformatie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | ExtraInformatie | |  | Definitie: | Extra informatie over dit object. | |  | Multipliciteit: | 0..\* | |
| **Relatie: inNetwork**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Utiliteitsnet | |  | Definitie: | Verwijzing naar het utiliteitsnet. | |  | Multipliciteit: | 1..\* | |
| **Relatie: dieptelegging**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Diepte | |  | Definitie: | Diepte waarop het object is gelegd. | |  | Omschrijving: | Wordt alleen opgenomen indien er sprake is van een legging die afwijkt van de gangbare (standaard) dieptelegging. | |  | Multipliciteit: | 0..1 | |
| **Relatie: extraGeometrie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | ExtraGeometrie | |  | Definitie: | Extra geometrie naast de verplichte arc/node. | |  | Multipliciteit: | 0..1 | |
| **Constraint: RotatiehoekEenheidDegrees**   |  | Natuurlijke taal: | rotatiehoek in graden | | --- | --- | --- | |  | OCL | Inv: self.rotatiehoekSymbool.Measure.uom = 'urn:ogc:def:uom:OGC::deg' | |

##### Diepte

| **Diepte (abstract)** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Abstract data object dat de gemeenschappelijke attributen en associaties bevat voor de diepte objecten. | |  | Subtype van: | Label, IMKLBasis | |  | Stereotypes: | «featureType» | |
| **Attribuut: diepteNauwkeurigheid**   |  | Naam: |  | | --- | --- | --- | |  | Type: | NauwkeurigheidDiepteValue | |  | Definitie: | De nauwkeurigheid van de dekking van een KabelOfLeiding of KabelEnLeidingContainer object of diepte van een Leidingelement of ContainerLeidingelement object. | |  | Omschrijving: | Dit attribuut gebruikt een codelijst – zie NauwkeurigheidDiepteValue. | |  | Multipliciteit: | 1 | |
| **Attribuut: dieptePeil**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Geeft de afstand weer vanaf de referentie – NAP of maaiveld – tot bovenkant van een KabelOfLeiding, KabelEnLeidingcontainer, Leidingelement of ContainerLeidingelement. Dit attribuut heeft een Measure als data type. De UOM wordt uitgedrukt via 1 van de volgende OGC URN codes: • urn:ogc:def:uom:OGC::m • urn:ogc:def:uom:OGC::cm • urn:ogc:def:uom:OGC::mm. Voor WION is de eenheid altijd meter en een getal met ten hoogste 2 decimalen. | |  | Multipliciteit: | 1 | |
| **Attribuut: datumOpmetingDieptePeil**   |  | Naam: |  | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | De datum waarop het dieptepeil werd opgemeten. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: diepteAangrijpingspunt**   |  | Naam: |  | | --- | --- | --- | |  | Type: | DiepteAangrijpingspuntValue | |  | Definitie: | Benoeming van welk aangrijpingspunt van het object de diepte is bepaald. | |  | Omschrijving: | Bijvoorbeeld bovenkant, onderkant, binnenkant. | |  | Multipliciteit: | 1 | |
| **Attribuut: rotatiehoekSymbool**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Hoek waaronder een puntsymbool wordt weergegeven. | |  | Omschrijving: | Voor een symbool dat gekoppeld is aan een puntgeometrie, geeft dit attribuut aan onder welke hoek een puntsymbool moet worden weergegeven. Eenheid: booggraad; één booggraad is een 360e deel van een cirkelomtrek. Oriëntering: met de klok mee (positief) t.o.v. normale tekstrichting (horizontaal = 0 graden; voor een kaart die noord georiënteerd is.). Decimale precisie: 1 (= 1 cijfer achter de komma, ofwel 1/10 booggraad). Bereik (minimale/maximale waarden): [-180, +180].]. Dit attribuut heeft een Measure als data type. De UOM wordt uitgedrukt via de volgende OGC URN code: urn:ogc:def:uom:OGC::deg | |  | Multipliciteit: | 0..1 | |
| **Attribuut: ligging**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_Point | |  | Definitie: | Locatie van het dieptegegeven. | |  | Omschrijving: | Locatie waar de diepte-informatie van toepassing is. Eén leiding kan meerdere dieptegegevens langs het traject van de leiding hebben. | |  | Multipliciteit: | 0..1 | |
| **Relatie: inNetwork**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Utiliteitsnet | |  | Definitie: | Verwijzing naar het utiliteitsnet. | |  | Multipliciteit: | 1 | |
| **Constraint: WionDiepteInMeterMetMaxTweeDecimalen**   |  | Natuurlijke taal: | Voor WION diepte is in meters met maximaal 2 decimalen | | --- | --- | --- | |  | OCL: | Inv: self.dieptepijl.Measure.uom = 'urn:ogc:def:uom:OGC::m' | |
| **Constraint: RotatiehoekEenheidDegrees**   | Natuurlijke taal: | rotatiehoek in graden | | --- | --- |   OCL :Inv: self.rotatiehoekSymbool.Measure.uom = 'urn:ogc:def:uom:OGC::deg' |

##### DiepteNAP

| **DiepteNAP** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Object dat dient om de afstand weer te geven van het NAP-nulpunt tot de bovenkant van kabel of leiding, leidingcontainer, leidingelement of containerleidingelement. | |  | Subtype van: | Diepte | |  | Omschrijving: | Voor een buis kan additioneel de binnenonderkant buis als meetpunt worden genomen. | |  | Stereotypes: | «featureType» | |
| **Attribuut: maaiveldPeil**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Hoogte van het maaiveld t.o.v. NAP. | |  | Omschrijving: | Kan gebruikt worden om de diepte van een kabel, leiding, element of container t.o.v. het maaiveld te berekenen. Dit attribuut heeft een Measure als data type. De UOM wordt uitgedrukt via 1 van de volgende OGC URN codes: urn:ogc:def:uom:OGC::m urn:ogc:def:uom:OGC::cm urn:ogc:def:uom:OGC::mm. Voor WION is de eenheid altijd meter en een getal met ten hoogste 2 decimalen. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: datumOpmetingMaaiveldPeil**   |  | Naam: |  | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | De datum waarop het maaiveldpeil werd opgemeten. | |  | Multipliciteit: | 0..1 | |
| **Constraint: MaaiveldpijlInMeterMetMaxTweeDecimalen**   |  | Natuurlijke taal: | Voor WION maaiveldpijl is in meters met maximaal 2 decimalen | | --- | --- | --- | |  | OCL: | Inv: self.maaiveldPijl.Measure.uom = 'urn:ogc:def:uom:OGC::m' | |

##### DiepteTovMaaiveld

| **DiepteTovMaaiveld** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Object dat dient om de afstand weer te geven vanaf het maaiveld tot de bovenkant van kabel of leiding, leidingcontainer, leidingelement of containerleidingelement. | |  | Subtype van: | Diepte | |  | Stereotypes: | «featureType» | |

##### Duct

| **Duct** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Een behuizing die ertoe dient om door middel van een omhullende constructie kabels en leidingen te beschermen en geleiden. | |  | Herkomst: | Inspire | |  | Subtype van: | Duct, KabelEnLeidingContainer | |  | Omschrijving: | Een duct is een constructie anders dan een buis. Een kabelbed of geul valt onder een duct. Een mantelbuis niet. Optioneel kan er als extrageometrie een vlak worden toegevoegd maar alleen als er grote diameters zijn. De netbeheerder bepaalt zelf wanneer dat functioneel is. | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### EffectcontourDodelijk

| **EffectcontourDodelijk** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Effectafstand dodelijk letsel (1% mortaliteit). | |  | Herkomst: | RRGS | |  | Subtype van: | IMKLBasis | |  | Omschrijving: | Zijnde de toetsingsafstand voor o.a. de inventarisatie van bebouwing voor de berekening van het groepsrisico alsook het omgaan met het restrisico. De effectcontour komt bij elke transportroute voor. | |  | Stereotypes: | «featureType» | |
| **Attribuut: effectcontourDodelijk**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_MultiSurface | |  | Definitie: | Effectafstand dodelijk letsel (1% mortaliteit). | |  | Omschrijving: | Zijnde de toetsingsafstand voor o.a. de inventarisatie van bebouwing voor de berekening van het groepsrisico alsook het omgaan met het restrisico | |  | Multipliciteit: | 1 | |  | Herkomst: | RRGS | |
| **Relatie: bijTransportroute**   |  | Naam: | bij transportroute | | --- | --- | --- | |  | Type: | Transportroute | |  | Definitie: | Vewijzing naar de bijbehorende transportroute. | |  | Multipliciteit: | 1 | |  | Herkomst: | RRGS | |

##### EigenTopografie

| **EigenTopografie** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Topografie die extra wordt toegevoegd voor relatieve plaatsbepaling van objecten. | |  | Subtype van: | Label, IMKLBasis | |  | Omschrijving: | In principe wordt er een standaard topografische ondergrond gebruikt maar optioneel kan een eigen topografie meegeleverd worden ter nadere bepaling of oriëntatie van de ligging van een leiding of leidingelement. In geval van een geografisch object worden deze topografieën gesitueerd via het attribuut “ligging” waarbij punt, lijn en polygoon geometrieën gebruikt kunnen worden. | |  | Stereotypes: | «featureType» | |
| **Attribuut: status**   |  | Naam: |  | | --- | --- | --- | |  | Type: | EigenTopografieStatusValue | |  | Definitie: | Plan of bestaande topografie. | |  | Multipliciteit: | 1 | |
| **Attribuut: typeTopografischObject**   |  | Naam: |  | | --- | --- | --- | |  | Type: | TopografischObjectTypeValue | |  | Definitie: | Soort topografisch object. | |  | Omschrijving: | Aangeven wordt welk type object uit de BGT of BGT plus is opgenomen. | |  | Multipliciteit: | 1 | |
| **Attribuut: ligging**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_Object | |  | Definitie: | Plaatsaanduiding van de extra topografie. | |  | Omschrijving: | In geval van een geografisch object worden deze topografieën gesitueerd via het attribuut “ligging” waarbij punt, lijn en polygoon geometrieën gebruikt kunnen worden. | |  | Multipliciteit: | 1 | |
| **Relatie: inNetwork**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Utiliteitsnet | |  | Definitie: | Verwijzing naar het utiliteitsnet. | |  | Omschrijving: | ExtraTopografie kan bij meerdere utliliteitsnetten horen. | |  | Multipliciteit: | 1..\* | |
| **Constraint: GeometriePuntLijnOfVlak**   |  | Natuurlijke taal: | Geometrie is punt, lijn of vlak | | --- | --- | --- | |  | OCL: | Inv: self.ligging.oclIsKindOf(GM\_Point) or self.ligging.oclIsKindOf(GM\_Curve) or self.ligging.oclIsKindOf(GM\_Surface) | |

##### EisVoorzorgsmaatregelBijlage

| **EisVoorzorgsmaatregelBijlage** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Bijlage met de vermelding welke voorzorgsmaatregelen getroffen dienen te worden. Aangegeven wordt wat de voorzorgsmaatregel is met de hoogste prioriteit. | |  | Subtype van: | Bijlage | |  | Omschrijving: | Alleen de eis voorzorgsmaatregel met de hoogste prioriteit binnen dit thema wordt opgenomen. Op basis van prioriteitscriteria wordt van alle binnen dit deel van het utiliteitsnetwork en dit thema geldende voorzorgsmaatregelen de maatregel met de hoogste proriteit opgenomen. | |  | Stereotypes: | «featureType» | |
| **Attribuut: eisVoorzorgsmaatregel**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Vermelding of er voorzorgsmaatregelen getroffen dienen te worden. Aangegeven wordt wat de voorzorgsmaatregel is. | |  | Multipliciteit: | 0..\* | |
| **Attribuut: toelichting**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Extra informatie in de vorm van een toelichting. | |  | Multipliciteit: | 0..1 | |

##### Elektriciteitskabel

| **Elektriciteitskabel** |
| --- |
| |  | Naam: | Elektriciteitskabel | | --- | --- | --- | |  | Definitie: | Een aansluiting of reeks aansluitingen van een nutsvoorzieningennet voor het overbrengen van elektriciteit van de ene locatie naar een andere. | |  | Herkomst: | Inspire | |  | Subtype van: | ElectricityCable, KabelSpecifiek, KabelOfLeiding | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### ExtraDetailinfo

| **ExtraDetailinfo** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Object dat extra informatie over één of meerdere utility network elementen weergeeft via bijkomende bestanden. | |  | Subtype van: | ExtraInformatie | |  | Omschrijving: | Het bestandstype is altijd pdf. | |  | Stereotypes: | «featureType» | |
| **Attribuut: adres**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Adres | |  | Definitie: | Adresaanduiding conform BAG | |  | Multipliciteit: | 0..1 | |
| **Attribuut: extraInfoType**   |  | Naam: |  | | --- | --- | --- | |  | Type: | ExtraDetailInfoTypeValue | |  | Definitie: | Beschrijft het type detailinformatie. | |  | Multipliciteit: | 1 | |
| **Attribuut: bestandLocatie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | URI | |  | Definitie: | Bestandsnaam van het bestand dat meegegeven wordt. | |  | Omschrijving: | De bestandsnaam omvat ook de locatie van het bestand. | |  | Multipliciteit: | 1 | |
| **Attribuut: bestandMediaType**   |  | Naam: |  | | --- | --- | --- | |  | Type: | BestandMediaTypeValue | |  | Definitie: | Media type van een bestand. | |  | Multipliciteit: | 1 | |
| **Attribuut: bestandIdentificator**   |  | Naam: |  | | --- | --- | --- | |  | Type: | URI | |  | Definitie: | Unieke identificator van een bestand. | |  | Omschrijving: | Deze identificator wordt beschreven via een URI. | |  | Multipliciteit: | 1 | |
| **Attribuut: ligging**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_Object | |  | Definitie: | Locatie waar de detailinformatie op van toepassing is. | |  | Omschrijving: | Kan een punt lijn of vlak zijn. | |  | Multipliciteit: | 1 | |
| **Constraint: GeometriePuntLijnOfVlak**   |  | Natuurlijke taal: | De geometrie is een punt, lijn of een vlak | | --- | --- | --- | |  | OCL: | Inv TypeGeometrie: self.ligging.oclIsKindOf(GM\_Point) or self.ligging.oclIsKindOf(GM\_Curve) or self.ligging.oclIsKindOf(GM\_Surface) | |
| **Constraint: HuisaansluitingVerplichtAdres**   |  | Natuurlijke taal: | Een huisaansluiting heeft verplicht een attribuut adres | | --- | --- | --- | |  | OCL: | Inv AdresVerplicht: if self.extraInfoType= ExtraDetailInfoTypeValue::huisaansluiting then self.adres -> notEmpty() | |

##### ExtraGeometrie

| **ExtraGeometrie** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Verzamelobject voor extra geometrie van netwerkelementen. | |  | Herkomst: | IMKL | |  | Subtype van: | IMKLBasis | |  | Omschrijving: | Deze klasse biedt de mogelijkheid om extra geometrie toe te voegen ten opzichte van de standaard nodes en links die onderdeel van het netwerk zijn. Dit zijn hoofdzakelijk 3D geometrieën, maar niet uitsluitend. vlakgeometrie2D biedt de mogelijkheid om een vlakrepresentatie van een netwerkelement, in 2D, op te nemen. Het is toegestaan om meerdere geometrieën op te nemen in dit object, ze sluiten elkaar niet uit. | |  | Stereotypes: | «featureType» | |
| **Attribuut: vlakgeometrie2D**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_Surface | |  | Definitie: | Tweedimensionale vlakrepresentatie van het netwerkelement. | |  | Omschrijving: | Wordt gebruikt indien een netwerkelement ook additioneel als gebied wordt gerepresenteerd. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: puntgeometrie2.5D**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_Point | |  | Definitie: | 2.5D representatie van een leidingelement, dus inclusief z waarde. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: lijngeometrie2.5D**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_Curve | |  | Definitie: | 2.5D representatie van een lijnvormig netwerkelement. | |  | Omschrijving: | Ten opzichte van de 2D representatie wordt de z coordinaat toegevoegd, maar ook waar nodig extra coordinatenparen om de lijn correct in 3D te representeren. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: vlakgeometrie2.5D**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_Surface | |  | Definitie: | 2.5D vlakrepresentatie van het netwerkelement. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: geometrie3D**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_Solid | |  | Definitie: | Representatie van het netwerkelement als 3D volume. | |  | Multipliciteit: | 0..1 | |
| **Relatie: inNetwork**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Utiliteitsnet | |  | Definitie: | Verwijzing naar het utiliteitsnet. | |  | Multipliciteit: | 1 | |

##### ExtraInformatie

| **ExtraInformatie (abstract)** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Informatie toegevoegd aan objecten. | |  | Subtype van: | Label, IMKLBasis | |  | Omschrijving: | De objecten kunnen via annotatie en gekoppelde bestanden voorzien worden van extra informatie. | |  | Stereotypes: | «featureType» | |
| **Relatie: inNetwork**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Utiliteitsnet | |  | Definitie: | Verwijzing naar het utiliteitsnet. | |  | Multipliciteit: | 1 | |

##### IMKLBasis

| **IMKLBasis (abstract)** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Abstract data object dat de basis attributen bevat van de IMKL extensie. | |  | Herkomst: | IMKL | |  | Stereotypes: | «featureType» | |
| **Attribuut: identificatie**   |  | Naam: | identificatie | | --- | --- | --- | |  | Type: | NEN3610ID | |  | Definitie: | Unieke identificatie van het object binnen het domein van NEN 3610. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «identificatie» | |  | Herkomst: | NEN 3610:2011 | |
| **Attribuut: beginLifespanVersion**   |  | Naam: |  | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | De begindatum waarop een data object in de registratie werd aangemaakt, het begin van de levenscyclus van een data object. | |  | Omschrijving: | Dit attribuut is afkomstig van INSPIRE maar wordt ook gebruikt in de IMKL-specieke objecten. Voor niet INSPIRE plichtige datasets kan hier een dummy waarde worden ingevuld. Dit attribuut heeft DateTime als data type. | |  | Multipliciteit: | 1 | |
| **Attribuut: endLifespanVersion**   |  | Naam: |  | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | De datum die het einde van een levenscyclus van een data object aangeeft. | |  | Omschrijving: | Het moment vanaf wanneer het geen onderdeel meer is van de actuele registratie. Dit attribuut is afkomstig van INSPIRE maar wordt ook gebruikt in de IMKL-specieke objecten. Dit attribuut heeft DateTime als data type. | |  | Multipliciteit: | 0..1 | |

##### Kabelbed

| **Kabelbed** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Kabelbed of Geul: Ruimtebeslag dat door een gemeenschappelijk tracé van één of meer kabels, buizen, HDPE- en/of mantelbuizen – die toebehoren aan één netbeheerder - wordt gevormd. | |  | Subtype van: | Duct | |  | Omschrijving: | Synoniem voor kabelbed is geul. Losse kabels of buizen die bij elkaar in een kabelbed liggen. Informatie is opgenomen op het niveau van de set van kabels of buizen. Indien er meerdere kabels in een kabelbed liggen wordt het aantal kabels verplicht opgenomen. Optioneel kan er als extrageometrie een vlak worden toegevoegd maar alleen als er grote breedtes zijn. De netbeheerder bepaalt zelf wanneer dat functioneel is. | |  | Stereotypes: | «featureType» | |

##### KabelEnLeidingContainer

| **KabelEnLeidingContainer (abstract)** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Abstract data object dat de gemeenschappelijke attributen en associaties bevat voor alle kabel- en leidingcontainer objecten. | |  | Subtype van: | Label | |  | Omschrijving: | Optioneel kan er als extrageometrie een vlak worden toegevoegd maar alleen als er grote diameters of breedtes zijn. De netbeheerder bepaalt zelf wanneer dat functioneel is. | |  | Stereotypes: | «featureType» | |
| **Attribuut: bovengrondsZichtbaar**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Boolean | |  | Definitie: | Aangegeven wordt of het leidingelement bovengronds vanaf het maaiveld zichtbaar is. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: geoNauwkeurigheidXY**   |  | Naam: |  | | --- | --- | --- | |  | Type: | NauwkeurigheidXYvalue | |  | Definitie: | Indicatie van de nauwkeurigheid in horizontaal vlak (x,y) waarmee de geometrie van de ligging van de leiding is aangegeven. | |  | Omschrijving: | De WION nauwkeurigheid is minimaal +/- 1 meter. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: toelichting**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Extra informatie in de vorm van een toelichting. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: aantalKabelsLeidingen**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Integer | |  | Definitie: | Aantal kabels leidingen of buizen dat zich in het containerelement bevindt. | |  | Omschrijving: | Wordt opgenomen indien het aantal meer dan één is. | |  | Multipliciteit: | 0..1 | |
| **Relatie: dieptelegging**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Diepte | |  | Definitie: | Diepte waarop het object is gelegd. | |  | Omschrijving: | Wordt alleen opgenomen indien er sprake is van een legging die afwijkt van de gangbare (standaard) dieptelegging. | |  | Multipliciteit: | 0..\* | |
| **Relatie: heeftExtraInformatie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | ExtraInformatie | |  | Definitie: | Extra informatie over dit object. | |  | Multipliciteit: | 0..\* | |
| **Relatie: extraGeometrie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | ExtraGeometrie | |  | Definitie: | Extra geometrie naast de verplichte arc/node. | |  | Multipliciteit: | 0..1 | |

##### KabelOfLeiding

| **KabelOfLeiding (abstract)** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Leidingen, buizen of kabels bestemd voor voortgeleiding van energie, materie of data. | |  | Herkomst: | IMKL | |  | Subtype van: | Label | |  | Omschrijving: | KabelOfLeiding is in dit model een abstract begrip en omvat alle typen van alle nettypen. Onder de objectklasse KabelOfLeiding vallen ook leidingen die buiten gebruik of vervallen zijn. Huisaansluitingen kunnen als object KabelOfLeiding opgenomen zijn (of in een aparte Huisaansluitingsschets). Optioneel is er via het associatie-attribuut extraGeometrie een buitenbegrenzing of contour van het object op te nemen. De netbeheerder bepaalt zelf wanneer dat functioneel is. | |  | Stereotypes: | «featureType» | |
| **Attribuut: geoNauwkeurigheidXY**   |  | Naam: |  | | --- | --- | --- | |  | Type: | NauwkeurigheidXYvalue | |  | Definitie: | Indicatie van de nauwkeurigheid in horizontaal vlak (x,y) waarmee de geometrie van de ligging van de leiding is aangegeven. | |  | Omschrijving: | De WION nauwkeurigheid is minimaal +/- 1 meter. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: toelichting**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Extra informatie in de vorm van een toelichting. | |  | Multipliciteit: | 0..1 | |
| **Relatie: dieptelegging**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Diepte | |  | Definitie: | Diepte waarop het object is gelegd. | |  | Omschrijving: | Wordt alleen opgenomen indien er sprake is van een legging die afwijkt van de gangbare (standaard) dieptelegging. | |  | Multipliciteit: | 0..\* | |
| **Relatie: heeftExtraInformatie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | ExtraInformatie | |  | Definitie: | Extra informatie over dit object. | |  | Multipliciteit: | 0..\* | |
| **Relatie: extraGeometrie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | ExtraGeometrie | |  | Definitie: | Extra geometrie naast de verplichte arc/node. | |  | Multipliciteit: | 0..1 | |

##### KabelSpecifiek

| **KabelSpecifiek (abstract)** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Abstract data object dat de kabel-specifieke attributen bevat van de IMKL extensie. | |  | Herkomst: | IMKL-Be | |  | Stereotypes: | «featureType» | |
| **Attribuut: kabelDiameter**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Diameter van een kabel of leiding uitgedrukt in een Unit of Measure (UOM). | |  | Omschrijving: | Dit attribuut heeft een Measure als data type. De UOM wordt uitgedrukt via één van de volgende OGC URN codes: • urn:ogc:def:uom:OGC::m • urn:ogc:def:uom:OGC::cm • urn:ogc:def:uom:OGC::mm | |  | Multipliciteit: | 0..1 | |

##### Kast

| **Kast** |
| --- |
| |  | Naam: | Kast | | --- | --- | --- | |  | Definitie: | Eenvoudig kast-object dat nutsvoorzieningenobjecten kan bevatten die tot een of meer nutsvoorzieningennetwerken behoren. | |  | Herkomst: | Inspire | |  | Subtype van: | ContainerLeidingelement, Cabinet | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### Label

| **Label (abstract)** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Abstract data object dat de labelattributen bevat van de IMKL extensie. | |  | Omschrijving: | Een label kan als attribuut bij netelementen opgenomen zijn. In dat geval hebben ze geen plaastingspunt. Ze kunnen ook bij maatvoering of annotatie opgenomen zijn. Dan hebben ze wel een plaastingspunt middels een attribuut ligging. | |  | Stereotypes: | «featureType» | |
| **Attribuut: label**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Tekst of getal dat een eigenschap omschrijft of kwantificeert en als annotatie op een kaartbeeld wordt afgebeeld. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: omschrijving**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Gedetailleerde omschrijving van het informatieobject. | |  | Omschrijving: | Kan toegevoegd worden als het label meer uitleg behoeft. | |  | Multipliciteit: | 0..1 | |

##### Leidingelement

| **Leidingelement (abstract)** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Een object dat bij een leiding behoort. | |  | Herkomst: | IMKL | |  | Subtype van: | Label | |  | Omschrijving: | Bijvoorbeeld objecten zoals een schakelkast, verdeelkast, kranen, afsluiters, versterkers, kabelmof, rioolput, (druk)rioolgemaal, kathodische bescherming, boorput, etc. In de WION hebben “elementen” betrekking op ondergrondse delen van het net, terwijl “markeringen” betrekking hebben op bovengrondse delen. Een leidingelement in het IMKL kan zowel betrekking hebben op ondergrondse als op bovengrondse delen van het net. Optioneel is er via het associatie-attribuut extraGeometrie een buitenbegrenzing of contour van het object op te nemen. De netbeheerder bepaalt zelf wanneer dat functioneel is. | |  | Stereotypes: | «featureType» | |
| **Attribuut: bovengrondsZichtbaar**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Boolean | |  | Definitie: | Aangegeven wordt of het leidingelement bovengronds vanaf het maaiveld zichtbaar is. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: geoNauwkeurigheidXY**   |  | Naam: |  | | --- | --- | --- | |  | Type: | NauwkeurigheidXYvalue | |  | Definitie: | Indicatie van de nauwkeurigheid in horizontaal vlak (x,y) waarmee de geometrie van de ligging van de leiding is aangegeven. | |  | Omschrijving: | De WION nauwkeurigheid is minimaal +/- 1 meter. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: eanCode**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Aansluiting identificatie code voor aansluiting op het elektriciteitsnet en gasnet van Nederland. | |  | Omschrijving: | Aansluiting identificatie code zoals die geregistreerd worden in het EAN codeboek. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: rotatiehoekSymbool**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Hoek waaronder een puntsymbool wordt weergegeven. | |  | Omschrijving: | Voor een symbool dat gekoppeld is aan een puntgeometrie, geeft dit attribuut aan onder welke hoek een puntsymbool moet worden weergegeven. Eenheid: booggraad; één booggraad is een 360e deel van een cirkelomtrek. Oriëntering: met de klok mee (positief) t.o.v. normale tekstrichting (horizontaal = 0 graden; voor een kaart die noord georiënteerd is.). Decimale precisie: 1 (= 1 cijfer achter de komma, ofwel 1/10 booggraad). Bereik (minimale/maximale waarden): [-180, +180].]. Dit attribuut heeft een Measure als data type. De UOM wordt uitgedrukt via de volgende OGC URN code: urn:ogc:def:uom:OGC::deg | |  | Multipliciteit: | 0..1 | |
| **Relatie: heeftExtraInformatie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | ExtraInformatie | |  | Definitie: | Extra informatie over dit object. | |  | Multipliciteit: | 0..\* | |
| **Relatie: dieptelegging**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Diepte | |  | Definitie: | Diepte waarop het object is gelegd. | |  | Omschrijving: | Wordt alleen opgenomen indien er sprake is van een legging die afwijkt van de gangbare (standaard) dieptelegging. | |  | Multipliciteit: | 0..1 | |
| **Relatie: extraGeometrie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | ExtraGeometrie | |  | Definitie: | Extra geometrie naast de verplichte arc/node. | |  | Multipliciteit: | 0..1 | |
| **Constraint: RotatiehoekEenheidDegrees**   |  | Natuurlijke taal: | rotatiehoek in graden | | --- | --- | --- | |  | OCL: | Inv: self.rotatiehoekSymbool.Measure.uom = 'urn:ogc:def:uom:OGC::deg' | |

##### Maatvoering

| **Maatvoering** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Teksten en symbolen weergegeven in het kaartbeeld. | |  | Subtype van: | ExtraInformatie | |  | Omschrijving: | Voor de aanduiding van de relatieve positie van een leiding of leidingelement ten opzichte van een topografisch object. Via het “annotatieType” attribuut kan het soort annotatie of maatvoering object worden bepaald – voor visualisatie - en via het attribuut “label” kan de tekst of numerieke waarde worden doorgegeven. | |  | Stereotypes: | «featureType» | |
| **Attribuut: maatvoeringsType**   |  | Naam: |  | | --- | --- | --- | |  | Type: | MaatvoeringsTypeValue | |  | Definitie: | Aard van de opgenomen annotatie | |  | Omschrijving: | Annotatie kan voor o.a. maatvoering getypeerd zijn. | |  | Multipliciteit: | 1 | |
| **Attribuut: rotatiehoek**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Hoek waaronder een labeltekst of symbool wordt weergegeven. | |  | Omschrijving: | Voor een annotatie die gekoppeld is aan een puntgeometrie, geeft dit attribuut aan onder welke hoek de labeltekst of een puntsymbool moet worden weergegeven. Eenheid: booggraad; één booggraad is een 360e deel van een cirkelomtrek. Oriëntering: met de klok mee (positief) t.o.v. normale tekstrichting (horizontaal = 0 graden; voor een kaart die noord georiënteerd is.). Decimale precisie: 1 (= 1 cijfer achter de komma, ofwel 1/10 booggraad). Bereik (minimale/maximale waarden): [-180, +180].]. Verstekwaarde voor tekst is 0 (dus horizontaal weergegeven rechtopstaande tekst). Dit attribuut heeft een Measure als data type. De UOM wordt uitgedrukt via de volgende OGC URN code: urn:ogc:def:uom:OGC::deg | |  | Multipliciteit: | 0..1 | |
| **Attribuut: labelpositie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Labelpositie | |  | Definitie: | Plaats van de labeltekst t.o.v. plaatsingspunt. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: ligging**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_Object | |  | Definitie: | Positie of geometrie van de annotatie. | |  | Omschrijving: | Afhankelijk van het type annotatie betreft het een plaatsingspunt van het label of de geometrie van de annotatie. | |  | Multipliciteit: | 1 | |
| **Constraint: GeometrieLijnOfPunt**   |  | Natuurlijke taal: | maatvoeringslijn en maatvoeringshulplijn hebben een lijngeometrie. Andere een puntgeometrie | | --- | --- | --- | |  | OCL: | inv: if self.maatvoeringsType = MaatvoeringsTypeValue::'maatvoeringslijn' or self.maatvoeringsType = MaatvoeringsTypeValue::'maatvoeringshulplijn' then self.ligging = 'GM\_Curve' else self.ligging = 'GM\_Point' | |
| **Constraint: RotatiehoekBijPijlpuntLabel**   |  | Natuurlijke taal: | Rotatiehoek alleen bij pijlpunt en label | | --- | --- | --- | |  | OCL: | Inv: if (self.maatvoeringsType= MaatvoeringsTypeValue::maatvoeringspijlpunt or self.maatvoeringsType= MaatvoeringsTypeValue::maatvoeringslabel) then self.rotatiehoek -> notEmpty() | |
| **Constraint: RotatiehoekEenheidDegrees**   |  | Natuurlijke taal: | Rotatiehoek is in graden | | --- | --- | --- | |  | OCL: | Inv: self.rotatiehoek.Measure.uom = 'urn:ogc:def:uom:OGC::deg' | |
| **Constraint: Labelwaarde verplicht bij label**   |  | Natuurlijke taal: | er is een label waarde verplicht bij een label | | --- | --- | --- | |  | OCL: | Inv: if (self.maatvoeringsType= MaatvoeringsTypeValue::maatvoeringslabel) then self.label -> notEmpty() | |

##### Mangat

| **Mangat** |
| --- |
| |  | Naam: | Mangat | | --- | --- | --- | |  | Definitie: | Eenvoudig omhullingsobject dat een of meer nutsvoorzieningennetobjecten kan bevatten. | |  | Herkomst: | Inspire | |  | Subtype van: | Manhole, ContainerLeidingelement | |  | Omschrijving: | Graag voorbeelden...... | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### Mantelbuis

| **Mantelbuis** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Beschermingsbuis. | |  | Subtype van: | Pipe, BuisSpecifiek, KabelEnLeidingContainer | |  | Omschrijving: | Met het object Mantelbuis wordt bedoeld een buis voor bescherming van kabels, buizen en HDPE buizen. Mantelbuizen kunnen bij meerdere thema’s geregistreerd staan. Ze moeten bij minstens één thema weergegeven worden maar het mag bij meerdere. Indien een mantelbuis leeg is kan dit bij de toelichting vermeld worden. Optioneel kan er als extrageometrie een vlak worden toegevoegd maar alleen als er grote diameters zijn. De netbeheerder bepaalt zelf wanneer dat functioneel is. | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutPressure**   |  | Natuurlijke taal: | geen attribuut pressure | | --- | --- | --- | |  | OCL: | Inv: self.pressure.OclIsKindOf(nilReason) | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### Mast

| **Mast** |
| --- |
| |  | Naam: | Mast | | --- | --- | --- | |  | Definitie: | Eenvoudig mast-object dat dienst kan doen als drager van nutsvoorzieningenobjecten van een of meer nutsvoorzieningnetten | |  | Herkomst: | Inspire | |  | Subtype van: | ContainerLeidingelement, Pole | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### OlieGasChemicalienPijpleiding

| **OlieGasChemicalienPijpleiding** |
| --- |
| |  | Naam: | OlieGasChemicalienPijpleiding | | --- | --- | --- | |  | Definitie: | Een pijpleiding voor het overbrengen van olie, gas of chemicaliën van de ene locatie naar een andere. | |  | Herkomst: | Inspire | |  | Subtype van: | OilGasChemicalsPipe, KabelOfLeiding, BuisSpecifiek | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### Rioolleiding

| **Rioolleiding** |
| --- |
| |  | Naam: | Rioolleiding | | --- | --- | --- | |  | Definitie: | Een rioleringsleiding voor het overbrengen van afvalwater (rioolwater en hemelwater) van de ene locatie naar een andere. | |  | Herkomst: | Inspire (aangepast) | |  | Subtype van: | StedelijkWaterSpecifiek, KabelOfLeiding, SewerPipe, BuisSpecifiek | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### StedelijkWaterSpecifiek

| **StedelijkWaterSpecifiek (abstract)** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Abstract data object dat de rioolleiding attributen bevat specifiek van de stedelijkwater extensie. | |  | Stereotypes: | «featureType» | |
| **Attribuut: typeRioolleiding**   |  | Naam: |  | | --- | --- | --- | |  | Type: | RioolleidingTypeValue | |  | Definitie: | Typering van soort rioolleiding. | |  | Multipliciteit: | 1 | |

##### TechnischGebouw

| **TechnischGebouw** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Heeft iemand een definitie? | |  | Subtype van: | ContainerLeidingelement, Cabinet | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### Telecommunicatiekabel

| **Telecommunicatiekabel** |
| --- |
| |  | Naam: | Telecommunicatiekabel | | --- | --- | --- | |  | Definitie: | Een geheel van geleiders welke voorzien zijn van één ommanteling en bestemd is voor transport van data. | |  | Herkomst: | IMKL2015 | |  | Subtype van: | TelecommunicationsCable, KabelSpecifiek, KabelOfLeiding | |  | Omschrijving: |  | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### ThermischePijpleiding

| **ThermischePijpleiding** |
| --- |
| |  | Naam: | ThermischePijpleiding | | --- | --- | --- | |  | Definitie: | Een leiding voor het transporteren van warmte of koelte van de ene locatie naar een andere. | |  | Herkomst: | Inspire | |  | Subtype van: | ThermalPipe, KabelOfLeiding, BuisSpecifiek | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### Toren

| **Toren** |
| --- |
| |  | Naam: | Toren | | --- | --- | --- | |  | Definitie: | Eenvoudig toren-object dat dienst kan doen als drager van nutsvoorzieningenobjecten van een of meer nutsvoorzieningnetten. | |  | Herkomst: | Inspire | |  | Subtype van: | ContainerLeidingelement, Tower | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

##### Transportroute

| **Transportroute** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Route samengesteld uit aaneengesloten buisleidingen. | |  | Herkomst: | RRGS | |  | Subtype van: | IMKLBasis | |  | Stereotypes: | «featureType» | |
| **Attribuut: transportrouteNaam**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Naam van de (hoofd)transportroute. | |  | Omschrijving: | max 240 tekens | |  | Multipliciteit: | 1 | |  | Herkomst: | RRGS | |
| **Attribuut: omschrijving**   |  | Type: | CharacterString | | --- | --- | --- | |  | Multipliciteit: | 1 | |
| **Attribuut: buisleidingtype**   |  | Naam: |  | | --- | --- | --- | |  | Type: | BuisleidingTypeValue | |  | Definitie: |  | |  | Omschrijving: | 7 mogelijkheden aangegeven dmv codelijstwaarden. | |  | Multipliciteit: | 1 | |  | Herkomst: | RRGS | |
| **Attribuut: maatgevendScenarioDodelijk**   |  | Naam: |  | | --- | --- | --- | |  | Type: | EffectScenarioType | |  | Definitie: | Scenario dat maatgevend is geweest voor de gegeven effectafstand dodelijk. | |  | Multipliciteit: | 0..1 | |  | Herkomst: | RRGS | |
| **Attribuut: casNrMaatgevendeStof**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Het CAS-nummer van de voor het risico maatgevende stof. | |  | Multipliciteit: | 1 | |  | Herkomst: | RRGS | |

##### Transportroutedeel

| **Transportroutedeel** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Deel van een buisleiding met gelijke waarden voor bepaalde buiskenmerken. | |  | Herkomst: | RRGS | |  | Subtype van: | OlieGasChemicalienPijpleiding | |  | Omschrijving: | Een transportroutedeel is onderdeel van een (hoofd)transportroute. | |  | Stereotypes: | «featureType» | |
| **Attribuut: wanddikte**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | De wanddikte van de buis in millimeters. | |  | Multipliciteit: | 1 | |  | Herkomst: | RRGS | |
| **Attribuut: effectafstandDodelijk**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Effectafstand dodelijk letsel (1% letaliteit) | |  | Omschrijving: | Zijnde de toetsingsafstand voor o.a. de inventarisatie van bebouwing voor de berekening van het groepsrisico alsook het omgaan met het restrisico. | |  | Multipliciteit: | 1 | |  | Herkomst: | RRGS | |
| **Attribuut: gewogenDekking**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Gemiddelde diepteligging bovenkant buis in cm tov het maaiveld | |  | Omschrijving: | Advieswaarde: minimale dekking per elke 100 meter en/of elke 10-20 cm overgang. Bij bochten en grote dekking veranderingen praktisch aanpassen | |  | Multipliciteit: | 1 | |  | Herkomst: | RRGS | |
| **Relatie: transportroute**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Transportroute | |  | Definitie: | (Hoofd)transportroute waar dit een van onderdeel is. | |  | Multipliciteit: | 1 | |  | Herkomst: | RRGS | |

##### TransportrouteRisico

| **TransportrouteRisico** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Risicocontour behorend bij de hoofdtransportroute. | |  | Herkomst: | RRGS | |  | Subtype van: | IMKLBasis | |  | Omschrijving: | De risicocontour is een optioneel element bij een transportroute. | |  | Stereotypes: | «featureType» | |
| **Attribuut: risicocontour10\_6**   |  | Naam: |  | | --- | --- | --- | |  | Type: | GM\_MultiSurface | |  | Definitie: | Geometrie v.d. risicontour 10-6 | |  | Multipliciteit: | 1 | |  | Herkomst: | RRGS | |
| **Relatie: bijTransportroute**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Transportroute | |  | Definitie: | Transportroute waar de risicocontour betrekking op heeft. | |  | Multipliciteit: | 1 | |  | Herkomst: | RRGS | |

##### Utiliteitsnet

| **Utiliteitsnet** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Een verzameling netwerkelementen die tot één type nutsvoorzieningennet behoren. | |  | Herkomst: | Inspire | |  | Subtype van: | Label, UtilityNetwork, IMKLBasis | |  | Omschrijving: | Alle netwerkelementen van een utiliteitsnet vallen onder het thema dat bij het utiliteitsnet hoort en worden daar ook door getypeerd. Dat wil zeggen dat bijvoorbeeld een kathodische bescherming voor een waterleiding valt onder een utiliteitsnet met het thema laagspanning. | |  | Stereotypes: | «featureType» | |
| **Attribuut: thema**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Thema | |  | Definitie: | Het thema geeft aan welk type leiding het betreft en welke functie de leidingen hebben. Bijvoorbeeld datatransport, gas lage druk, laagspanning, riool etc. Gekozen kan worden uit een lijst van thema’s | |  | Omschrijving: | Opmerking: Signaleringskabels die data vervoeren vallen onder datatransport. | |  | Multipliciteit: | 1 | |
| **Attribuut: technischContactpersoon**   |  | Naam: |  | | --- | --- | --- | |  | Type: | TechnischContactpersoon | |  | Definitie: | Persoon die gecontacteerd kan worden voor technisch-inhoudelijke informatie over deze dataset. | |  | Multipliciteit: | 1 | |
| **Attribuut: standaardDieptelegging**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Gangbare dieptelegging behorend bij dit utiliteitsnet. Diepte is ten opzichte van maaiveld. Dit attribuut heeft een Measure als data type. De UOM wordt uitgedrukt via 1 van de volgende OGC URN codes: • urn:ogc:def:uom:OGC::m • urn:ogc:def:uom:OGC::cm • urn:ogc:def:uom:OGC::mm. Voor WION is de eenheid altijd meter en een getal met ten hoogste 2 decimalen. | |  | Multipliciteit: | 0..1 | |
| **Relatie: bijlage**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Bijlage | |  | Definitie: | Verwijzing naar bijlage document. | |  | Omschrijving: | Onder andere verwijzing naar de eventueel gekoppelde tekst van de eis voorzorgsmaatregel voor dit utiliteitsnet. | |  | Multipliciteit: | 0..\* | |
| **Relatie: heeftExtraInformatie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | ExtraInformatie | |  | Definitie: | Extra informatie over dit object. | |  | Omschrijving: | Bij het utiliteitsnet betreft dit de algemene informatie die bij het utiliteitsnet hoort en niet bij specifieke netelementen. | |  | Multipliciteit: | 0..\* | |
| **Constraint: WionDiepteInMeterMetMaxTweeDecimalen**   |  | Natuurlijke taal: | Voor WION diepte is in meters met maximaal 2 decimalen | | --- | --- | --- | |  | OCL: | Inv: self.standaardDieptelegging.Measure.uom = 'urn:ogc:def:uom:OGC::m' | |
| **Constraint: NetworkBinnenNetworkNietVanToepassing**   |  | Natuurlijke taal: | een netwerk kan niet naar een andere netwerk verwijzen | | --- | --- | --- | |  | OCL: | Inv: self.networks.OclIsKindOf(nilReason) | |
| **Constraint: AssociatieElementsNietVanToepassing**   |  | Natuurlijke taal: | er is geen verwijzing van een netwerk naar de netelementen daarvan | | --- | --- | --- | |  | OCL: | Inv: self.elements.OclIsKindOf(nilReason) | |

##### Waterleiding

| **Waterleiding** |
| --- |
| |  | Naam: | Waterleiding | | --- | --- | --- | |  | Definitie: | Een waterleiding voor het overbrengen van water van de ene locatie naar een andere. | |  | Herkomst: | Inspire | |  | Subtype van: | KabelOfLeiding, WaterPipe, BuisSpecifiek | |  | Stereotypes: | «featureType» | |
| **Constraint: GeenAttribuutGovernmentalServiceRef**   |  | OCL: |  | | --- | --- | --- | |

### Data types

##### Adres

| **Adres** |
| --- |
| |  | Naam: | BAG-Adres | | --- | --- | --- | |  | Definitie: | Beschrijving van een locatie van door middel van een adres. | |  | Omschrijving: | Adresgegevens van Panden, Ligplaatsen en Staanplaatsen zijn beschreven in de BAG. Voor de attributen van net adres zijn de BAG definities gebruikt. | |  | Stereotypes: | «dataType» | |
| **Attribuut: openbareRuimteNaam**   |  | Naam: | openbare ruimte naam | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | -- Definition -- Een naam die aan een OPENBARE RUIMTE is toegekend in een daartoe strekkend formeel gemeentelijk besluit. | |  | Multipliciteit: | 1 | |  | Herkomst: | BAG | |
| **Attribuut: huisnummer**   |  | Naam: | huisnummer | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | -- Definition -- Een door of namens het gemeentebestuur ten aanzien van een adresseerbaar object toegekende nummering. | |  | Multipliciteit: | 1 | |  | Herkomst: | BAG | |
| **Attribuut: huisletter**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Een door of namens het gemeentebestuur ten aanzien van een adresseerbaar object toegekende toevoeging aan een huisnummer in de vorm van een alfanumeriek teken. | |  | Multipliciteit: | 0..1 | |  | Herkomst: | BAG | |
| **Attribuut: huisnummertoevoeging**   |  | Naam: |  | | --- | --- | --- | |  | Type: | Integer | |  | Definitie: | Een door of namens het gemeentebestuur ten aanzien van een adresseerbaar object toegekende nadere toevoeging aan een huisnummer of een combinatie van huisnummer en huisletter. | |  | Multipliciteit: | 0..1 | |  | Herkomst: | BAG | |
| **Attribuut: woonplaatsNaam**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | De benaming van een door het gemeentebestuur aangewezen WOONPLAATS. | |  | Multipliciteit: | 1 | |  | Herkomst: | BAG | |
| **Attribuut: postcode**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | De door TNT Post vastgestelde code behorende bij een bepaalde combinatie van een straatnaam en een huisnummer. | |  | Omschrijving: | De volgende regulier expressie beschrijft het format van een valide volledige postcode: [1-9]{1}[0-9]{3}[A-Z]{2}. | |  | Multipliciteit: | 1 | |  | Herkomst: | BAG. http://www.digitaleoverheid.nl/onderwerpen/stelselinformatiepunt/stelsel-van-basisregistraties/stelselvoorzieningen/stelselcatalogus/begrippen/Adres/BAG/Nummeraanduiding/Postcode-Nummeraanduiding | |
| **Attribuut: landcode**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Tweeletterige afkorting van de landsnaam conform ISO 3166 - Country codes | |  | Multipliciteit: | 1 | |
| **Attribuut: identificatieBAG**   |  | Naam: | identificatie BAG | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | BAG identifier van de nummeraanduiding van het adres zoals geregistreerd bij de BAG. | |  | Omschrijving: | Adresgegevens van Verblijfsobjecten, Ligplaatsen en Staanplaatsen zijn als nummeraanduiding beschreven in de BAG. En complete nummeraanduiding bestaat uit de volgende 3 componenten: • Nummeraanduiding • Naam van een openbare ruimte • Naam van een woonplaats Alleen de identificatie van de nummeraanduiding hoeft te worden opgenomen omdat de andere twee daaruit af te leiden zijn | |  | Multipliciteit: | 0..1 | |

##### Labelpositie

| **Labelpositie** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Punt op de horiziontale - en verticale as in labeltekst dat geldt als referentie voor plaatsingspunt. | |  | Stereotypes: | «dataType» | |
| **Attribuut: aangrijpingHorizontaal**   |  | Naam: |  | | --- | --- | --- | |  | Type: | LabelpositieValue | |  | Definitie: | Punt op de horiziontale as in labeltekst dat geldt als referentie voor plaatsingspunt. | |  | Multipliciteit: | 1 | |
| **Attribuut: aangrijpingVerticaal**   |  | Naam: |  | | --- | --- | --- | |  | Type: | LabelpositieValue | |  | Definitie: | Punt op de verticale as in labeltekst dat geldt als referentie voor plaatsingspunt. | |  | Multipliciteit: | 1 | |

##### NEN3610ID

| **NEN3610ID** |
| --- |
| |  | Naam: | NEN3610 ID | | --- | --- | --- | |  | Definitie: | identificatiegegevens voor de universeel unieke identificatie van een object | |  | Herkomst: | NEN 3610:2011 | |  | Omschrijving: | De combinatie van ‘namespace’ van een registratie, lokale identificatie en versie informatie maken een object uniek identificeerbaar. Met de informatie van deze klasse kan daardoor met zekerheid worden verwezen naar het geïdentificeerde object. | |  | Stereotypes: | «dataType» | |
| **Attribuut: namespace**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | unieke verwijzing naar een registratie van objecten | |  | Omschrijving: | Het attribuut ‘namespace’ is een unieke verwijzing naar de registratie die de identificatie uitdeelt. Deze lijst van registraties wordt beheerd binnen de context van NEN 3610. Binnen Nederland zal deze namespace vrijwel altijd met ‘NL.’ beginnen. De volgende karakters mogen in een namespace aanduiding voorkomen: {”A”…”Z”, “a”…”z”, ”0”…”9”, “\_”, “- “, “,”, ”.”} | |  | Multipliciteit: | 1 | |  | Herkomst: | NEN 3610:2011 | |
| **Attribuut: lokaalID**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | unieke identificatiecode binnen een registratie | |  | Omschrijving: | ‘LokaalId’ is de identificatiecode die een object heeft binnen een (lokale) registratie. De volgende karakters mogen in een lokaalID voorkomen: {”A”…”Z”, “a”…”z”, ”0”…”9”, “\_”, “-“, “,”, ”.”}. | |  | Multipliciteit: | 1 | |  | Herkomst: | NEN 3610:2011 | |
| **Attribuut: versie**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | versie-aanduiding van een object | |  | Omschrijving: | Het attribuut ‘versie’ maakt geen deel uit van de identificatie van het object maar kan worden gebruikt om verschillende versies van hetzelfde object te identificeren. | |  | Multipliciteit: | 0..1 | |  | Herkomst: | NEN 3610:2011 | |

##### TechnischContactpersoon

| **TechnischContactpersoon** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Persoon die gecontacteerd kan worden voor technisch-inhoudelijke informatie over deze dataset. | |  | Stereotypes: | «dataType» | |
| **Attribuut: naam**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: |  | |  | Multipliciteit: | 1 | |
| **Attribuut: telefoon**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: |  | |  | Multipliciteit: | 1 | |
| **Attribuut: email**   |  | Naam: |  | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: |  | |  | Multipliciteit: | 1 | |

### Enumeraties en codelijsten

##### AnnotatieTypeValue

| **AnnotatieTypeValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Codelijst met waarden voor annotatie. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### BestandMediaTypeValue

| **BestandMediaTypeValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Technisch formaat van digitaal bestand. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### BijlageTypeValue

| **BijlageTypeValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Typering van een bijlage. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### BuisleidingTypeValue

| **BuisleidingTypeValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Soort buisleiding. | |  | Herkomst: | RRGS | |  | Omschrijving: | Classificatie gebruikt in RRGS | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### ConditionOfFacilityIMKLValue

| **ConditionOfFacilityIMKLValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | IMKL waardelijst voor toepassing INSPIRE ConditionOfFacilityValue. | |  | Subtype van: | ConditionOfFacilityValue | |  | Omschrijving: | Kan zowel uitbreiding als beperking op INSPIRE waardelijst betreffen. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### DiepteAangrijpingspuntValue

| **DiepteAangrijpingspuntValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Aangrijpingspunt van object van af waar de diepte wordt bepaald. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### EffectScenarioType

| **EffectScenarioType** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Type risico dat zich kan voordoen. | |  | Herkomst: | RRGS | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### EigenTopografieStatusValue

| **EigenTopografieStatusValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Status van topografie die als extra locatie informatie, meestal voor maatvoering, wordt meegeleverd. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### ElectricityAppurtenanceTypeIMKLValue

| **ElectricityAppurtenanceTypeIMKLValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | IMKL waardelijst voor toepassing INSPIRE ElectricityAppurtenanceTypeValue. | |  | Subtype van: | ElectricityAppurtenanceTypeValue | |  | Omschrijving: | Kan zowel uitbreiding als beperking op INSPIRE waardelijst betreffen. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### ExtraDetailInfoTypeValue

| **ExtraDetailInfoTypeValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Verschillende vormen van extra detailinformatie die opgenomen worden bij een utiliteitsnet. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### LabelpositieValue

| **LabelpositieValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Aangrijpingspunt van het label in relatie tot het plaatsingspunt. | |  | Herkomst: | IMKL | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### MaatvoeringsTypeValue

| **MaatvoeringsTypeValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: |  | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### NauwkeurigheidDiepteValue

| **NauwkeurigheidDiepteValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Codelijst met nauwkeurigheid van dieptegegevens. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### NauwkeurigheidXYvalue

| **NauwkeurigheidXYvalue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Codelijst met geografische nauwkeurigheid in het horizontale vlak. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### OilGasChemicalsAppurtenanceITypeIMKLValue

| **OilGasChemicalsAppurtenanceITypeIMKLValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | IMKL waardelijst voor toepassing INSPIRE OilGasChemicalsAppurtenanceITypeValue. | |  | Subtype van: | OilGasChemicalsAppurtenanceTypeValue | |  | Omschrijving: | Kan zowel uitbreiding als beperking op INSPIRE waardelijst betreffen. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### OilGasChemicalsProductTypeIMKLValue

| **OilGasChemicalsProductTypeIMKLValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | IMKL waardelijst voor toepassing INSPIRE OilGasChemicalsProductTypeValue. | |  | Subtype van: | OilGasChemicalsProductTypeValue | |  | Omschrijving: | Kan zowel uitbreiding als beperking op INSPIRE waardelijst betreffen. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### PipeMaterialTypeIMKLValue

| **PipeMaterialTypeIMKLValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | IMKL waardelijst voor toepassing INSPIRE PipeMaterialTypeValue. | |  | Subtype van: | PipeMaterialTypeValue | |  | Omschrijving: | Kan zowel uitbreiding als beperking op INSPIRE waardelijst betreffen. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### RioolleidingTypeValue

| **RioolleidingTypeValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Typering van soort rioolleiding. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### SewerAppurtenanceTypeIMKLValue

| **SewerAppurtenanceTypeIMKLValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | IMKL waardelijst voor toepassing INSPIRE SewerAppurtenanceTypeValue. | |  | Subtype van: | SewerAppurtenanceTypeValue | |  | Omschrijving: | Kan zowel uitbreiding als beperking op INSPIRE waardelijst betreffen. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### TelecommunicationsAppurtenanceTypeIMKLValue

| **TelecommunicationsAppurtenanceTypeIMKLValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | IMKL waardelijst voor toepassing INSPIRE TelecommunicationsAppurtenanceTypeValue. | |  | Subtype van: | TelecommunicationsAppurtenanceTypeValue | |  | Omschrijving: | Kan zowel uitbreiding als beperking op INSPIRE waardelijst betreffen. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### Thema

| **Thema** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Thema of discipline waar een leiding of leidingelement toe behoort. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### ThermalAppurtenanceTypeIMKLValue

| **ThermalAppurtenanceTypeIMKLValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | IMKL waardelijst voor toepassing INSPIRE ThermalAppurtenanceTypeValue. | |  | Subtype van: | ThermalAppurtenanceTypeValue | |  | Omschrijving: | Kan zowel uitbreiding als beperking op INSPIRE waardelijst betreffen. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### TopografischObjectTypeValue

| **TopografischObjectTypeValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | Soort topografisch object. | |  | Omschrijving: | Typen gebaseerd op semantiek van IMGeo (grootschalige geografie) | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### UtilityNetworkTypeIMKLValue

| **UtilityNetworkTypeIMKLValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | IMKL waardelijst voor toepassing INSPIRE UtilityNetworkTypeValue | |  | Subtype van: | UtilityNetworkTypeValue | |  | Omschrijving: | Kan zowel uitbreiding als beperking op INSPIRE waardelijst betreffen. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### WaterAppurtenanceTypeIMKLValue

| **WaterAppurtenanceTypeIMKLValue** |
| --- |
| |  | Naam: |  | | --- | --- | --- | |  | Definitie: | IMKL waardelijst voor toepassing INSPIRE WaterAppurtenanceTypeValue. | |  | Subtype van: | WaterAppurtenanceTypeValue | |  | Omschrijving: | Kan zowel uitbreiding als beperking op INSPIRE waardelijst betreffen. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

### Kandidaat types en placeholders

##### PipeMaterialTypeValue

| **PipeMaterialTypeValue** |
| --- |
| |  | Package: | Common Extended Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | Pipe material type value (Extended) | |  | Definitie: | Codelist containing a classification of pipe material types. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### UtilityNetwork

| **UtilityNetwork** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | utility network | |  | Definitie: | Collection of network elements that belong to a single type of utility network. | |  | Subtype van: | Network | |  | Omschrijving: | In the real world, objects are connected to each other: an optical cable is connected to a multiplexer that in turn is connected to copper cables connecting into our homes to provide cable TV, telephony and internet access. Using GIS to support network utility management typically involves many types of features that may have connectivity to each other. Topology in GIS is generally defined as the spatial relationship between connecting or adjacent features, and is an essential prerequisite for many spatial operations such as network analysis. Utility networks can be described as NaN (Node-Arc-Node) network using two basic geometric types: points (aka *nodes*) and polylines (aka *arcs*). NaN topologies can be directed or un-directed, depending on specific type of network (i.e. water networks are directed, while telecommunications networks are not). Such topology structure provides an automated way to handle digitising and editing errors, and enable advanced spatial analyses such as adjacency, connectivity and containment. Infrastructure networks rely on Generic network model developed during Annex I. Note: Via the attribute "utilityNetworkType", that uses the "UtilityNetworkTypeValue" codelist, the type of utility network can be defined. E.g. by selecting the "sewer" value, the utility network becomes a "sewer utility network". Using the "crossTheme" value, a utility network can be created that contains e.g. ducts, which can contain pipes and cables from various utility network types. | |  | Stereotypes: | «featureType» | |
| **Attribuut: utilityNetworkType**   |  | Naam: | utility network type | | --- | --- | --- | |  | Type: | UtilityNetworkTypeValue | |  | Definitie: | The type of utility network or the utilily network theme. | |  | Omschrijving: | Uses the codelist "UtilityNetworkTypeValue" to describe the possible utility networks. This also contains the "crossTheme" value to be used for utility networks that can contain cables or pipes from various themes, typically used by utility network providers that provide ducts. | |  | Multipliciteit: | 1 | |
| **Attribuut: authorityRole**   |  | Naam: | authority role | | --- | --- | --- | |  | Type: | RelatedParty | |  | Definitie: | Parties authorized to manage a utility network, such as maintainers, operators or owners. | |  | Multipliciteit: | 1..\* | |
| **Attribuut: utilityFacilityReference**   |  | Naam: | utility facility reference | | --- | --- | --- | |  | Type: | ActivityComplex | |  | Definitie: | Reference to a facility activity complex that is linked to (e.g. part of) this utility network. | |  | Omschrijving: | This reference can be used to link utility facilities - having a more complex geometry - to a utility network. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Attribuut: disclaimer**   |  | Naam: | disclaimer | | --- | --- | --- | |  | Type: | PT\_FreeText | |  | Definitie: | Legal text describing confidentiality clauses applying to the utility network information. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: networks**   |  | Naam: | networks | | --- | --- | --- | |  | Type: | UtilityNetwork | |  | Definitie: | A single sub-network that can be considered as part of a higher-order utility network. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Constraint: "telecommunications" value of "utilityNetworkType" is not in IR**   |  | Natuurlijke taal: | The multiplicity of "telecommunications" shall be 0 | | --- | --- | --- | |  | OCL: | inv: telecommunications->size()=0 | |
| **Constraint: All utility network objects have inspireId**   |  | Natuurlijke taal: | All utility network objects have an external object identifier. | | --- | --- | --- | |  | OCL: | inv:inspireId->notEmpty() | |

##### Cabinet

| **Cabinet** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | cabinet | |  | Definitie: | Simple cabinet object which may carry utility objects belonging to either single or multiple utility networks. | |  | Subtype van: | UtilityNodeContainer | |  | Omschrijving: | Cabinets represent mountable node objects that can contain smaller utility devices and cables. | |  | Stereotypes: | «featureType» | |

##### UtilityNetworkTypeValue

| **UtilityNetworkTypeValue** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | utility network type | |  | Definitie: | Classification of utility network types. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### Pipe

| **Pipe** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | pipe | |  | Definitie: | A utility link or link sequence for the conveyance of solids, liquids, chemicals or gases from one location to another. A pipe can also be used as an object to encase several cables (a bundle of cables) or other (smaller) pipes. | |  | Subtype van: | UtilityLinkSet | |  | Stereotypes: | «featureType» | |
| **Attribuut: pipeDiameter**   |  | Naam: | pipe diameter | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | Pipe outer diameter. | |  | Omschrijving: | For convex shaped objects (e.g. a circle) the diameter is defined to be the largest distance that can be formed between two opposite parallel lines tangent to its boundery. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: pressure**   |  | Naam: | pressure | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | The maximum allowable operating pressure at which a product is conveyed through a pipe. | |  | Omschrijving: | The unit of measure for pressure is commonly expressed in "bar". | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Relatie: cables**   |  | Naam: | cables | | --- | --- | --- | |  | Type: | Cable | |  | Definitie: | A pipe may contain one or more cables. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: pipes**   |  | Naam: | pipes | | --- | --- | --- | |  | Type: | Pipe | |  | Definitie: | A pipe may contain one or more pipes. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |

##### Pole

| **Pole** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | pole | |  | Definitie: | Simple pole (mast) object which may carry utility objects belonging to either single or multiple utility networks. | |  | Subtype van: | UtilityNodeContainer | |  | Omschrijving: | Poles represent node objects that can support utility devices and cables. | |  | Stereotypes: | «featureType» | |
| **Attribuut: poleHeight**   |  | Naam: | pole height | | --- | --- | --- | |  | Type: | Length | |  | Definitie: | The height of the pole. | |  | Omschrijving: | The height is the vertical extend measuring accross the object - in this case, the pole - at right angles to the lenght. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |

##### Duct

| **Duct** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | duct | |  | Definitie: | A utility link or link sequence used to protect and guide cable and pipes via an encasing construction. | |  | Subtype van: | UtilityLinkSet | |  | Omschrijving: | A Duct (or Conduit, or Duct-bank, or Wireway) is a linear object which belongs to the structural network. It is the outermost casing. A Duct may contain Pipe(s), Cable(s) or other Duct(s). Duct is a concrete feature class that contains information about the position and characteristics of ducts as seen from a manhole, vault, or a cross section of a trench and duct. | |  | Stereotypes: | «featureType» | |
| **Attribuut: ductWidth**   |  | Naam: | duct width | | --- | --- | --- | |  | Type: | Length | |  | Definitie: | The width of the duct. | |  | Omschrijving: | The measurement of the object - in this case, the duct - from side to side. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Relatie: ducts**   |  | Naam: | ducts | | --- | --- | --- | |  | Type: | Duct | |  | Definitie: | A single duct or set of ducts that constitute the inner-duct. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: cables**   |  | Naam: | cables | | --- | --- | --- | |  | Type: | Cable | |  | Definitie: | A duct may contain one or more cables. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: pipes**   |  | Naam: | pipes | | --- | --- | --- | |  | Type: | Pipe | |  | Definitie: | The set of pipes that constitute the duct bank. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Constraint: "Duct" shall not have a "utilityDeliveryType"**   |  | Natuurlijke taal: | The multiplicity of "utilityDeliveryType" shall be 0 | | --- | --- | --- | |  | OCL: | inv: utilityDeliveryType->size()=0 | |

##### Tower

| **Tower** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | tower | |  | Definitie: | Simple tower object which may carry utility objects belonging to either single or multiple utility networks. | |  | Subtype van: | UtilityNodeContainer | |  | Omschrijving: | Towers represent node objects that support reservoirs, cables or antennas. | |  | Stereotypes: | «featureType» | |
| **Attribuut: towerHeight**   |  | Naam: | tower height | | --- | --- | --- | |  | Type: | Length | |  | Definitie: | The height of the tower. | |  | Omschrijving: | The height is the vertical extend measuring accross the object - in this case, the tower - at right angles to the lenght. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |

##### Cable

| **Cable (abstract)** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | cable | |  | Definitie: | A utility link or link sequence used to convey electricity or data from one location to another. | |  | Subtype van: | UtilityLinkSet | |  | Stereotypes: | «featureType» | |

##### Manhole

| **Manhole** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | manhole | |  | Definitie: | Simple container object which may contain either single or multiple utility networks objects. | |  | Subtype van: | UtilityNodeContainer | |  | Omschrijving: | Manholes perform following functions:   * Provide drainage for the conduit system so that freezing water does not damage the conduit or wires. * Provide a location for bending the conduit run without damaging the wires. * Provide a junction for conduits coming from different directions. * Provide access to the system for maintenance. | |  | Stereotypes: | «featureType» | |

##### AppurtenanceTypeValue

| **AppurtenanceTypeValue** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | appurtenance type | |  | Definitie: | Classification of appurtenances. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### Appurtenance

| **Appurtenance** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | appurtenance | |  | Definitie: | An appurtenance is a node object that is described by its type (via the attribute "appurtenanceType"). | |  | Subtype van: | UtilityNode | |  | Omschrijving: | The "appurtenanceType" attribute uses the "AppurtenanceTypeValue" codelist for its values. But this is an empty codelist that needs to be extended by a concrete codelist of appurtenance types for each utility network type. So e.g. for the electricity network, the "ElectricityAppurtenanceTypeValue" codelist should be used. | |  | Stereotypes: | «featureType» | |
| **Attribuut: appurtenanceType**   |  | Naam: | appurtenance type value | | --- | --- | --- | |  | Type: | AppurtenanceTypeValue | |  | Definitie: | Type of appurtenance | |  | Omschrijving: | The "AppurtenanceTypeValue" codelist is an abstract codelist that can be replaced by the various appurtenance type value codelists for each utility network. | |  | Multipliciteit: | 1 | |
| **Attribuut: specificAppurtenanceType**   |  | Naam: | specific appurtenance type | | --- | --- | --- | |  | Type: | SpecificAppurtenanceTypeValue | |  | Definitie: | Type of appurtenance according to a domain-specific classification. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Constraint: "TelecommunicationsAppurtenanceTypeValue" is not in IR**   |  | OCL: |  | | --- | --- | --- | |

##### SpecificAppurtenanceTypeValue

| **SpecificAppurtenanceTypeValue** |
| --- |
| |  | Package: | Common Utility Network Elements [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | specific appurtenance type | |  | Definitie: | Domain-specific classification of appurtenances. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### ElectricityAppurtenanceTypeValue

| **ElectricityAppurtenanceTypeValue** |
| --- |
| |  | Package: | Electricity Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | electricity appurtenance type | |  | Definitie: | Classification of electricity appurtenances. | |  | Subtype van: | AppurtenanceTypeValue | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### ElectricityCable

| **ElectricityCable** |
| --- |
| |  | Package: | Electricity Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | electricity cable | |  | Definitie: | A utility link or link sequence used to convey electricity from one location to another. | |  | Subtype van: | Cable | |  | Stereotypes: | «featureType» | |
| **Attribuut: operatingVoltage**   |  | Naam: | operating voltage | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | The utilization or operating voltage by the equipment using the electricity. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: nominalVoltage**   |  | Naam: | nominal voltage | | --- | --- | --- | |  | Type: | Measure | |  | Definitie: | The nominal system voltage at the point of supply. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |

##### OilGasChemicalsPipe

| **OilGasChemicalsPipe** |
| --- |
| |  | Package: | Oil-Gas-Chemicals Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | oil, gas and chemicals pipe | |  | Definitie: | A pipe used to convey oil, gas or chemicals from one location to another. | |  | Subtype van: | Pipe | |  | Stereotypes: | «featureType» | |
| **Attribuut: oilGasChemicalsProductType**   |  | Naam: | oil, gas and chemicals product type | | --- | --- | --- | |  | Type: | OilGasChemicalsProductTypeValue | |  | Definitie: | The type of oil, gas or chemicals product that is conveyed through the oil, gas, chemicals pipe. | |  | Multipliciteit: | 1..\* | |  | Stereotypes: | «voidable» | |

##### OilGasChemicalsProductTypeValue

| **OilGasChemicalsProductTypeValue** |
| --- |
| |  | Package: | Oil-Gas-Chemicals Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | oil, gas and chemicals product type | |  | Definitie: | Classification of oil, gas and chemicals products. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### OilGasChemicalsAppurtenanceTypeValue

| **OilGasChemicalsAppurtenanceTypeValue** |
| --- |
| |  | Package: | Oil-Gas-Chemicals Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | oil, gas and chemicals appurtenance type | |  | Definitie: | Classification of oil, gas, chemicals appurtenances. | |  | Subtype van: | AppurtenanceTypeValue | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### SewerWaterTypeValue

| **SewerWaterTypeValue** |
| --- |
| |  | Package: | Sewer Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | sewer water type | |  | Definitie: | Classification of sewer water types. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### SewerPipe

| **SewerPipe** |
| --- |
| |  | Package: | Sewer Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | sewer pipe | |  | Definitie: | A sewer pipe used to convey wastewater (sewer) from one location to another. | |  | Subtype van: | Pipe | |  | Stereotypes: | «featureType» | |
| **Attribuut: sewerWaterType**   |  | Naam: | sewer water type | | --- | --- | --- | |  | Type: | SewerWaterTypeValue | |  | Definitie: | Type of sewer water. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |

##### SewerAppurtenanceTypeValue

| **SewerAppurtenanceTypeValue** |
| --- |
| |  | Package: | Sewer Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | sewer appurtenance type | |  | Definitie: | Classification of sewer appurtenances. | |  | Subtype van: | AppurtenanceTypeValue | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### TelecommunicationsAppurtenanceTypeValue

| **TelecommunicationsAppurtenanceTypeValue** |
| --- |
| |  | Package: | Telecommunications Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | telecommunications appurtenance type | |  | Definitie: | Classification of telecommunication appurtenances. | |  | Subtype van: | AppurtenanceTypeValue | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### TelecommunicationsCableMaterialTypeValue

| **TelecommunicationsCableMaterialTypeValue** |
| --- |
| |  | Package: | Telecommunications Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | telecommunications cable material type | |  | Definitie: | Classification of telecommunications cable materials. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### TelecommunicationsCable

| **TelecommunicationsCable** |
| --- |
| |  | Package: | Telecommunications Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | telecommunications cable | |  | Definitie: | A utility link or link sequence used to convey data signals (PSTN, radio or computer) from one location to another. | |  | Subtype van: | Cable | |  | Stereotypes: | «featureType» | |
| **Attribuut: telecommunicationsCableMaterialType**   |  | Naam: | telecommunications cable material type | | --- | --- | --- | |  | Type: | TelecommunicationsCableMaterialTypeValue | |  | Definitie: | Type of cable material. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Constraint: "TelecommunicationsCable" is not in IR**   |  | OCL: |  | | --- | --- | --- | |

##### ThermalPipe

| **ThermalPipe** |
| --- |
| |  | Package: | Thermal Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | thermal pipe | |  | Definitie: | A pipe used to disseminate heating or cooling from one location to another. | |  | Subtype van: | Pipe | |  | Stereotypes: | «featureType» | |
| **Attribuut: thermalProductType**   |  | Naam: | thermal product type | | --- | --- | --- | |  | Type: | ThermalProductTypeValue | |  | Definitie: | The type of thermal product that is conveyed through the thermal pipe. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |

##### ThermalAppurtenanceTypeValue

| **ThermalAppurtenanceTypeValue** |
| --- |
| |  | Package: | Thermal Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | thermal appurtenance type | |  | Definitie: | Classification of thermal appurtenances. | |  | Subtype van: | AppurtenanceTypeValue | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### WaterPipe

| **WaterPipe** |
| --- |
| |  | Package: | Water Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | water pipe | |  | Definitie: | A water pipe used to convey water from one location to another. | |  | Subtype van: | Pipe | |  | Stereotypes: | «featureType» | |
| **Attribuut: waterType**   |  | Naam: | water type | | --- | --- | --- | |  | Type: | WaterTypeValue | |  | Definitie: | Type of water. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |

##### WaterAppurtenanceTypeValue

| **WaterAppurtenanceTypeValue** |
| --- |
| |  | Package: | Water Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | water appurtenance type | |  | Definitie: | Classification of water appurtenances. | |  | Subtype van: | AppurtenanceTypeValue | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### WaterTypeValue

| **WaterTypeValue** |
| --- |
| |  | Package: | Water Network [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | water type | |  | Definitie: | Classification of water types. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### GeometryMethodValue

| **GeometryMethodValue** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Description of how and by whom this geographic position of the address was created or derived. | |  | Omschrijving: | NOTE Information on what type of spatial feature the geographic position of the address was created or derived from, is represented by the GeometrySpecificationValue. | |  | Stereotypes: | «codeList» | |  | Governance: | Centrally managed in INSPIRE code list register. URN: urn:x-inspire:def:codeList:INSPIRE:GeometryMethodValue | |

##### AddressComponent

| **AddressComponent (abstract)** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Identifier or geographic name of a specific geographic area, location, or other spatial object which defines the scope of an address. | |  | Omschrijving: | NOTE 1 Four different subclasses of address components are defined: o Administrative unit name, which may include name of country, name of municipality, name of district o Address area name like e.g. name of village or settlement o Thoroughfare name, most often road name o Postal descriptor In order to construct an address, these subclasses are often structured hierarchically. NOTE 2 It is the combination of the address locator and the address components, which makes a specific address spatial object readable and unambiguous for the human user. EXAMPLE The combination of the locator "13" and the address components "Calle Mayor" (thoroughfare name), "Cortijo del Marqués" (address area name), "41037" (postal descriptor), "Écija", "Sevilla" and "España" (administrative unit names) makes this specific address spatial object readable and unambiguous. | |  | Stereotypes: | «featureType» | |
| **Attribuut: inspireId**   |  | Type: | Identifier | | --- | --- | --- | |  | Definitie: | External object identifier of the address component. | |  | Omschrijving: | NOTE 1 An external object identifier is a unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object. The identifier is an identifier of the spatial object, not an identifier of the real-world phenomenon. NOTE 2 The primary purpose of this identifier is to enable links between various sources and the address components. EXAMPLE An address component spatial object from Denmark could carry this identifier: Namespace: DK\_ADR Local identifier: 0A3F507B2AB032B8E0440003BA298018 Version identifier: 12-02-2008T10:05:01+01:00 | |  | Multipliciteit: | 0..1 | |
| **Attribuut: alternativeIdentifier**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | External, thematic identifier of the address component spatial object, which enables interoperability with existing legacy systems or applications. | |  | Omschrijving: | NOTE Compared with a proper identifier of the address component, the alternative identifier is not necessarily persistent in the lifetime of the component spatial object. Likewise it is usually not globally unique and in general does include information on the version of the spatial object. EXAMPLE 1 National or regional sector-specific identifiers (like e.g. a number- or letter code) for administrative units, address areas (localities, villages, sub-divisions) or thoroughfare names, which are used by a number of existing legacy systems. EXAMPLE 2 In Denmark the four character municipal "road name code" (0001-9899) is only unique within the present municipality, thus if two municipalities merge, it is necessary to assign new road name codes. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: beginLifespanVersion**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which this version of the spatial object was inserted or changed in the spatial data set. | |  | Omschrijving: | NOTE This date is recorded to enable the generation of change only update files. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Attribuut: endLifespanVersion**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which this version of the spatial object was superseded or retired in the spatial data set. | |  | Omschrijving: | NOTE This date is recorded primarily for those systems which "close" an entry in the spatial data set in the event of an attribute change. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Attribuut: status**   |  | Type: | StatusValue | | --- | --- | --- | |  | Definitie: | Validity of the address component within the life-cycle (version) of the address component spatial object. | |  | Omschrijving: | NOTE This status relates to the address component and is not a property of the object to which the address is assigned (the addressable object). | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: validFrom**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time of which this version of the address component was or will be valid in the real world. | |  | Omschrijving: | NOTE This date and time can be set in the future for situations where an address component or a version of an address component has been decided by the appropriate authority to take effect for a future date. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: validTo**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which the address component ceased or will cease to exist in the real world. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Relatie: situatedWithin**   |  | Type: | AddressComponent | | --- | --- | --- | |  | Definitie: | Another address component within which the geographic feature represented by this address component is situated. | |  | Omschrijving: | NOTE 1 The association enables the application schema to express that the subtypes of address components in the dataset form a hierarchy e.g. like: thoroughfare name within municipality within region within country NOTE 2 The representation of the hierarchy facilitates queries e.g. for a specific thoroughfare name within a given municipality or postcode. It is also necessary where the application schema is used to create or update, for example , a gazetteer which is based on the hierarchical structure of the address components. NOTE 3 The multiplicity of the association allows it to express that a thoroughfare name is situated in a certain municipality and in a certain postcode. It is also possible to express, for example, that some thoroughfare names cross borders between municipalities and thus is situated within more than one municipality. EXAMPLE 1 In Spain many spatial objects of the thoroughfare name "Calle Santiago" exist. The association can express that one of the spatial objects is situated within in the municipality of Albacete. From the same example the municipality name "Albacete" is situated within the administrative name (region) of "Castilla La Mancha". EXAMPLE 2 In Denmark, several address area names entitled "Strandby" exists. In order to identify a specific spatial object it is necessary to know that the relevant spatial object is situated e.g. in the municipality of "Frederikshavn". | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Constraint: EndLifeSpanVersion**   |  | Natuurlijke taal: | If date set endLifespanVersion must be later than beginLifespanVersion (if set) | | --- | --- | --- | |  | OCL: | inv: self.endLifespanVersion .isAfter(self.beginLifespanVersion) | |

##### LocatorLevelValue

| **LocatorLevelValue** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | The level to which the locator refers. | |  | Omschrijving: | NOTE The locator level attribute enables the comparison of locators from different countries. EXAMPLE In The Netherlands a single locator, the address number, identifies a dwelling or business entity unit (unit level locator). In Spain up to four locators could be needed to obtain the same level of detail: Address number, entrance number, stair identifier plus a floor and door identifier. | |  | Stereotypes: | «codeList» | |  | Governance: | Centrally managed in INSPIRE code list register. URN: urn:x-inspire:def:codeList:INSPIRE:LocatorLevelValue | |

##### LocatorDesignatorTypeValue

| **LocatorDesignatorTypeValue** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Description of the semantics of the locator designator. | |  | Stereotypes: | «codeList» | |  | Governance: | Centrally managed in INSPIRE code list register. URN: urn:x-inspire:def:codeList:INSPIRE:LocatorDesignatorTypeValue | |

##### LocatorName

| **LocatorName** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Proper noun applied to the real world entity identified by the locator. | |  | Omschrijving: | NOTE The locator name could be the name of the property or complex, of the building or part of the building, or it could be the name of a room inside a building. | |  | Stereotypes: | «dataType» | |
| **Attribuut: name**   |  | Type: | GeographicalName | | --- | --- | --- | |  | Definitie: | The identifying part of the locator name. | |  | Omschrijving: | NOTE 1 The data type allows names in different languages and scripts as well as inclusion of alternative name, alternative spellings, historical name and exonyms. NOTE 2 The locator name could be the name of the property or complex, of the building or part of the building (e.g. a wing), or it could be the name of a room or similar inside the building. NOTE 3 The locator name sometimes refer to the name of the family or business entity which at present or in the past has owned or occupied the property or building; although this is the case the locator name must not be confused with the name of the addressee(s). NOTE 4 As locator name it is also possible to use a descriptive text that allows a user to identify the property in question. EXAMPLE 1 The "Radford Mill Farm" in Timsbury, Bath, UK; The allotment house area "Brumleby" in Copenhagen, Denmark, the university campus "Cité Universitaire", in Paris, France. EXAMPLE 2 "Millers House" in Stromness, Orkney Isles, UK; "Ulla's Pension" in Niederfell, Rheinland-Pfalz, Germany. EXAMPLE 3 "Multi-storey car park at Southampton Magistrates Courts" in Southampton, UK. | |  | Multipliciteit: | 1..\* | |
| **Attribuut: type**   |  | Type: | LocatorNameTypeValue | | --- | --- | --- | |  | Definitie: | The type of locator value, which enables an application to interpret, parse or format it according to certain rules. | |  | Omschrijving: | NOTE The type enables a user or an application to understand if the name "Radford Mill Farm" is for example a name of a specific site or of a building. | |  | Multipliciteit: | 1 | |

##### LocatorDesignator

| **LocatorDesignator** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | A number or a sequence of characters that uniquely identifies the locator within the relevant scope(s). The full identification of the locator could include one or more locator designators. | |  | Omschrijving: | NOTE 1 Locator designators are often assigned according to a set of commonly known rules which enables a user or application to "parse" the information: Address numbers are most often assigned in ascending order with odd and even numbers on each side of the thoroughfare. In a building, the floor identifier represents the level according to the traditions within the area, e.g., 1, 2, 3. NOTE 2 Several types of locator designators exist, such as: Address number, address number suffix, building identifier, building name. A locator could be composed by an ordered set of these. EXAMPLE In Paris, France a locator could be composed by two locator designators: address number "18" and address number suffix: "BIS". | |  | Stereotypes: | «dataType» | |
| **Attribuut: designator**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | The identifying part of the locator designator composed by one or more digits or other characters. | |  | Omschrijving: | NOTE The value is often a descriptive code assigned according to certain well known rules e.g. like ascending odd and even address numbers along the thoroughfare, or like floor identifiers: 0, 1, 2, 3. EXAMPLE Address number "2065", Address number suffix "B", Floor identifier "7" door identifier "B707" are all locator attribute values. | |  | Multipliciteit: | 1 | |
| **Attribuut: type**   |  | Type: | LocatorDesignatorTypeValue | | --- | --- | --- | |  | Definitie: | The type of locator value, which enables an application to interpret, parse or format it according to certain rules. | |  | Omschrijving: | NOTE The type enables a user or an application to understand if the value "A" is e.g. an identifier of a specific building, door, staircase or dwelling. | |  | Multipliciteit: | 1 | |

##### StatusValue

| **StatusValue** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Current validity of the real world address or address component. | |  | Omschrijving: | NOTE 1 This element enables the application schema to represent a full life-cycle of an address and address component, from proposed to reserved, current and retired, or even alternative. NOTE 2 The status value relates to the real world address or address component and not to the property to which the address or address component is assigned (the addressable object). | |  | Stereotypes: | «codeList» | |  | Governance: | Centrally managed in INSPIRE code list register. URN: urn:x-inspire:def:codeList:INSPIRE:StatusValue | |

##### GeometrySpecificationValue

| **GeometrySpecificationValue** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Information defining the specification used to create or derive this geographic position of the address. | |  | Omschrijving: | NOTE 1 Multiple address points can be derived from one polygon spatial object. NOTE 2 If the position of an address is derived from a polygon spatial object a number of different approaches is used. EXAMPLE 1 The same point (e.g., centre point of the polygon) is used for each address, thus, multiple address points will be overlapping. EXAMPLE 2 Each point position is unique within the polygon to be able to visually distinguish the representation of each address. | |  | Stereotypes: | «codeList» | |  | Governance: | Centrally managed in INSPIRE code list register. URN: urn:x-inspire:def:codeList:INSPIRE:GeometrySpecificationValue | |

##### LocatorNameTypeValue

| **LocatorNameTypeValue** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Description of the semantics of the locator name. | |  | Stereotypes: | «codeList» | |  | Governance: | Centrally managed in INSPIRE code list register. URN: urn:x-inspire:def:codeList:INSPIRE:LocatorNameTypeValue | |

##### AddressLocator

| **AddressLocator** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Human readable designator or name that allows a user or application to reference and distinguish the address from neighbour addresses, within the scope of a thoroughfare name, address area name, administrative unit name or postal designator, in which the address is situated. | |  | Omschrijving: | NOTE 1 The most common locators are designators like an address number, building number or flat identifier as well as the name of the property, complex or building. NOTE 2 The locator identifier(s) are most often only unambiguous and meaningful within the scope of the adjacent thoroughfare name, address area name or post code. NOTE 3 The locator could be composed of one or more designators e.g., address number, address number suffix, building number or name, floor number, flat or room identifier. In addition to these common locator types, also narrative or descriptive locators are possible. NOTE 4 The locators of an address could be composed as a hierarchy, where one level of locators identifies the real property or building while another level of locators identifies the flats or dwellings inside the property. EXAMPLE 1 In a Spanish city a "site-level" locator could identify a building on the thoroughfare name "Calle Gran Vía using the address number "8". If the building has four entrance doors, the door number "3" could be the "access-level" locator. The 3rd door could, via two staircases "A" and "B", give access to a number of floors, identified by a number "1" to "5" on which a number of dwellings are situated, also identified by numbers "1" to "3"; The "unit level" locator will thus composed of staircase-, floor- and dwelling identification e.g. "staircase A, floor 5, dwelling 1". In total, the three parent-child levels of locators uniquely identify the dwelling. EXAMPLE 2 In Copenhagen an "access level" locator could identify a specific entrance door in a building on the thoroughfare name "Wildersgade" using the address number "60A" (In Denmark the optional suffix is a part of the address number). The entrance door gives access to a number of floors, e.g, "st", "1", "2", "3", on which two dwellings are situated "tv" and "th". The "unit level" locator will thus be composed by a floor- and a door identifier: "2. th." (2nd floor, door to the right). In total, the two parent-child levels of locators uniquely identify the dwelling. EXAMPLE 3 In The Netherlands only one level of locators exists. The individual apartment within a large complex, a dwelling, a part of other kinds of buildings (for example an office), a mooring place or a place for the permanent placing of trailers are addressable objects which must have an address. This address is the only level of the locator. This locator could be composed by three attributes the house number, plus optionally an additional house letter, plus optionally an additional housenumber suffix. EXAMPLE 4 Sometimes the building name is an alternative identifier to the address number e.g. the house located in "Calle Santiago, 15, Elizondo-Baztán, Navarra, Spain" is also identified by the building name "Urtekoetxea" | |  | Stereotypes: | «dataType» | |
| **Attribuut: designator**   |  | Type: | LocatorDesignator | | --- | --- | --- | |  | Definitie: | A number or a sequence of characters that uniquely identifies the locator within the relevant scope(s). | |  | Multipliciteit: | 0..\* | |  | Collectie constraints: | ordered | |
| **Attribuut: name**   |  | Type: | LocatorName | | --- | --- | --- | |  | Definitie: | A geographic name or descriptive text associated to a property identified by the locator. | |  | Omschrijving: | NOTE 1 The locator name could be the name of the property or complex (e.g. an estate, hospital or a shopping mall), of the building or part of the building (e.g. a wing), or it could be the name of a room inside the building. NOTE 2 As locator name it is also possible to use a description that allows a user to identify the property in question. NOTE 3 The locator name could be an alternative addition to the locator designator (e.g. the address number) or it could be an independent identifier. EXAMPLE In the address "Calle Santiago, 15, Elizondo-Baztán, Navarra, Spain" the building name "Urtekoetxea" is an alternative to the building identifier "3". | |  | Multipliciteit: | 0..\* | |  | Collectie constraints: | ordered | |
| **Attribuut: level**   |  | Type: | LocatorLevelValue | | --- | --- | --- | |  | Definitie: | The level to which the locator refers. | |  | Multipliciteit: | 1 | |
| **Relatie: withinScopeOf**   |  | Type: | AddressComponent | | --- | --- | --- | |  | Definitie: | The address component that defines the scope within which the address locator is assigned according to rules ensuring unambiguousness. | |  | Omschrijving: | NOTE 1 For the assignment of unambiguous locators (e.g. address numbers) different rules exists in different countries and regions. According to the most common rule, an address number should be unique within the scope of the thoroughfare name. In other areas the address number is unique inside an address area name (e.g. the name of the village) or postal designator (e.g. the post code). In some areas even a combination of rules are applied: e.g. addresses with two locators, each of them referencing to a separate address component. NOTE 2 Locators that has the level of unit (like e.g. floor identifier and door or unit identifiers) are most often assigned so that they are unambiguous within the more narrow scope of the property or building; for these locators the association should therefore not be populated. EXAMPLE 1 In a typical European address dataset, parts of the addresses have locators which are unambiguous within the scope of the road name (thoroughfare name) while others are unambiguous within the name ogf the village or district (address area name). EXAMPLE 2 In Lithuania and Estonia a concept of "corner addresses" exists. Corner addresses have two address numbers (designators) each of them referring to a thoroughfare name (primary and secondary street name). E.g. in Vilnius the address designated "A. Stulginskio gatve 4 / A. Smetonos gatve 7" is situated on the corner of the two streets. EXAMPLE 3 In the Czech Republic in some cities an address has two locator designators: A building number which referres to the address area (district, cz: "cast obce") and a address number that referres to the thoroughfare name. As an example in Praha for address designated "Na Pankráci 1690/125, Nusle" the designator "1690" is a building number unique within the address area (cz cast obce) "Nusle", while the "125" is an address number that has the thoroughfare name as its scope. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Constraint: DesignatorEmpty**   |  | Natuurlijke taal: | If no designator exists, a name is required. | | --- | --- | --- | |  | OCL: | inv: self.designator->isEmpty() implies self.name->notEmpty() | |
| **Constraint: NameEmpty**   |  | Natuurlijke taal: | If no name exists, a designator is required. | | --- | --- | --- | |  | OCL: | inv: self.name->isEmpty() implies self.designator->notEmpty() | |

##### Address

| **Address** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | An identification of the fixed location of property by means of a structured composition of geographic names and identifiers. | |  | Omschrijving: | NOTE 1 The spatial object, referenced by the address, is defined as the "addressable object". The addressable object is not within the application schema, but it is possible to represent the address' reference to a cadastral parcel or a building through associations. It should, however, be noted that in different countries and regions, different traditions and/or regulations determine which object types should be regarded as addressable objects. NOTE 2 In most situations the addressable objects are current, real world objects. However, addresses may also reference objects which are planned, under construction or even historical. NOTE 3 Apart from the identification of the addressable objects (like e.g. buildings), addresses are very often used by a large number of other applications to identify object types e.g. statistics of the citizens living in the building, for taxation of the business entities that occupy the building, and the utility installations. NOTE 4 For different purposes, the identification of an address can be represented in different ways (see example 3). EXAMPLE 1 A property can e.g., be a plot of land, building, part of building, way of access or other construction, EXAMPLE 2 In the Netherlands the primary addressable objects are buildings and dwellings which may include parts of buildings, mooring places or places for the permanent placement of trailers (mobile homes), in the UK it is the lowest level of unit for the delivery of services, in the Czech Republic it is buildings and entrance doors. EXAMPLE 3 Addresses can be represented differently. In a human readable form an address in Spain and an address in Denmark could be represented like this: "Calle Mayor, 13, Cortijo del Marqués, 41037 Écija, Sevilla, España" or "Wildersgade 60A, st. th, 1408 Copenhagen K., Denmark". | |  | Stereotypes: | «featureType» | |
| **Attribuut: inspireId**   |  | Type: | Identifier | | --- | --- | --- | |  | Definitie: | External object identifier of the address. | |  | Omschrijving: | NOTE 1 An external object identifier is a unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object. The identifier is an identifier of the spatial object, not an identifier of the addressable object. NOTE 2 The primary purpose of this identifier is to enable links between various sources and the address components. EXAMPLE An address spatial object from Denmark could carry this identifier: Namespace: DK\_ADR Local identifier: 0A3F507B2AB032B8E0440003BA298018 Version identifier: 12-02-2008T10:05:01+01:00 | |  | Multipliciteit: | 1 | |
| **Attribuut: alternativeIdentifier**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | External, thematic identifier of the address spatial object, which enables interoperability with existing legacy systems or applications. | |  | Omschrijving: | NOTE 1 Compared with the proper identifier of the address, the alternative identifier is not necessarily persistent in the lifetime of the address spatial object. Likewise it is usually not globally unique and in general does not include information on the version of the address spatial object. NOTE 2 Often alternative address identifiers are composed by a set of codes that, e.g., identify the region and the municipality, the thoroughfare name and the address number. These alternative identifiers will not remain persistent e.g. in the case of the merging of two municipalities. EXAMPLE In Denmark many legacy systems (e.g. in the Statistics Denmark or the Central Business Register) uses as address identification the three digit municipality code plus the four character street name code plus the address number. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: position**   |  | Type: | GeographicPosition | | --- | --- | --- | |  | Definitie: | Position of a characteristic point which represents the location of the address according to a certain specification, including information on the origin of the position. | |  | Multipliciteit: | 1..\* | |
| **Attribuut: status**   |  | Type: | StatusValue | | --- | --- | --- | |  | Definitie: | Validity of the address within the life-cycle (version) of the address spatial object. | |  | Omschrijving: | NOTE This status relates to the address and is not a property of the object to which the address is assigned (the addressable object). | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: locator**   |  | Type: | AddressLocator | | --- | --- | --- | |  | Definitie: | Human readable designator or name. | |  | Multipliciteit: | 1..\* | |  | Collectie constraints: | ordered | |
| **Attribuut: validFrom**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time of which this version of the address was or will be valid in the real world. | |  | Omschrijving: | NOTE This date and time can be set in the future for situations where an address or a version of an address has been decided by the appropriate authority to take effect for a future date. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: validTo**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which this version of the address ceased or will cease to exist in the real world. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: beginLifespanVersion**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which this version of the spatial object was inserted or changed in the spatial data set. | |  | Omschrijving: | NOTE This date is recorded to enable the generation of change only update files. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Attribuut: endLifespanVersion**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which this version of the spatial object was superseded or retired in the spatial data set. | |  | Omschrijving: | NOTE This date is recorded primarily for those systems which "close" an entry in the spatial data set in the event of an attribute change. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Relatie: building**   |  | Naam: | building | | --- | --- | --- | |  | Type: | AbstractConstruction | |  | Definitie: | Building that the address is assigned to or associated with. | |  | Omschrijving: | NOTE An address could potentially have an association to zero, one or several buildings. Also it is possible (but this is not expressed in this application schema) that several addresses are associated to a single building. EXAMPLE In Praha, The Czech Republic, the address designated "NaPankráci 1690/125" is associated to a specific building in the street, in this case the building with number 1690 in the district (cz: cast obce) "Nusle". | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: parcel**   |  | Type: | CadastralParcel | | --- | --- | --- | |  | Definitie: | Cadastral parcel that this address is assigned to or associated with. | |  | Omschrijving: | NOTE An address could potentially have an association to zero, one or several cadastral parcels. Also it is possible (but this is not expressed in this application schema) that several addresses are associated to a single cadastral parcel. EXAMPLE In the street "Wildersgade" in Copenhagen, Denmark, the address designated as "Wildersgade 66, 1408 København K" is associated to the cadastral parcel identifier "81" in the district of "Christianshavn". | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: parentAddress**   |  | Type: | Address | | --- | --- | --- | |  | Definitie: | The main (parent) address with which this (sub) address is tightly connected. | |  | Omschrijving: | NOTE 1 The relationship between a set of subaddresses and the main address most often means that the sub addresses use the same locator and address components (for example , thoroughfare name, address area, post code) as the parent address. For each sub address additional address locators are then included for identification, like e.g. flat number, floor identifier, door number. NOTE 2 In some countries several levels of parent-, sub- and sub-sub-addresses exist. In other countries the concept of parent addresses does not exist; all addresses are thus of the same level. EXAMPLE 1 In a Spanish city the address "Calle Gran Vía 8" is a parent address where the locator "8" represents the building. In the building, the sub address "Calle Gran Via 8, door 3" represents a sub-address, while the more detailed sub-sub address "Calle Gran Via 8, door 3, staircase A, floor 5, dwelling 1" represents the address of a specific dwelling. EXAMPLE 2 In Denmark the legislation on addresses define two types of addresses: the parent "access level" and the sub "unit level". In the city of Copenhagen "Wildersgade 60A" is a parent access address that represents a specific entrance to a building. Inside the entrance, subaddresses using floor and door designators identifies the individual dwellings like e.g. "Wildersgade 60A, 1st floor, left door". EXAMPLE 3 In The Netherlands only one level of addresses exists. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Relatie: component**   |  | Type: | AddressComponent | | --- | --- | --- | |  | Definitie: | Represents that the address component is engaged as a part of the address. | |  | Omschrijving: | EXAMPLE For the address designated "Calle Mayor 13, Cortijo del Marqués, 41037, Écija, Sevilla, España" the six address components "Calle Mayor", "Cortijo del Marqués", "41037", "Écija", "Sevilla" and "España" are engaged as address components. | |  | Multipliciteit: | 1..\* | |
| **Constraint: AddressCountry**   |  | Natuurlijke taal: | An address shall have an admin unit address component spatial object whose level is 1 (Country) | | --- | --- | --- | |  | OCL: | inv: self.component -> forAll (a1 | exists(a1.parent.oclIsTypeOf(AdminUnitName) and a1.parent.level=1)) | |
| **Constraint: AddressPosition**   |  | Natuurlijke taal: | An address shall have exactly one default geographic position (default attribute of GeographicPosition must be true) | | --- | --- | --- | |  | OCL: | inv: self.position -> one(a1 | a1.default = true) | |
| **Constraint: EndLifeSpanVersion**   |  | Natuurlijke taal: | If date set endLifespanVersion must be later than beginLifespanVersion (if set) | | --- | --- | --- | |  | OCL: | inv: self.endLifespanVersion.isAfter(self.beginLifespanVersion) | |

##### AddressRepresentation

| **AddressRepresentation** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Representation of an address spatial object for use in external application schemas that need to include the basic, address information in a readable way. | |  | Omschrijving: | NOTE 1 The data type includes the all necessary readable address components as well as the address locator(s), which allows the identification of the address spatial objects, e.g., country, region, municipality, address area, post code, street name and address number. It also includes an optional reference to the full address spatial object. NOTE 2 The datatype could be used in application schemas that wish to include address information e.g. in a dataset that registers buildings or properties. | |  | Stereotypes: | «dataType» | |
| **Attribuut: adminUnit**   |  | Type: | GeographicalName | | --- | --- | --- | |  | Definitie: | The name or names of a unit of administration where a Member State has and/or exercises jurisdictional rights, for local, regional and national governance. | |  | Multipliciteit: | 1..\* | |  | Collectie constraints: | ordered | |
| **Attribuut: locatorDesignator**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | A number or a sequence of characters which allows a user or an application to interpret, parse and format the locator within the relevant scope. A locator may include more locator designators. | |  | Multipliciteit: | 0..\* | |  | Collectie constraints: | ordered | |
| **Attribuut: locatorName**   |  | Type: | GeographicalName | | --- | --- | --- | |  | Definitie: | Proper noun(s) applied to the real world entity identified by the locator. | |  | Multipliciteit: | 0..\* | |  | Collectie constraints: | ordered | |
| **Attribuut: addressArea**   |  | Type: | GeographicalName | | --- | --- | --- | |  | Definitie: | The name or names of a geographic area or locality that groups a number of addressable objects for addressing purposes, without being an administrative unit. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |  | Collectie constraints: | ordered | |
| **Attribuut: postName**   |  | Type: | GeographicalName | | --- | --- | --- | |  | Definitie: | One or more names created and maintained for postal purposes to identify a subdivision of addresses and postal delivery points. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |  | Collectie constraints: | ordered | |
| **Attribuut: postCode**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | A code created and maintained for postal purposes to identify a subdivision of addresses and postal delivery points. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: thoroughfare**   |  | Type: | GeographicalName | | --- | --- | --- | |  | Definitie: | The name or names of a passage or way through from one location to another like a road or a waterway. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |  | Collectie constraints: | ordered | |
| **Relatie: addressFeature**   |  | Type: | Address | | --- | --- | --- | |  | Definitie: | Reference to the address spatial object. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |

##### GeographicPosition

| **GeographicPosition** |
| --- |
| |  | Package: | Addresses [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | The position of a characteristic point which represents the location of the address according to a certain specification, including information on the origin of the position. | |  | Stereotypes: | «dataType» | |
| **Attribuut: geometry**   |  | Type: | GM\_Point | | --- | --- | --- | |  | Definitie: | The position of the point expressed in coordinates in the chosen spatial reference system. | |  | Multipliciteit: | 1 | |
| **Attribuut: specification**   |  | Type: | GeometrySpecificationValue | | --- | --- | --- | |  | Definitie: | Information defining the specification used to create or derive this geographic position of the address. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: method**   |  | Type: | GeometryMethodValue | | --- | --- | --- | |  | Definitie: | Description of how and by whom the geographic position of the address was created or derived. | |  | Omschrijving: | NOTE The geographic position could be created manually by the address authority itself, by an independent party (e.g. by field surveying or digitizing of paper maps) or it could be derived automatically from the addressable object or from other Inspire features. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: default**   |  | Type: | Boolean | | --- | --- | --- | |  | Definitie: | Specifies whether or not this position should be considered as the default. | |  | Omschrijving: | NOTE As a member state may provide several positions of an address, there is a need to identify the commonly used (main) position. Preferrably, the default position should be the one with best accuracy. | |  | Multipliciteit: | 1 | |

##### AdministrativeBoundary

| **AdministrativeBoundary** |
| --- |
| |  | Package: | AdministrativeUnits [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | administrative boundary | |  | Definitie: | A line of demarcation between administrative units. | |  | Stereotypes: | «featureType» | |
| **Attribuut: beginLifespanVersion**   |  | Naam: | begin lifespan version | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | Date and time at which this version of the spatial object was inserted or changed in the spatial data set. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Attribuut: country**   |  | Naam: | country | | --- | --- | --- | |  | Type: | CountryCode | |  | Definitie: | Two-character country code according to the Interinstitutional style guide published by the Publications Office of the European Union. | |  | Multipliciteit: | 1 | |
| **Attribuut: endLifespanVersion**   |  | Naam: | end lifespan version | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | Date and time at which this version of the spatial object was superseded or retired in the spatial data set. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Attribuut: geometry**   |  | Naam: | geometry | | --- | --- | --- | |  | Type: | GM\_Curve | |  | Definitie: | Geometric representation of border line. | |  | Multipliciteit: | 1 | |
| **Attribuut: inspireId**   |  | Naam: | inspire id | | --- | --- | --- | |  | Type: | Identifier | |  | Definitie: | External object identifier of the spatial object. | |  | Omschrijving: | NOTE An external object identifier is a unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object. The identifier is an identifier of the spatial object, not an identifier of the real-world phenomenon. | |  | Multipliciteit: | 1 | |
| **Attribuut: legalStatus**   |  | Naam: | legal status | | --- | --- | --- | |  | Type: | LegalStatusValue | |  | Definitie: | Legal status of this administrative boundary. | |  | Omschrijving: | NOTE The legal status is considered in terms of political agreement or disagreement of the administrative units separated by this boundary. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: nationalLevel**   |  | Naam: | national level | | --- | --- | --- | |  | Type: | AdministrativeHierarchyLevel | |  | Definitie: | The hierarchy levels of all adjacent administrative units this boundary is part of. | |  | Multipliciteit: | 1..6 | |
| **Attribuut: technicalStatus**   |  | Naam: | technical status | | --- | --- | --- | |  | Type: | TechnicalStatusValue | |  | Definitie: | The technical status of the administrative boundary. | |  | Omschrijving: | NOTE The technical status of the boundary is considered in terms of its topological matching or not-matching with the borders of all separated administrative units. Edge-matched means that the same set of coordinates is used. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Relatie: admUnit**   |  | Naam: | adm unit | | --- | --- | --- | |  | Type: | AdministrativeUnit | |  | Definitie: | The administrative units separated by this administrative boundary. | |  | Omschrijving: | NOTE In case of a national boundary (i.e. nationalLevel='1st order') only one national administrative unit (i.e. country) is provided. | |  | Multipliciteit: | 1..\* | |  | Stereotypes: | «voidable» | |

##### AdministrativeUnit

| **AdministrativeUnit** |
| --- |
| |  | Package: | AdministrativeUnits [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | administrative unit | |  | Definitie: | Unit of administration where a Member State has and/or exercises jurisdictional rights, for local, regional and national governance. | |  | Stereotypes: | «featureType» | |
| **Attribuut: beginLifespanVersion**   |  | Naam: | begin lifespan version | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | Date and time at which this version of the spatial object was inserted or changed in the spatial data set. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Attribuut: country**   |  | Naam: | country | | --- | --- | --- | |  | Type: | CountryCode | |  | Definitie: | Two-character country code according to the Interinstitutional style guide published by the Publications Office of the European Union. | |  | Multipliciteit: | 1 | |
| **Attribuut: endLifespanVersion**   |  | Naam: | end lifespan version | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | Date and time at which this version of the spatial object was superseded or retired in the spatial data set. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Attribuut: geometry**   |  | Naam: | geometry | | --- | --- | --- | |  | Type: | GM\_MultiSurface | |  | Definitie: | Geometric representation of spatial area covered by this administrative unit. | |  | Multipliciteit: | 1 | |
| **Attribuut: inspireId**   |  | Naam: | inspire id | | --- | --- | --- | |  | Type: | Identifier | |  | Definitie: | External object identifier of the spatial object. | |  | Omschrijving: | NOTE An external object identifier is a unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object. The identifier is an identifier of the spatial object, not an identifier of the real-world phenomenon. | |  | Multipliciteit: | 1 | |
| **Attribuut: name**   |  | Naam: | name | | --- | --- | --- | |  | Type: | GeographicalName | |  | Definitie: | Official national geographical name of the administrative unit, given in several languages where required. | |  | Multipliciteit: | 1..\* | |
| **Attribuut: nationalCode**   |  | Naam: | national code | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Thematic identifier corresponding to the national administrative codes defined in each country. | |  | Multipliciteit: | 1 | |
| **Attribuut: nationalLevel**   |  | Naam: | national level | | --- | --- | --- | |  | Type: | AdministrativeHierarchyLevel | |  | Definitie: | Level in the national administrative hierarchy, at which the administrative unit is established. | |  | Multipliciteit: | 1 | |
| **Attribuut: nationalLevelName**   |  | Naam: | national level name | | --- | --- | --- | |  | Type: | LocalisedCharacterString | |  | Definitie: | Name of the level in the national administrative hierarchy, at which the administrative unit is established. | |  | Multipliciteit: | 1..\* | |  | Stereotypes: | «voidable» | |
| **Attribuut: residenceOfAuthority**   |  | Naam: | residence of authority | | --- | --- | --- | |  | Type: | ResidenceOfAuthority | |  | Definitie: | Center for national or local administration. | |  | Multipliciteit: | 1..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: lowerLevelUnit**   |  | Naam: | lower level unit | | --- | --- | --- | |  | Type: | AdministrativeUnit | |  | Definitie: | Units established at a lower level of the national administrative hierarchy which are administered by the administrative unit. | |  | Omschrijving: | NOTE For administrative units at the lowest level of the national hierarchy no lower level unit exists. CONSTRAINT Each administrative unit except for the lowest level units shall refer to its lower level units | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: upperLevelUnit**   |  | Naam: | upper level unit | | --- | --- | --- | |  | Type: | AdministrativeUnit | |  | Definitie: | A unit established at a higher level of national administrative hierarchy that this administrative unit administers. | |  | Omschrijving: | NOTE Administrative units at the highest level of national hierarchy (i.e. the country) do not have upper level units. CONSTRAINT Each administrative unit at the level other than '1st order' (i.e. nationalLevel <> '1st order') shall refer their upper level unit. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Relatie: condominium**   |  | Naam: | condominium | | --- | --- | --- | |  | Type: | Condominium | |  | Definitie: | Condominium administered by this administrative unit. | |  | Omschrijving: | NOTE Condominiums may only exist at state level and can be administered only by administrative units at the highest level of the national administrative hierarchy (i.e. countries). | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: administeredBy**   |  | Naam: | administered by | | --- | --- | --- | |  | Type: | AdministrativeUnit | |  | Definitie: | Administrative unit established at same level of national administrative hierarchy that administers this administrative unit. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: coAdminister**   |  | Naam: | co administer | | --- | --- | --- | |  | Type: | AdministrativeUnit | |  | Definitie: | Administrative unit established at same level of national administrative hierarchy which is co-administered by this administrative unit. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: boundary**   |  | Naam: | boundary | | --- | --- | --- | |  | Type: | AdministrativeBoundary | |  | Definitie: | The administrative boundaries between this administrative unit and all the units adjacent to it. | |  | Omschrijving: | NOTE Administrative boundary corresponds to the curve established between the nodes at lowest level of territory division in Member State. Thus, it does not necessarily represents boundary in political terms, but just part of it. | |  | Multipliciteit: | 1..\* | |  | Stereotypes: | «voidable» | |
| **Constraint: AdmininstrativeUnitHighestLevel**   |  | Natuurlijke taal: | No unit at highest level can associate units at a higher level. | | --- | --- | --- | |  | OCL: | inv: self.nationalLevel = '1stOrder' implies self.upperLevelUnit->isEmpty() and self.loweLevelUnit->notEmpty() | |
| **Constraint: AdministrativeUnitLowestLevel**   |  | Natuurlijke taal: | No unit at lowest level can associate units at lower level. | | --- | --- | --- | |  | OCL: | inv: self.nationalLevel = '6thOrder' implies self.lowerLevelUnit->isEmpty and self.upperLevelUnit->notEmpty | |
| **Constraint: CondominiumsAtCountryLevel**   |  | Natuurlijke taal: | Association role condominium applies only for administrative units which nationalLevel='1st order' (country level). | | --- | --- | --- | |  | OCL: | inv: self.condominium->notEmpty implies self.nationalLevel = '1stOrder' | |

##### AdministrativeHierarchyLevel

| **AdministrativeHierarchyLevel** |
| --- |

##### Condominium

| **Condominium** |
| --- |
| |  | Package: | AdministrativeUnits [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | condominium | |  | Definitie: | An administrative area established independently to any national administrative division of territory and administered by two or more countries. | |  | Omschrijving: | NOTE Condominium is not a part of any national administrative hierarchy of territory division in Member State. | |  | Stereotypes: | «featureType» | |
| **Attribuut: beginLifespanVersion**   |  | Naam: | begin lifespan version | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | Date and time at which this version of the spatial object was inserted or changed in the spatial data set. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Attribuut: endLifespanVersion**   |  | Naam: | end lifespan version | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | Date and time at which this version of the spatial object was superseded or retired in the spatial data set. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Attribuut: geometry**   |  | Naam: | geometry | | --- | --- | --- | |  | Type: | GM\_MultiSurface | |  | Definitie: | Geometric representation of spatial area covered by this condominium. | |  | Multipliciteit: | 1 | |
| **Attribuut: inspireId**   |  | Naam: | inspire id | | --- | --- | --- | |  | Type: | Identifier | |  | Definitie: | External object identifier of the spatial object. | |  | Omschrijving: | NOTE An external object identifier is a unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object. The identifier is an identifier of the spatial object, not an identifier of the real-world phenomenon. | |  | Multipliciteit: | 1 | |
| **Attribuut: name**   |  | Naam: | name | | --- | --- | --- | |  | Type: | GeographicalName | |  | Definitie: | Official geographical name of this condominium, given in several languages where required. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: admUnit**   |  | Naam: | adm unit | | --- | --- | --- | |  | Type: | AdministrativeUnit | |  | Definitie: | The administrative unit administering the condominium. | |  | Multipliciteit: | 1..\* | |  | Stereotypes: | «voidable» | |

##### ResidenceOfAuthority

| **ResidenceOfAuthority** |
| --- |
| |  | Package: | AdministrativeUnits [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Data type representing the name and position of a residence of authority. | |  | Stereotypes: | «dataType» | |
| **Attribuut: name**   |  | Type: | GeographicalName | | --- | --- | --- | |  | Definitie: | Name of the residence of authority. | |  | Multipliciteit: | 1 | |
| **Attribuut: geometry**   |  | Type: | GM\_Point | | --- | --- | --- | |  | Definitie: | Position of the residence of authority. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |

##### CadastralZoning

| **CadastralZoning** |
| --- |
| |  | Package: | CadastralParcels [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Intermediary areas used in order to divide national territory into cadastral parcels. | |  | Omschrijving: | NOTE 1 In the INSPIRE context, cadastral zonings are to be used to carry metadata information and to facilitate portrayal and search of data. NOTE 2 Cadastral zonings have generally been defined when cadastral maps were created for the first time. EXAMPLE Municipality, section, parish, district, block. | |  | Stereotypes: | «featureType» | |
| **Attribuut: beginLifespanVersion**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which this version of the spatial object was inserted or changed in the spatial data set. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «lifeCycleInfo,voidable» | |
| **Attribuut: endLifespanVersion**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which this version of the spatial object was superseded or retired in the spatial data set. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «lifeCycleInfo,voidable» | |
| **Attribuut: estimatedAccuracy**   |  | Type: | Length | | --- | --- | --- | |  | Definitie: | The estimated absolute positional accuracy of cadastral parcels within the cadastral zoning in the used INSPIRE coordinate reference system. Absolute positional accuracy is the mean value of the positional uncertainties for a set of positions, where the positional uncertainties are the distance between a measured position and what is considered as the corresponding true position. | |  | Omschrijving: | NOTE This mean value may come from quality measures on a homogeneous population of cadastral parcels or from an estimation based on the knowledge of the production processes and of their accuracy. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: geometry**   |  | Type: | GM\_MultiSurface | | --- | --- | --- | |  | Definitie: | Geometry of the cadastral zoning. | |  | Multipliciteit: | 1 | |
| **Attribuut: inspireId**   |  | Type: | Identifier | | --- | --- | --- | |  | Definitie: | External object identifier of spatial object. | |  | Omschrijving: | NOTE An external object identifier is a unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object. The identifier is an identifier of the spatial object, not an identifier of the real-world phenomenon. | |  | Multipliciteit: | 0..1 | |
| **Attribuut: label**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | Text commonly used to display the cadastral zoning identification. | |  | Omschrijving: | NOTE 1 The label is usually the last part of the national cadastral zoning reference or that reference itself or the name. NOTE 2 The label can be used for label in portrayal. | |  | Multipliciteit: | 1 | |
| **Attribuut: level**   |  | Type: | CadastralZoningLevelValue | | --- | --- | --- | |  | Definitie: | Level of the cadastral zoning in the national cadastral hierarchy. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: levelName**   |  | Type: | LocalisedCharacterString | | --- | --- | --- | |  | Definitie: | Name of the level of the cadastral zoning in the national cadastral hierarchy, in at least one official language of the European Union. | |  | Omschrijving: | EXAMPLE For Spain, level name might be supplied as "municipio" (in Spanish) and as "municipality" (in English). | |  | Multipliciteit: | 1..\* | |  | Stereotypes: | «voidable» | |
| **Attribuut: name**   |  | Type: | GeographicalName | | --- | --- | --- | |  | Definitie: | Name of the cadastral zoning. | |  | Omschrijving: | NOTE 1 Cadastral zonings which are also administrative units have generally a name. EXAMPLE Bordeaux, Copenhagen. NOTE 2 The language of the name should be filled in most cases, except if the data producer does not know in which language the names are. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Attribuut: nationalCadastalZoningReference**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | Thematic identifier at national level, generally the full national code of the cadastral zoning. | |  | Omschrijving: | EXAMPLE 03260000AB (France), 30133 (Austria), APD00F (Netherlands). | |  | Multipliciteit: | 1 | |
| **Attribuut: originalMapScaleDenominator**   |  | Type: | Integer | | --- | --- | --- | |  | Definitie: | The denominator in the scale of the original paper map (if any) to whose extent the cadastral zoning corresponds. | |  | Omschrijving: | EXAMPLE 2000 means that original cadastral map was designed at scale 1: 2000. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: validFrom**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Official date and time the cadastral zoning was/will be legally established. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: referencePoint**   |  | Type: | GM\_Point | | --- | --- | --- | |  | Definitie: | A point within the cadastral zoning. | |  | Omschrijving: | EXAMPLE The centroid of the cadastral parcel geometry. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: validTo**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which the cadastral zoning legally ceased/will cease to be used. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Relatie: upperLevelUnit**   |  | Type: | CadastralZoning | | --- | --- | --- | |  | Definitie: | The next upper level cadastral zoning containing this cadastral zoning. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Constraint: endLifespanVersion**   |  | Natuurlijke taal: | If set, the date endLifespanVersion shall be later than beginLifespanVersion. | | --- | --- | --- | |  | OCL: | inv: self.endLifespanVersion .isAfter(self.beginLifespanVersion) | |
| **Constraint: estimatedAccuracyUoM**   |  | Natuurlijke taal: | Value of estimatedAccuracy shall be given in meters. | | --- | --- | --- | |  | OCL: | inv: self.estimatedAccuracy.uom.uomSymbol='m' | |
| **Constraint: validTo**   |  | Natuurlijke taal: | If set, the date validTo shall be equal or later than validFrom. | | --- | --- | --- | |  | OCL: | inv: self.validTo .isEqual(self.validFrom) or self.validTo .isAfter(self.validFrom) | |
| **Constraint: zoningLevelHierarchy**   |  | Natuurlijke taal: | A lower level cadastral zoning shall be part of an upper level zoning. | | --- | --- | --- | |  | OCL: | inv: self.nationalLevel <> '1stOrder' implies self.level < self.upperLevelUnit.level | |

##### Measure

| **Measure** |
| --- |
| |  | Package: | ProductionAndIndustrialFacilitiesExtension [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Declared or measured quantity of any kind of physical entity. | |  | Stereotypes: | «dataType» | |
| **Attribuut: value**   |  | Type: | Decimal | | --- | --- | --- | |  | Definitie: | Declared or measured physical size expressed as a numerical quantity. | |  | Omschrijving: | The data format is decimal. Decimal is a data type in which the number represents an exact value, as a finite representation of a decimal number. | |  | Multipliciteit: | 1 | |
| **Attribuut: unitOfMeasure**   |  | Type: | UnitOfMeasure | | --- | --- | --- | |  | Definitie: | Unit of measure accompanying the numerical quantity declared or measured for a physical entity. | |  | Multipliciteit: | 1 | |

##### CadastralParcel

| **CadastralParcel** |
| --- |
| |  | Package: | CadastralParcels [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Areas defined by cadastral registers or equivalent. | |  | Omschrijving: | SOURCE [INSPIRE Directive:2007]. NOTE As much as possible, in the INSPIRE context, cadastral parcels should be forming a partition of national territory. Cadastral parcel should be considered as a single area of Earth surface (land and/or water), under homogeneous real property rights and unique ownership, real property rights and ownership being defined by national law (adapted from UN ECE 2004 and WG-CPI, 2006). By unique ownership is meant that the ownership is held by one or several joint owners for the whole parcel. | |  | Stereotypes: | «featureType» | |
| **Attribuut: areaValue**   |  | Type: | Area | | --- | --- | --- | |  | Definitie: | Registered area value giving quantification of the area projected on the horizontal plane of the cadastral parcel. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: beginLifespanVersion**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which this version of the spatial object was inserted or changed in the spatial data set. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «lifeCycleInfo,voidable» | |
| **Attribuut: endLifespanVersion**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which this version of the spatial object was superseded or retired in the spatial data set. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «lifeCycleInfo,voidable» | |
| **Attribuut: geometry**   |  | Type: | GM\_Object | | --- | --- | --- | |  | Definitie: | Geometry of the cadastral parcel. | |  | Omschrijving: | As much as possible, the geometry should be a single area. | |  | Multipliciteit: | 1 | |
| **Attribuut: inspireId**   |  | Type: | Identifier | | --- | --- | --- | |  | Definitie: | External object identifier of the spatial object. | |  | Omschrijving: | NOTE An external object identifier is a unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object. The identifier is an identifier of the spatial object, not an identifier of the real-world phenomenon. | |  | Multipliciteit: | 1 | |
| **Attribuut: label**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | Text commonly used to display the cadastral parcel identification. | |  | Omschrijving: | NOTE 1 The label is usually the last part of the national cadastral reference. NOTE 2 The label can be used for label in portrayal. | |  | Multipliciteit: | 1 | |
| **Attribuut: nationalCadastralReference**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | Thematic identifier at national level, generally the full national code of the cadastral parcel. Must ensure the link to the national cadastral register or equivalent. | |  | Omschrijving: | The national cadastral reference can be used also in further queries in national services. | |  | Multipliciteit: | 1 | |
| **Attribuut: referencePoint**   |  | Type: | GM\_Point | | --- | --- | --- | |  | Definitie: | A point within the cadastral parcel. | |  | Omschrijving: | EXAMPLE The centroid of the cadastral parcel geometry. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: validFrom**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Official date and time the cadastral parcel was/will be legally established. | |  | Omschrijving: | NOTE This is the date and time the national cadastral reference can be used in legal acts. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: validTo**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which the cadastral parcel legally ceased/will cease to be used. | |  | Omschrijving: | NOTE This is the date and time the national cadastral reference can no longer be used in legal acts. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Relatie: basicPropertyUnit**   |  | Type: | BasicPropertyUnit | | --- | --- | --- | |  | Definitie: | The basic property unit(s) containing this cadastral parcel. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Relatie: zoning**   |  | Type: | CadastralZoning | | --- | --- | --- | |  | Definitie: | The cadastral zoning of lowest level containing this cadastral parcel. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Relatie: administrativeUnit**   |  | Type: | AdministrativeUnit | | --- | --- | --- | |  | Definitie: | The administrative unit of lowest administrative level containing this cadastral parcel. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Constraint: areaValueUoM**   |  | Natuurlijke taal: | Value of areaValue shall be given in square meters. | | --- | --- | --- | |  | OCL: | inv: self.areaValue.uom.uomSymbol='m2' | |
| **Constraint: endLifespanVersion**   |  | Natuurlijke taal: | If set, the date endLifespanVersion shall be later than beginLifespanVersion. | | --- | --- | --- | |  | OCL: | inv: self.endLifespanVersion .isAfter(self.beginLifespanVersion) | |
| **Constraint: geometryType**   |  | Natuurlijke taal: | Type of geometry shall be GM\_Surface or GM\_MultiSurface | | --- | --- | --- | |  | OCL: | inv: geometry.oclIsKindOf(GM\_Surface) or geometry.oclIsKindOf(GM\_MultiSurface) | |
| **Constraint: validTo**   |  | Natuurlijke taal: | If set, the date validTo shall be equal or later than validFrom. | | --- | --- | --- | |  | OCL: | inv: self.validTo .isEqual(self.validFrom) or self.validTo .isAfter(self.validFrom) | |

##### CadastralZoningLevelValue

| **CadastralZoningLevelValue** |
| --- |
| |  | Package: | CadastralParcels [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Levels of hierarchy of the cadastral zonings. | |  | Omschrijving: | NOTE The higher levels in the administrative units theme (province, state) are not repeated in this code list. | |  | Stereotypes: | «codeList» | |  | Governance: | Centrally managed in INSPIRE code list register. URN: urn:x-inspire:def:codeList:INSPIRE:CadastralZoningLevelValue | |

##### BasicPropertyUnit

| **BasicPropertyUnit** |
| --- |
| |  | Package: | CadastralParcels [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | The basic unit of ownership that is recorded in the land books, land registers or equivalent. It is defined by unique ownership and homogeneous real property rights, and may consist of one or more adjacent or geographically separate parcels. | |  | Omschrijving: | SOURCE Adapted from UN ECE 2004. NOTE 1 In the INSPIRE context, basic property units are to be made available by member states where unique cadastral references are given only for basic property units and not for parcels. NOTE 2 In many (but not all) countries, the area of the basic property unit corresponds to the cadastral parcel itself. NOTE 3 Some countries, such as Finland, may also register officially basic property units without any area. These basic property units are considered out of the INSPIRE scope. NOTE 4 Some countries, such as Norway, may have parcels which belong to several basic property units. | |  | Stereotypes: | «featureType» | |
| **Attribuut: inspireId**   |  | Type: | Identifier | | --- | --- | --- | |  | Definitie: | External object identifier of the spatial object. | |  | Omschrijving: | NOTE An external object identifier is a unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object. The identifier is an identifier of the spatial object, not an identifier of the real-world phenomenon. | |  | Multipliciteit: | 1 | |
| **Attribuut: nationalCadastralReference**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | Thematic identifier at national level, generally the full national code of the basic property unit. Must ensure the link to the national cadastral register or equivalent. | |  | Omschrijving: | The national cadastral reference can be used also in further queries in national services. | |  | Multipliciteit: | 1 | |
| **Attribuut: areaValue**   |  | Type: | Area | | --- | --- | --- | |  | Definitie: | Registered area value giving quantification of the area projected on the horizontal plane of the cadastral parcels composing the basic property unit. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: validFrom**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Official date and time the basic property unit was/will be legally established. | |  | Omschrijving: | NOTE This is the date and time the national cadastral reference can be used in legal acts. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: validTo**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which the basic property unit legally ceased/will cease to be used. | |  | Omschrijving: | NOTE This is the date and time the national cadastral reference can no longer be used in legal acts. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: beginLifespanVersion**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which this version of the spatial object was inserted or changed in the spatial data set. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «lifeCycleInfo,voidable» | |
| **Attribuut: endLifespanVersion**   |  | Type: | DateTime | | --- | --- | --- | |  | Definitie: | Date and time at which this version of the spatial object was superseded or retired in the spatial data set. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «lifeCycleInfo,voidable» | |
| **Relatie: administrativeUnit**   |  | Type: | AdministrativeUnit | | --- | --- | --- | |  | Definitie: | The administrative unit of lowest administrative level containing this basic property unit. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Constraint: areaValueUoM**   |  | Natuurlijke taal: | Value of areaValue shall be given in square meters | | --- | --- | --- | |  | OCL: | inv: self.areaValue.uom.uomSymbol='m2' | |
| **Constraint: endLifespanVersion**   |  | Natuurlijke taal: | If set, the date endLifespanVersion shall be later than beginLifespanVersion. | | --- | --- | --- | |  | OCL: | inv: self.endLifespanVersion .isAfter(self.beginLifespanVersion) | |
| **Constraint: validTo**   |  | Natuurlijke taal: | If set, the date validTo shall be equal or later than validFrom. | | --- | --- | --- | |  | OCL: | inv: self.validTo .isEqual(self.validFrom) or self.validTo .isAfter(self.validFrom) | |

##### GrammaticalNumberValue

| **GrammaticalNumberValue** |
| --- |
| |  | Package: | Geographical Names [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | The grammatical number of a geographical name. | |  | Stereotypes: | «codeList» | |  | Governance: | Centrally managed in INSPIRE code list register. URN: urn:x-inspire:def:codeList:INSPIRE:GrammaticalNumberValue | |

##### NameStatusValue

| **NameStatusValue** |
| --- |
| |  | Package: | Geographical Names [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | The status of a geographical name, that is the information enabling to discern which credit should be given to the name with respect to its standardisation and/or its topicality. | |  | Omschrijving: | NOTE The precise definition of the values 'Official', 'Standardised', 'Historical' and 'Other' can only be decided by Member States according to their legislation and practice. | |  | Stereotypes: | «codeList» | |  | Governance: | Centrally managed in INSPIRE code list register. URN: urn:x-inspire:def:codeList:INSPIRE:NameStatusValue | |

##### NativenessValue

| **NativenessValue** |
| --- |
| |  | Package: | Geographical Names [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | The nativeness of a geographical name. | |  | Stereotypes: | «codeList» | |  | Governance: | Centrally managed in INSPIRE code list register. URN: urn:x-inspire:def:codeList:INSPIRE:NativenessValue | |

##### PronunciationOfName

| **PronunciationOfName** |
| --- |
| |  | Package: | Geographical Names [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Proper, correct or standard (standard within the linguistic community concerned) pronunciation of a name. | |  | Omschrijving: | SOURCE Adapted from [UNGEGN Manual 2006]. | |  | Stereotypes: | «dataType» | |
| **Attribuut: pronunciationSoundLink**   |  | Type: | URI | | --- | --- | --- | |  | Definitie: | Proper, correct or standard (standard within the linguistic community concerned) pronunciation of a name, expressed by a link to any sound file. | |  | Omschrijving: | SOURCE Adapted from [UNGEGN Manual 2006]. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: pronunciationIPA**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | Proper, correct or standard (standard within the linguistic community concerned) pronunciation of a name, expressed in International Phonetic Alphabet (IPA). | |  | Omschrijving: | SOURCE Adapted from [UNGEGN Manual 2006]. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Constraint: pronunciationSoundLink or pronunciationIPA not empty**   |  | Natuurlijke taal: | At least one of the two attributes pronunciationSoundLink and pronunciationIPA shall not be void. | | --- | --- | --- | |  | OCL: | inv: self.pronounciationIPA -> notEmpty() or self.pronounciationSoundLink -> notEmpty() | |

##### SpellingOfName

| **SpellingOfName** |
| --- |
| |  | Package: | Geographical Names [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Proper way of writing a name. | |  | Omschrijving: | SOURCE Adapted from [UNGEGN Manual 2006]. NOTE Proper spelling means the writing of a name with the correct capitalisation and the correct letters and diacritics present in an accepted standard order. | |  | Stereotypes: | «dataType» | |
| **Attribuut: text**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | Way the name is written. | |  | Multipliciteit: | 1 | |
| **Attribuut: script**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | Set of graphic symbols (for example an alphabet) employed in writing the name, expressed using the four letters codes defined in ISO 15924, where applicable. | |  | Omschrijving: | SOURCE Adapted from [UNGEGN Glossary 2007]. EXAMPLES Cyrillic, Greek, Roman/Latin scripts. NOTE 1The four letter codes for Latin (Roman), Cyrillic and Greek script are "Latn", "Cyrl" and "Grek", respectively. NOTE 2 In rare cases other codes could be used (for other scripts than Latin, Greek and Cyrillic). However, this should mainly apply for historical names in historical scripts. NOTE 3 This attribute is of first importance in the multi-scriptual context of Europe. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: transliterationScheme**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | Method used for the names conversion between different scripts. | |  | Omschrijving: | SOURCE Adapted from [UNGEGN Glossary 2007]. NOTE 1 This attribute should be filled for any transliterated spellings. If the transliteration scheme used is recorded in codelists maintained by ISO or UN, those codes should be preferred. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |

##### GrammaticalGenderValue

| **GrammaticalGenderValue** |
| --- |
| |  | Package: | Geographical Names [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | The grammatical gender of a geographical name. | |  | Stereotypes: | «codeList» | |  | Governance: | Centrally managed in INSPIRE code list register. URN: urn:x-inspire:def:codeList:INSPIRE:GrammaticalGenderValue | |

##### GeographicalName

| **GeographicalName** |
| --- |
| |  | Package: | Geographical Names [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Definitie: | Proper noun applied to a real world entity. | |  | Stereotypes: | «dataType» | |
| **Attribuut: language**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | Language of the name, given as a three letters code, in accordance with either ISO 639-3 or ISO 639-5. | |  | Omschrijving: | NOTE 1More precisely, this definition refers to the language used by the community that uses the name. NOTE 2 The code "mul" for "multilingual" should not be used in general. However it can be used in rare cases like official names composed of two names in different languages. For example, "Vitoria-Gasteiz" is such a multilingual official name in Spain. NOTE 3 Even if this attribute is "voidable" for pragmatic reasons, it is of first importance in several use cases in the multi-language context of Europe. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: nativeness**   |  | Type: | NativenessValue | | --- | --- | --- | |  | Definitie: | Information enabling to acknowledge if the name is the one that is/was used in the area where the spatial object is situated at the instant when the name is/was in use. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: nameStatus**   |  | Type: | NameStatusValue | | --- | --- | --- | |  | Definitie: | Qualitative information enabling to discern which credit should be given to the name with respect to its standardisation and/or its topicality. | |  | Omschrijving: | NOTE The Geographical Names application schema does not explicitly make a preference between different names (e.g. official endonyms) of a specific real world entity. The necessary information for making the preference (e.g. the linguistic status of the administrative or geographic area in question), for a certain use case, must be obtained from other data or information sources. For example, the status of the language of the name may be known through queries on the geometries of named places against the geometry of administrative units recorded in a certain source with the language statuses information. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: sourceOfName**   |  | Type: | CharacterString | | --- | --- | --- | |  | Definitie: | Original data source from which the geographical name is taken from and integrated in the data set providing/publishing it. For some named spatial objects it might refer again to the publishing data set if no other information is available. | |  | Omschrijving: | EXAMPLES Gazetteer, geographical names data set. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: pronunciation**   |  | Type: | PronunciationOfName | | --- | --- | --- | |  | Definitie: | Proper, correct or standard (standard within the linguistic community concerned) pronunciation of the geographical name. | |  | Omschrijving: | SOURCE Adapted from [UNGEGN Manual 2006]. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: spelling**   |  | Type: | SpellingOfName | | --- | --- | --- | |  | Definitie: | A proper way of writing the geographical name. | |  | Omschrijving: | NOTE 1 Different spellings should only be used for names rendered in different scripts. . NOTE 2 While a particular GeographicalName should only have one spelling in a given script, providing different spellings in the same script should be done through the provision of different geographical names associated with the same named place. | |  | Multipliciteit: | 1..\* | |
| **Attribuut: grammaticalGender**   |  | Type: | GrammaticalGenderValue | | --- | --- | --- | |  | Definitie: | Class of nouns reflected in the behaviour of associated words. | |  | Omschrijving: | NOTE the attribute has cardinality [0..1] and is voidable, which means that:   * in case the concept of grammatical gender has no sense for a given name (i.e. the attribute is not applicable), the attribute should not be provided. * in case the concept of grammatical gender has some sense for the name but is unknown, the attribute should be provided but *void*. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: grammaticalNumber**   |  | Type: | GrammaticalNumberValue | | --- | --- | --- | |  | Definitie: | Grammatical category of nouns that expresses count distinctions. | |  | Omschrijving: | NOTE the attribute has cardinality [0..1] and is voidable, which means that:   * in case the concept of grammatical number has no sense for a given name (i.e. the attribute is not applicable), the attribute should not be provided. * in case the concept of grammatical number has some sense for the name but is unknown, the attribute should be provided but *void*. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |

##### ConditionOfConstructionValue

| **ConditionOfConstructionValue** |
| --- |
| |  | Package: | BuildingsBase [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | Condition of construction value | |  | Definitie: | Values indicating the condition of a construction. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### ElevationReferenceValue

| **ElevationReferenceValue** |
| --- |
| |  | Package: | BuildingsBase [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | Elevation reference value | |  | Definitie: | List of possible elements considered to capture a vertical geometry. | |  | Omschrijving: | NOTE: The values of this code list are used to describe the reference of elevation both where elevation has been captured as attribute or as Z coordinate. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### HeightStatusValue

| **HeightStatusValue** |
| --- |
| |  | Package: | BuildingsBase [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | Height status value | |  | Definitie: | Values indicating the method used to capture a height. | |  | Stereotypes: | «codeList» | |  | Governance: | Uitbreidbaar | |

##### Elevation

| **Elevation** |
| --- |
| |  | Package: | BuildingsBase [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | Elevation | |  | Definitie: | This data types includes the elevation value itself and information on how this elevation was measured. | |  | Stereotypes: | «dataType» | |
| **Attribuut: elevationReference**   |  | Naam: | Elevation reference | | --- | --- | --- | |  | Type: | ElevationReferenceValue | |  | Definitie: | Element where the elevation was measured. | |  | Multipliciteit: | 1 | |
| **Attribuut: elevationValue**   |  | Naam: | elevation value | | --- | --- | --- | |  | Type: | DirectPosition | |  | Definitie: | Value of the elevation. | |  | Multipliciteit: | 1 | |

##### DateOfEvent

| **DateOfEvent** |
| --- |
| |  | Package: | BuildingsBase [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | Date of event | |  | Definitie: | This data type includes the different possible ways to define the date of an event. | |  | Stereotypes: | «dataType» | |
| **Attribuut: anyPoint**   |  | Naam: | Any point | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | A date and time of any point of the event, between its beginning and its end. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: beginning**   |  | Naam: | Beginning | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | Date and time when the event begun. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: end**   |  | Naam: | End | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | Date and time when the event ended. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Constraint: atLeastOneEvent**   |  | Natuurlijke taal: | At least, one of the attributes beginning, end or anyPoint shall be supplied. | | --- | --- | --- | |  | OCL: | inv: dateOfEvent->notEmpty() | |
| **Constraint: beginning is before anyPoint is before end**   |  | Natuurlijke taal: | inv: beginning <= anyPoint and anyPoint <= end and beginning <= end | | --- | --- | --- | |  | OCL: |  | |

##### ExternalReference

| **ExternalReference** |
| --- |
| |  | Package: | BuildingsBase [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | External reference | |  | Definitie: | Reference to an external information system containing any piece of information related to the spatial object. | |  | Stereotypes: | «dataType» | |
| **Attribuut: informationSystem**   |  | Naam: | Information system | | --- | --- | --- | |  | Type: | URI | |  | Definitie: | Uniform Resource Identifier of the external information system. | |  | Multipliciteit: | 1 | |
| **Attribuut: informationSystemName**   |  | Naam: | Information system name | | --- | --- | --- | |  | Type: | PT\_FreeText | |  | Definitie: | The name of the external information system. | |  | Omschrijving: | EXAMPLES: Danish Register of Dwellings, Spanish Cadastre. | |  | Multipliciteit: | 1 | |
| **Attribuut: reference**   |  | Naam: | Reference | | --- | --- | --- | |  | Type: | CharacterString | |  | Definitie: | Thematic identifier of the spatial object or of any piece of information related to the spatial object. | |  | Omschrijving: | NOTE: This reference will act as a foreign key to implement the association between the spatial object in the INSPIRE data set and in the external information system. EXAMPLE: The cadastral reference of a given building in the national cadastral register. | |  | Multipliciteit: | 1 | |

##### AbstractConstruction

| **AbstractConstruction (abstract)** |
| --- |
| |  | Package: | BuildingsBase [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | Abstract construction | |  | Definitie: | Abstract spatial object type grouping the semantic properties of buildings, building parts and of some optional spatial object types that may be added in order to provide more information about the theme Buildings. | |  | Omschrijving: | The optional spatial object types that may be added to core profiles are described in the extended profiles. The ones inheriting from the attributes of AbstractConstruction are Installation and OtherConstruction. | |  | Stereotypes: | «featureType» | |
| **Attribuut: beginLifespanVersion**   |  | Naam: | Begin lifespan version | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | Date and time at which this version of the spatial object was inserted or changed in the spatial data set. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Attribuut: conditionOfConstruction**   |  | Naam: | Condition of construction | | --- | --- | --- | |  | Type: | ConditionOfConstructionValue | |  | Definitie: | Status of the construction. | |  | Omschrijving: | EXAMPLES: functional, projected, ruin | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: dateOfConstruction**   |  | Naam: | Date of construction | | --- | --- | --- | |  | Type: | DateOfEvent | |  | Definitie: | Date of construction. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: dateOfDemolition**   |  | Naam: | Date of demolition | | --- | --- | --- | |  | Type: | DateOfEvent | |  | Definitie: | Date of demolition. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: dateOfRenovation**   |  | Naam: | Date of last major renovation | | --- | --- | --- | |  | Type: | DateOfEvent | |  | Definitie: | Date of last major renovation. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: elevation**   |  | Naam: | Elevation | | --- | --- | --- | |  | Type: | Elevation | |  | Definitie: | Vertically-constrained dimensional property consisting of an absolute measure referenced to a well-defined surface which is commonly taken as origin (geoïd, water level, etc.). | |  | Omschrijving: | Source: adapted from the definition given in the data specification of the theme Elevation. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Attribuut: endLifespanVersion**   |  | Naam: | End lifespan version | | --- | --- | --- | |  | Type: | DateTime | |  | Definitie: | Date and time at which this version of the spatial object was superseded or retired in the spatial data set. | |  | Multipliciteit: | 0..1 | |  | Stereotypes: | «voidable,lifeCycleInfo» | |
| **Attribuut: externalReference**   |  | Naam: | External reference | | --- | --- | --- | |  | Type: | ExternalReference | |  | Definitie: | Reference to an external information system containing any piece of information related to the spatial object. | |  | Omschrijving: | EXAMPLE 1: Reference to another spatial data set containing another view on buildings; the externalReference may be used for instance to ensure consistency between 2D and 3D representations of the same buildings EXAMPLE 2: Reference to cadastral or dwelling register. The reference to this register may enable to find legal information related to the building, such as the owner(s) or valuation criteria (e.g. type of heating, toilet, kitchen) EXAMPLE 3: Reference to the system recording the building permits. The reference to the building permits may be used to find detailed information about the building physical and temporal aspects. | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Attribuut: heightAboveGround**   |  | Naam: | Height above ground | | --- | --- | --- | |  | Type: | HeightAboveGround | |  | Definitie: | Height above ground. | |  | Omschrijving: | NOTE: height above ground may be defined as the difference between elevation at a low reference (ground level) and elevation as a high reference (e.g. roof level, top of construction) | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |
| **Attribuut: inspireId**   |  | Naam: | inspire id | | --- | --- | --- | |  | Type: | Identifier | |  | Definitie: | External object identifier of the spatial object. | |  | Omschrijving: | An external object identifier is a unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object. The identifier is an identifier of the spatial object, not an identifier of the real-world phenomenon. | |  | Multipliciteit: | 1 | |
| **Attribuut: name**   |  | Naam: | Name | | --- | --- | --- | |  | Type: | GeographicalName | |  | Definitie: | Name of the construction. | |  | Omschrijving: | EXAMPLES: Big Ben, Eiffel Tower, Sacrada Familia | |  | Multipliciteit: | 0..\* | |  | Stereotypes: | «voidable» | |

##### HeightAboveGround

| **HeightAboveGround** |
| --- |
| |  | Package: | BuildingsBase [Candidate type that might be extended in Annex II/III INSPIRE data specification] | | --- | --- | --- | |  | Naam: | Height above ground | |  | Definitie: | Vertical distance (measured or estimated) between a low reference and a high reference. | |  | Stereotypes: | «dataType» | |
| **Attribuut: heightReference**   |  | Naam: | Height reference | | --- | --- | --- | |  | Type: | ElevationReferenceValue | |  | Definitie: | Element used as the high reference. | |  | Omschrijving: | EXAMPLE: The height of the building has been captured up to the top of building. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: lowReference**   |  | Naam: | Low reference | | --- | --- | --- | |  | Type: | ElevationReferenceValue | |  | Definitie: | Element as the low reference. | |  | Omschrijving: | EXAMPLE: the height of the building has been captured from its the lowest ground point. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: status**   |  | Naam: | Status | | --- | --- | --- | |  | Type: | HeightStatusValue | |  | Definitie: | The way the height has been captured. | |  | Multipliciteit: | 1 | |  | Stereotypes: | «voidable» | |
| **Attribuut: value**   |  | Naam: | Value | | --- | --- | --- | |  | Type: | Length | |  | Definitie: | Value of the height above ground. | |  | Multipliciteit: | 1 | |
| **Constraint: valueUoMIsMetre**   |  | Natuurlijke taal: | Value shall be in meters. | | --- | --- | --- | |  | OCL: | inv: self.value.uom.uomSymbol='m' | |

#### Geïmporteerde types (informatief)

Deze paragraaf beschrijft de definities voor feature types, enumeraties en codelijsten die in andere applicatieschemas worde gedefinieerd. Deze paragraaf is puur informatief and kan de lezer helpen in het begrijpen van de feature catalogus in de voorgaande paragrafen.Kijk voor de normatieve documentatie van deze types in de gegeven referenties.

##### ActivityComplex

| **ActivityComplex** |
| --- |
| |  | Package: | Activity Complex [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | A "single unit", both technically and economically, under the management control of the same legal entity (operator), covering activities as those listed in the Eurostat NACE classification, products and services. Activity Complex includes all infrastructure, equipment and materials. It must represent the whole area, at the same or different geographical location, managed by a "single unit". | |  | Omschrijving: | NOTE 1 This class describes the minimal set of elements necessary to describe and identify geographically a legal entity and the activities taken place on it under the context of a Environmental purposes. NOTE 2 "Activity Complex" could be assimilated to terms described on the legislation as Facility, Establishment, Plant, Holding, Organization ,Farm, Extractive Industries or Aquaculture Production Business among others EXAMPLE i.e. an Agro-business that is legally registered under the Emissions Directive. | |

##### NetworkElement

| **NetworkElement (abstract)** |
| --- |
| |  | Package: | Network [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | Abstract base type representing an element in a network. Every element in a network provides some function that is of interest in the network. | |

##### Network

| **Network** |
| --- |
| |  | Package: | Network [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | A network is a collection of network elements. | |  | Omschrijving: | The reason for collecting certain elements in a certain network may vary (e.g. connected elements for the same mode of transport) | |

##### Function

| **Function** |
| --- |
| |  | Package: | Activity Complex [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | The function of something expressed as an activity and optional input and/or output. | |  | Omschrijving: | NOTE Depending on the scope it can refer to different activities (co-incineration, Collection, exploration, incineration, interim disposal, management, recycling, primary production, primary treatment, recovery , recycling, release, storage, use, waste management, etc) and Inputs and Outputs (sludge, substance, tailings, technical products, urban waste water, volatile organic compound, waste, WEEE from private households, etc). | |

##### Identifier

| **Identifier** |
| --- |
| |  | Package: | Base Types [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | External unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object. | |  | Omschrijving: | NOTE1 External object identifiers are distinct from thematic object identifiers. NOTE 2 The voidable version identifier attribute is not part of the unique identifier of a spatial object and may be used to distinguish two versions of the same spatial object. NOTE 3 The unique identifier will not change during the life-time of a spatial object. | |

##### Contact

| **Contact** |
| --- |
| |  | Package: | Base Types 2 [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | Communication channels by which it is possible to gain access to someone or something. | |

##### RelatedParty

| **RelatedParty** |
| --- |
| |  | Package: | Base Types 2 [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | An organisation or a person with a role related to a resource. | |  | Omschrijving: | NOTE 1 A party, typically an individual person, acting as a general point of contact for a resource can be specified without providing any particular role. | |

##### ThematicIdentifier

| **ThematicIdentifier** |
| --- |
| |  | Package: | Base Types 2 [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | Thematic identifier to uniquely identify the spatial object. | |  | Omschrijving: | Some spatial objects may be assigned multiple unique identifiers. These may have been established to meet data exchange requirements of different reporting obligations at International, European or national levels and/or internal data maintenance requirements. | |

##### EconomicActivityValue

| **EconomicActivityValue** |
| --- |
| |  | Package: | Activity Complex [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | Classification of economic activities. | |

##### InputOutputValue

| **InputOutputValue** |
| --- |
| |  | Package: | Activity Complex [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | Classification of inputs or outputs. | |

##### ConditionOfFacilityValue

| **ConditionOfFacilityValue** |
| --- |
| |  | Package: | Base Types [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | The status of a facility with regards to its completion and use. | |

##### PartyRoleValue

| **PartyRoleValue** |
| --- |
| |  | Package: | Base Types 2 [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | Roles of parties related to or responsible for a resource. | |

##### CountryCode

| **CountryCode** |
| --- |
| |  | Package: | Base Types 2 [Include reference to the document that includes the package, e.g. INSPIRE data specification, ISO standard or the GCM] | | --- | --- | --- | |  | Definitie: | Country code as defined in the Interinstitutional style guide published by the Publications Office of the European Union. | |



Bijlage 4: Alle IMKL2015 waardelijsten samen

Zie Excel bestand IMKL2015 – Waardelijsten.