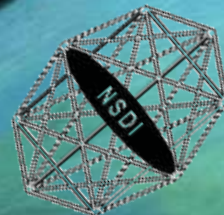


Extensions on INSPIRE

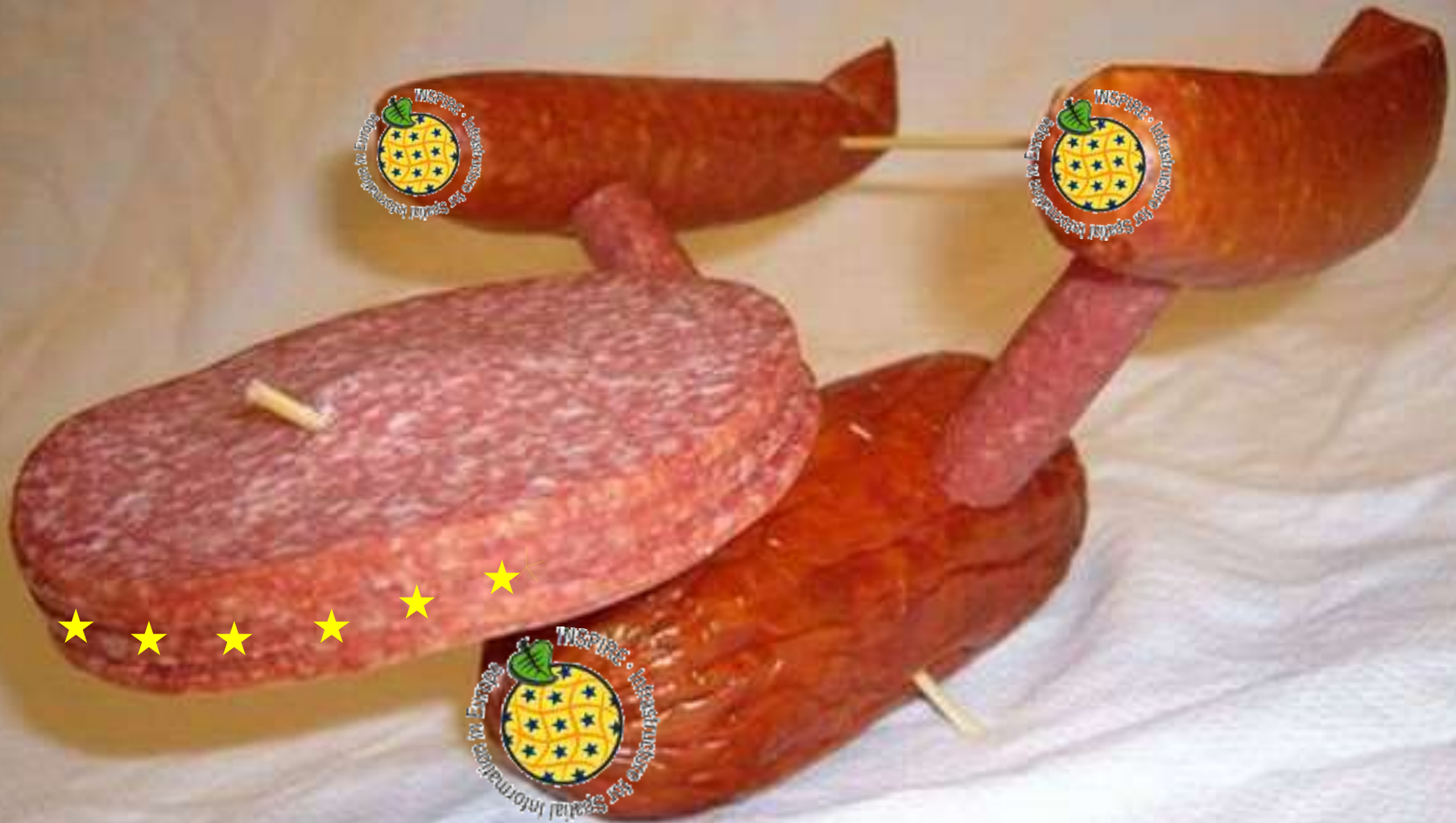
KLIC-WIN as extension on INSPIRE
utilities

Modified from Open Geodag 2015
Paul Janssen (Geonovum)
p.janssen@geonovum.nl

Starship INSPIRE encounters National SDI: Collision or Merger?

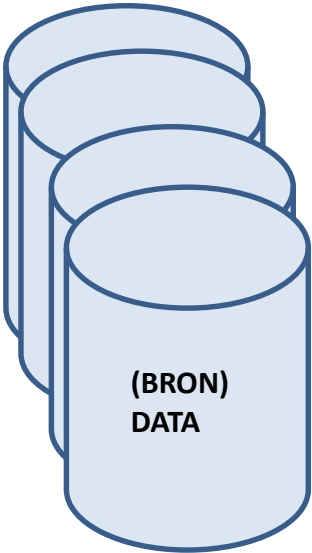


Make it digestible



Utility Networks

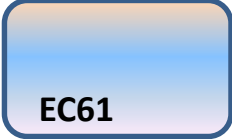
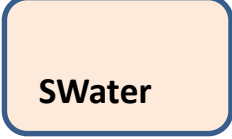
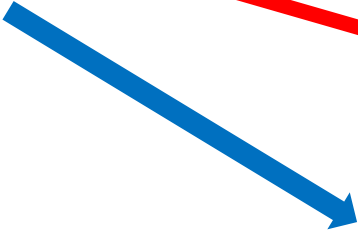
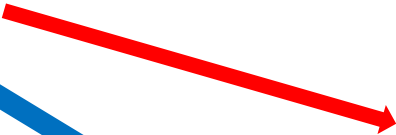
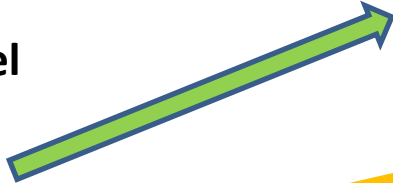
Data producten



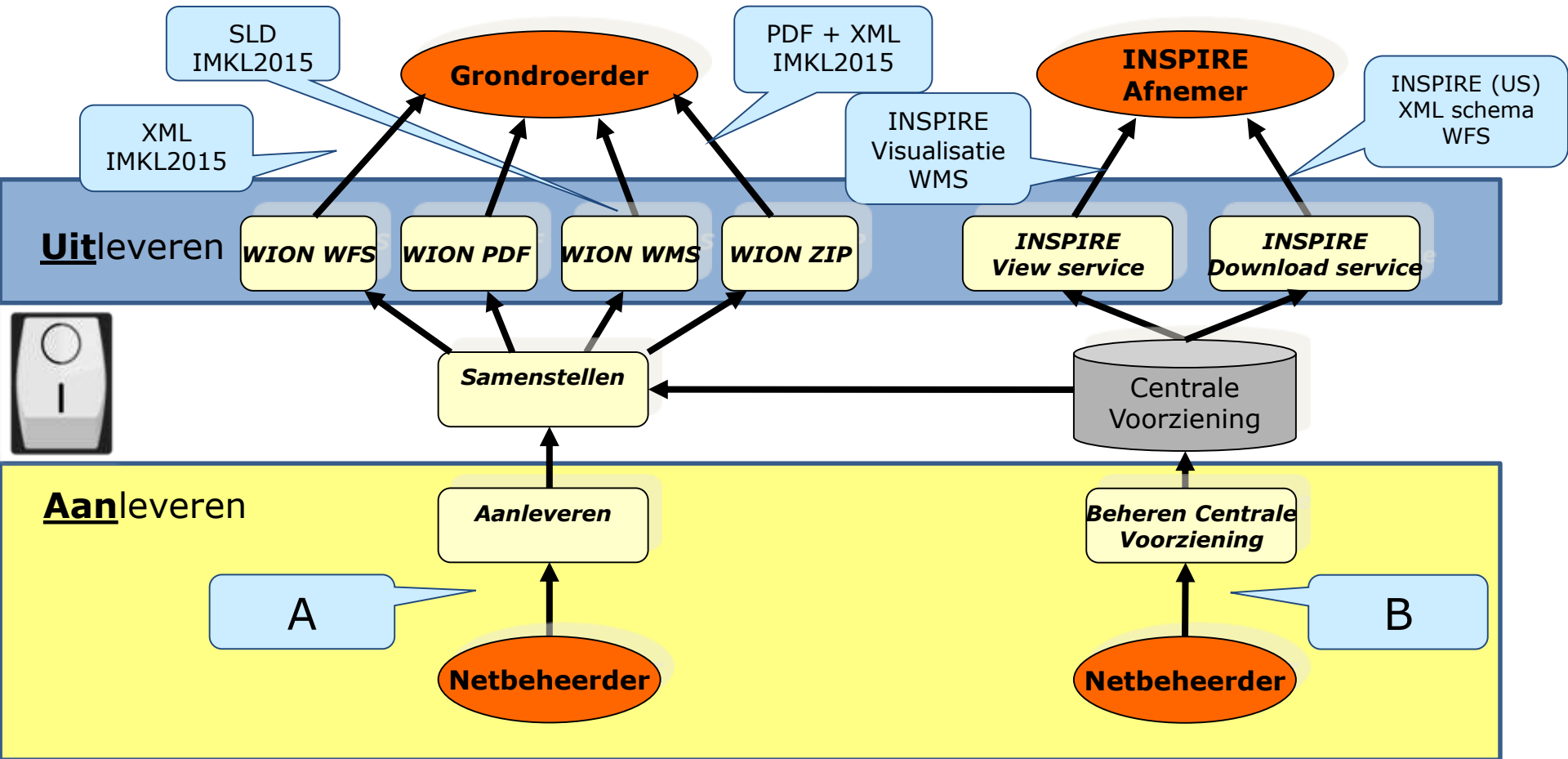
IMKL uitwissel
interface



IMKL2015



Algemene Use Case: Synergie tussen processen



De Uitdaging! Extensie op Inspire

INSPIRE Utilities model als Basis



Vier methoden om INSPIRE model uit te breiden

Subtyperen van INSPIRE klassen

Associeren van extra NL informatie

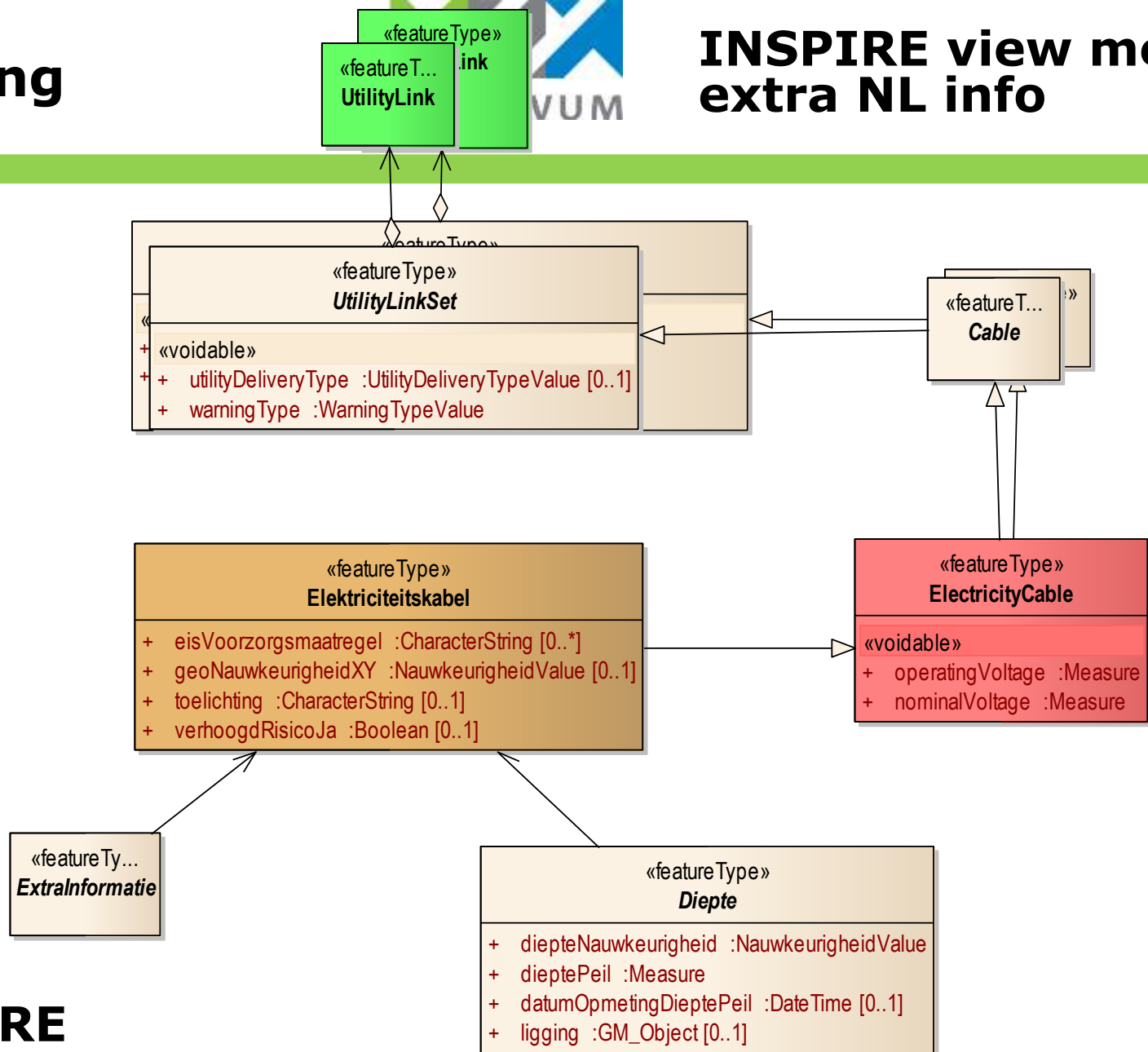
ApplicationDomain Extension

Mixin – multiple inheritance

Subtyping



INSPIRE view met extra NL info

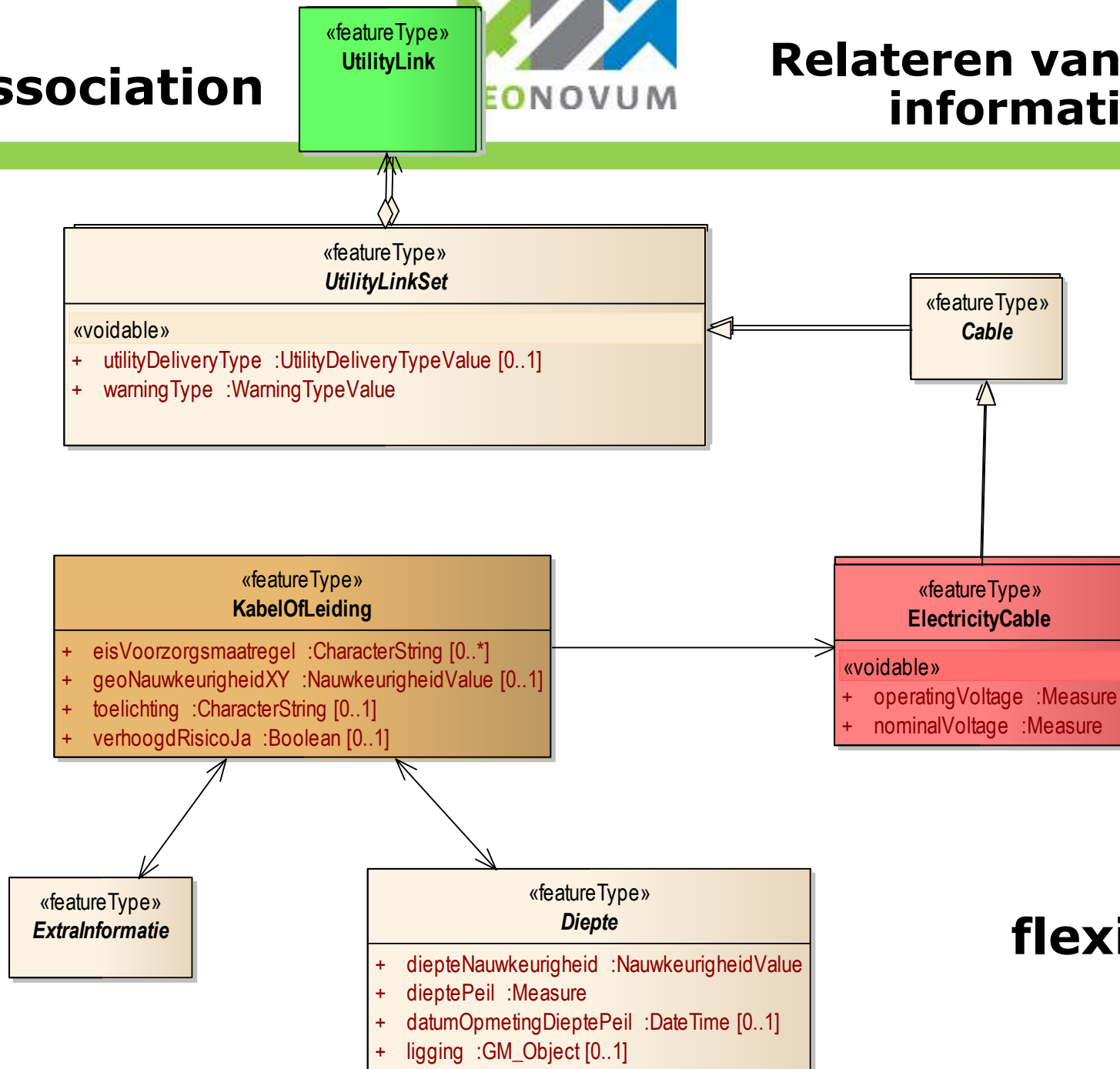


Star in INSPIRE keurslijf

By association

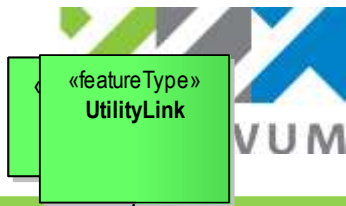


Relateren van extra informatie

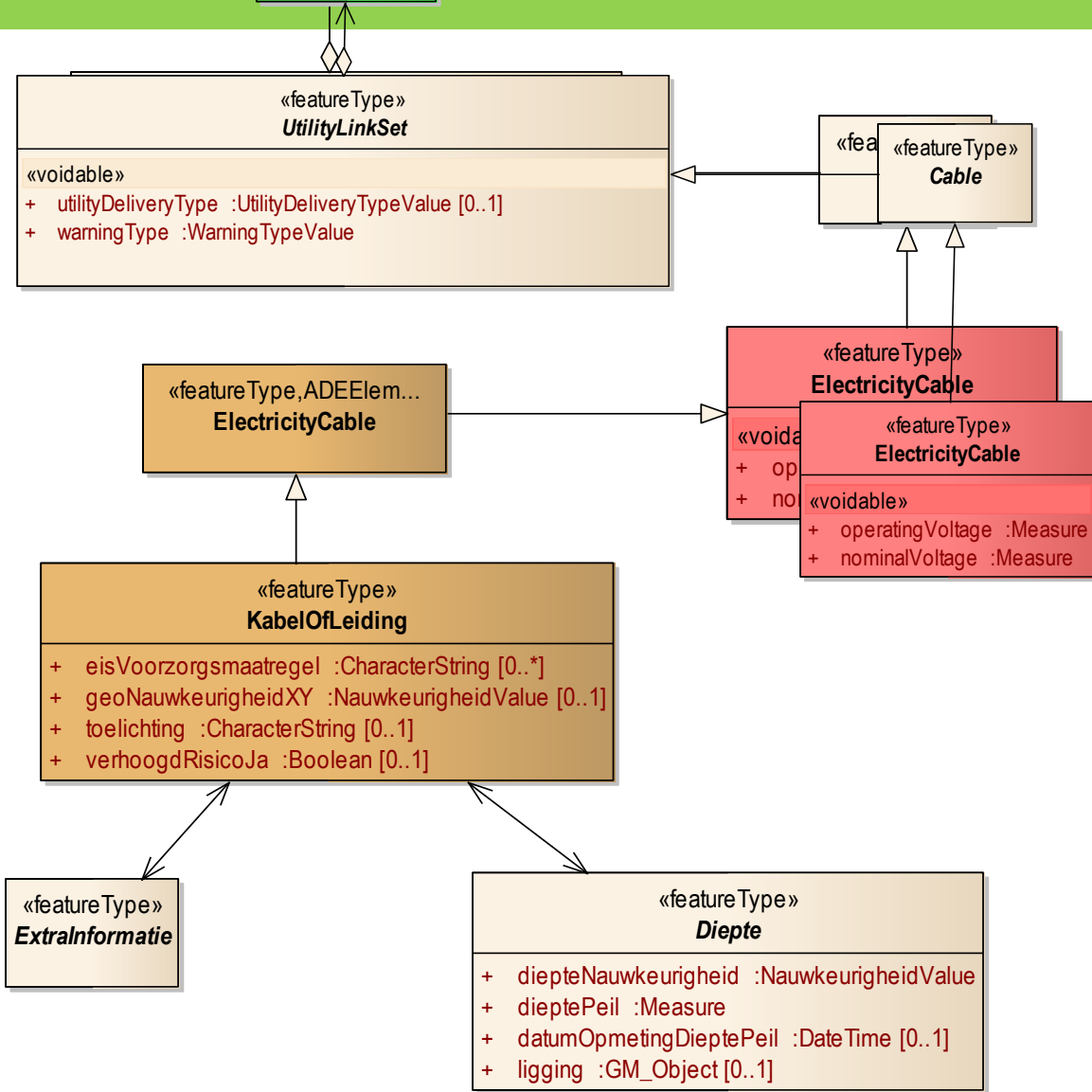


flexibel

Application Domain Extension



OGC best practice

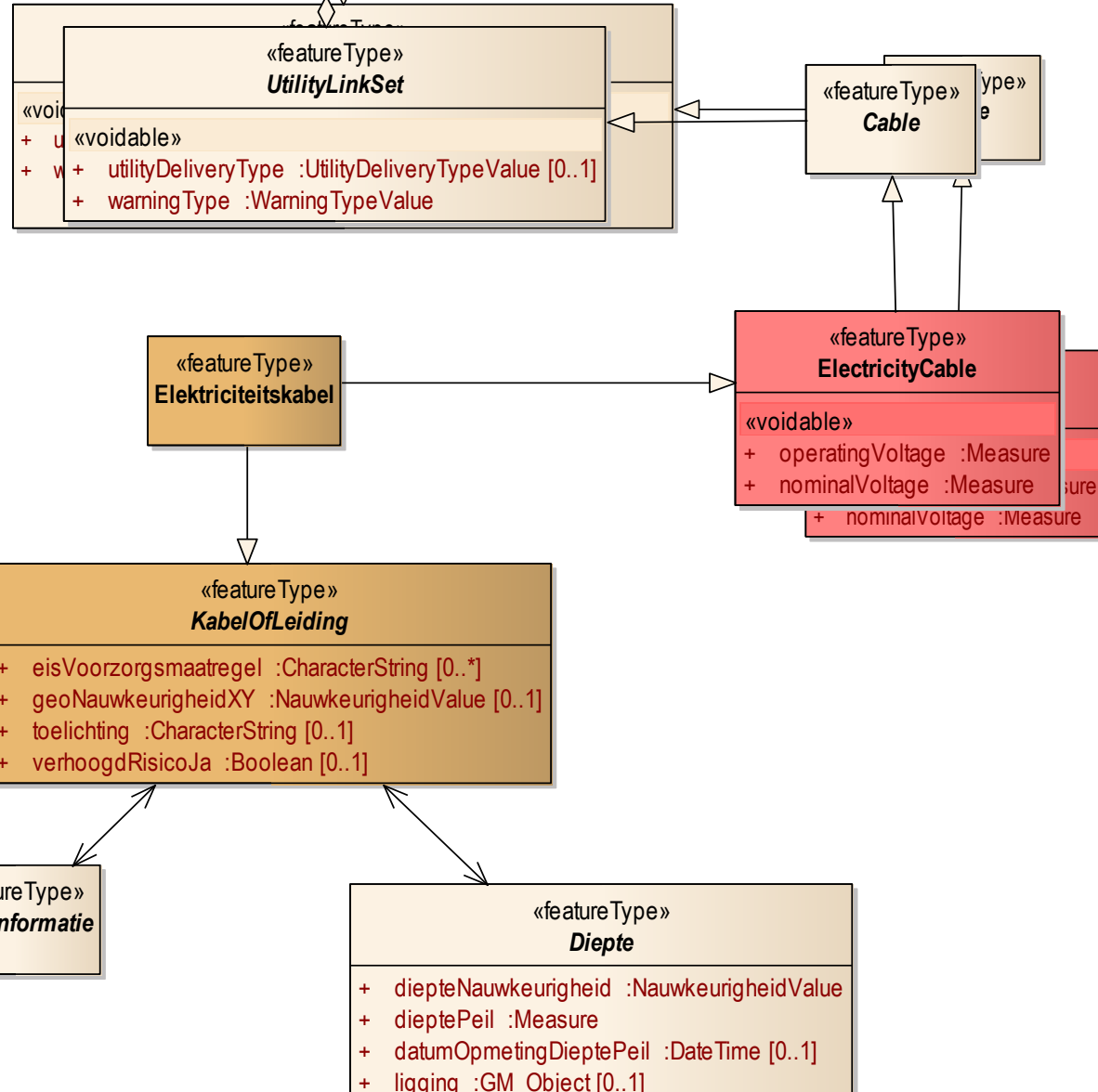


Taal beperkend

Mixin – multiple inheritance



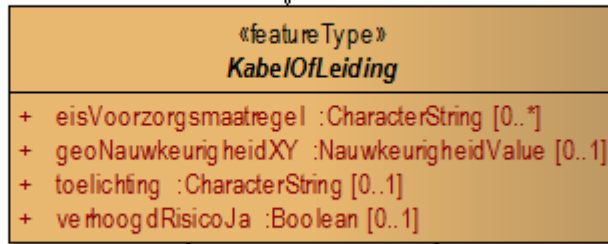
Combinatie van twee modellen: INSPIRE view NL view



Mixin class

Flexibel
En
veelzijdig

Mixin class



The screenshot shows the UML modeling tool interface for the `KabelOfLeiding` class. The left sidebar shows the class structure with 'Properties' selected. The main area displays the class name and a rich text editor with the following content:

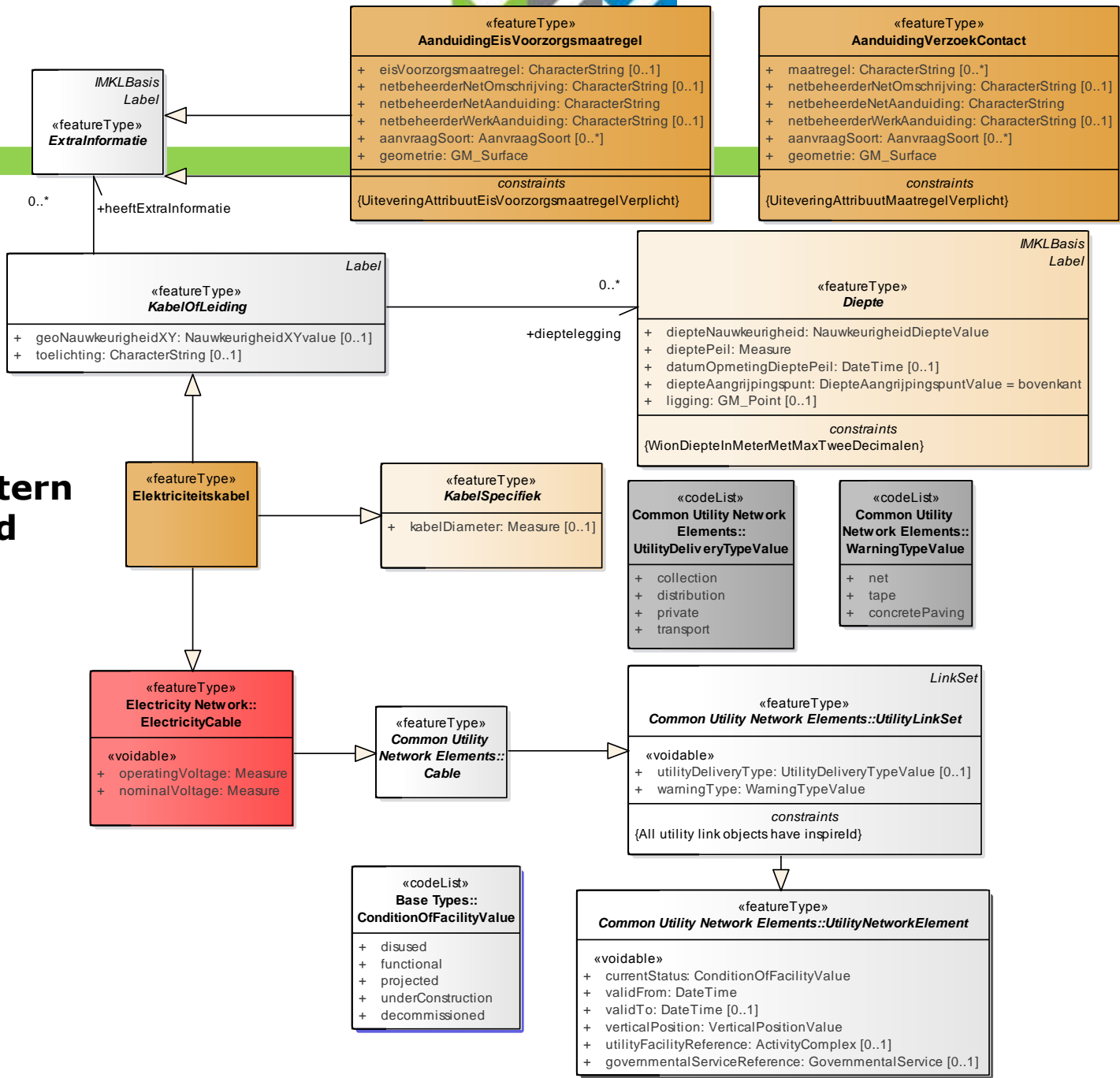
```
-- Name --  
-- Definition --  
Leidingen, buizen of kabels bestemd voor voortgeleiding van energie, materie of data.  
-- Description --  
KabelOfLeiding is in dit model een abstract begrip en omvat alle typen van alle nettypen.  
Onder de objectklasse KabelOfLeiding vallen ook leidingen die buiten 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.  
-- Source --  
IMKL
```

The right sidebar shows the 'UML Profile for INSPIRE data specificati...' with the following properties:

byValuePropert...	false
gmlMixin	true
inspireConcept	FIXME
isCollection	false
noPropertyType	false
xsdEncodingRule	iso19136_2007_INSPIRE_Ext...

The 'gmlMixin' property is circled in red. At the bottom, there are buttons for 'OK', 'Annuleren', 'Toepassen', and 'Help'.

Mixin Pattern Applied





«codeList»
Common Utility Network Elements::
SpecificAppurtenanceTypeValue

«codeList»
Common Utility Network Elements::
AppurtenanceTypeValue

Extensies op INSPIRE waardelijsten

«codeList»
Sewer Network::
SewerAppurtenanceTypeValue

- + anode
- + barrel
- + barScreen
- + catchBasin
- + cleanOut
- + dischargeStructure
- + meter
- + pump
- + regulator
- + scadaSensor
- + thrustProtection
- + tideGate
- + other
- + node
- + connection
- + specificStructure
- + mechanicAndElectromechanicEquipment
- + rainwaterCollector
- + watertankOrChamber

«codeList»
Electricity Network::
ElectricityAppurtenanceTypeValue

- + capacitorControl
- + connectionBox
- + correctingEquipment
- + deliveryPoint
- + dynamicProtectiveDevice
- + fuse
- + generator
- + loadTapChanger
- + mainStation
- + netStation
- + networkProtector
- + openPoint
- + primaryMeter
- + recloserElectronicControl
- + recloserHydraulicControl
- + regulatorControl
- + relayControl
- + sectionalizerElectronicControl
- + sectionalizerHydraulicControl
- + streetLight
- + subStation
- + switch
- + transformer
- + voltageRegulator
- + detectionEquipment
- + pointSettingMachine
- + monitoringAndControlEquipment
- + anode

«codeList»
Thermal Network::
ThermalAppurtenanceType Value

«codeList»
ThermalAppurtenanceTypeIMKLValue
{leaf}

«codeList»
Water Network::
WaterAppurtenanceTypeValue

- + anode
- + clearWell
- + controlValve
- + fitting
- + hydrant
- + junction
- + lateralPoint
- + meter
- + pump
- + pumpStation
- + samplingStation
- + scadaSensor
- + storageBasin
- + storageFacility
- + surgeReliefTank
- + systemValve
- + thrustProtection
- + treatmentPlant
- + well
- + pressureRelieveValve
- + airRelieveValve
- + checkValve
- + waterExhaustPoint
- + waterServicePoint
- + fountain
- + pressureController
- + vent
- + recoilCheckValve
- + waterDischargePoint

«codeList»
Telecommunications Network::
TelecommunicationsAppurtenanceTypeValue

- + antenna
- + copperMaintenanceLoop
- + copperRepeater
- + digitalCrossConnect
- + digitalLoopCarrier
- + exchange
- + fiberInterconnect
- + jointClosure
- + loadCoil
- + mainDistributionFrame
- + multiplexer
- + opticalMaintenanceLoop
- + opticalRepeater
- + patchPanel
- + spliceClosure
- + splitter
- + terminal
- + termination
- + noticeBoard

«codeList»
TelecommunicationsAppurtenanceTypeIMKLValue
{leaf}

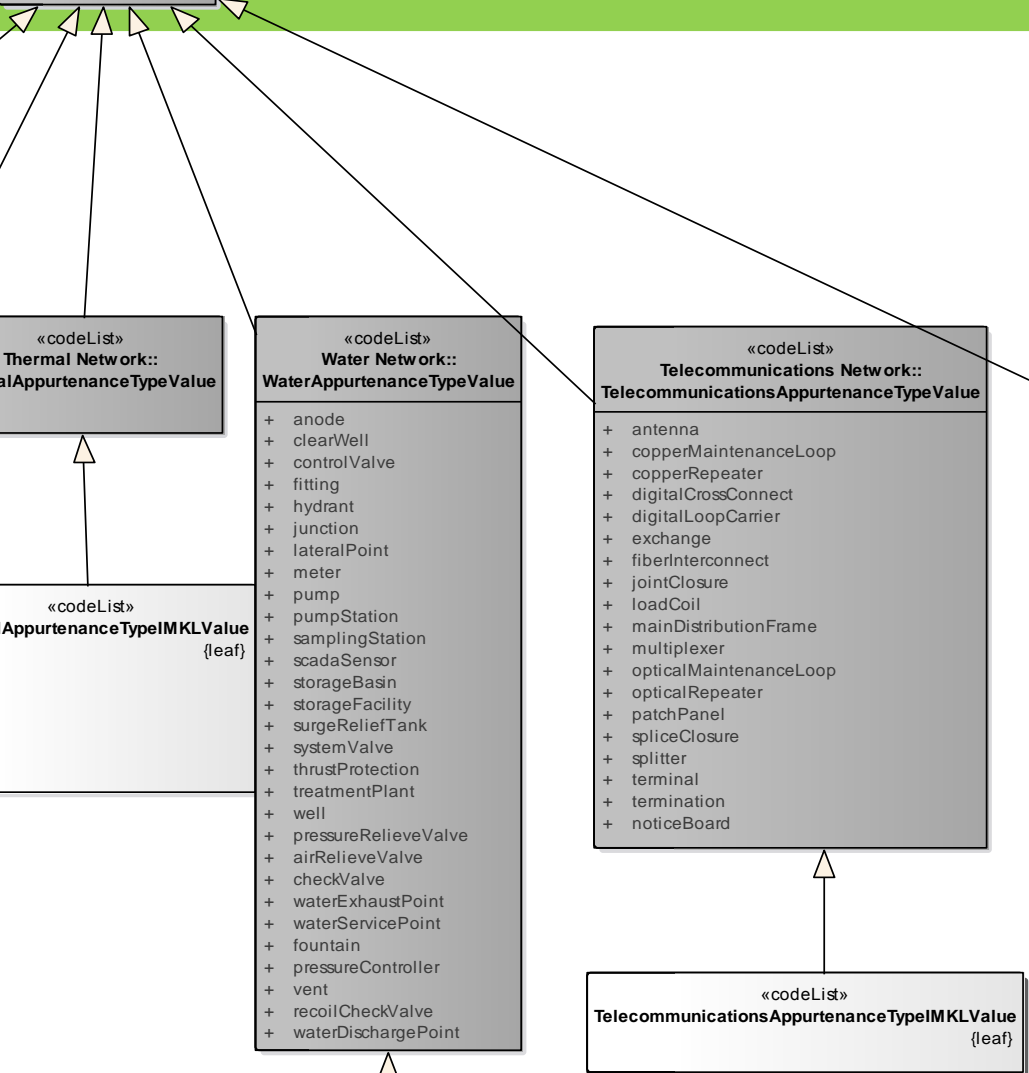
«codeList»
SewerAppurtenanceTypeIMKLValue
{leaf}

«codeList»
ElectricityAppurtenanceTypeIMKLValue
{leaf}

«codeList»
Thema

- + buisleidingGevaarlijkeInhoud
- + datatransport
- + gasHogeDruk

«codeList»
WaterAppurtenanceTypeIMKLValue
{leaf}



Waardelijsten gepubliceerd in SKOS. Ontsloten via Registry



<http://definities.geostandaarden.nl/resource?subject=http%3A%2F%2Fdefinities.geostandaarden.nl%2Fid%2Fwaardelijsten>



Geonovum maakt geo-informatie van de overheid toegankelijk en zorgt voor de standaarden die daarvoor nodig zijn.

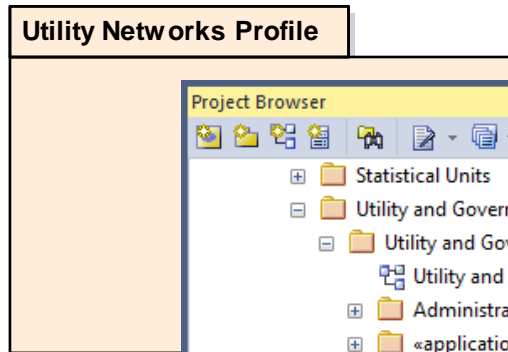
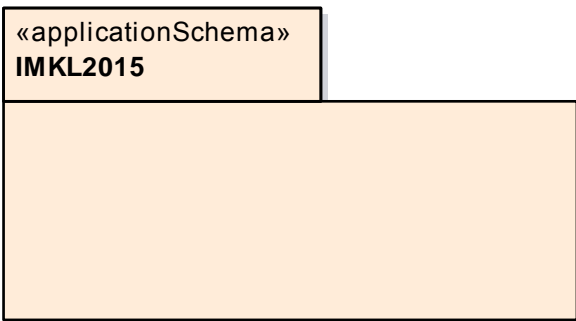


IMGEO NEN3610 IMRO IMBRT IMKL

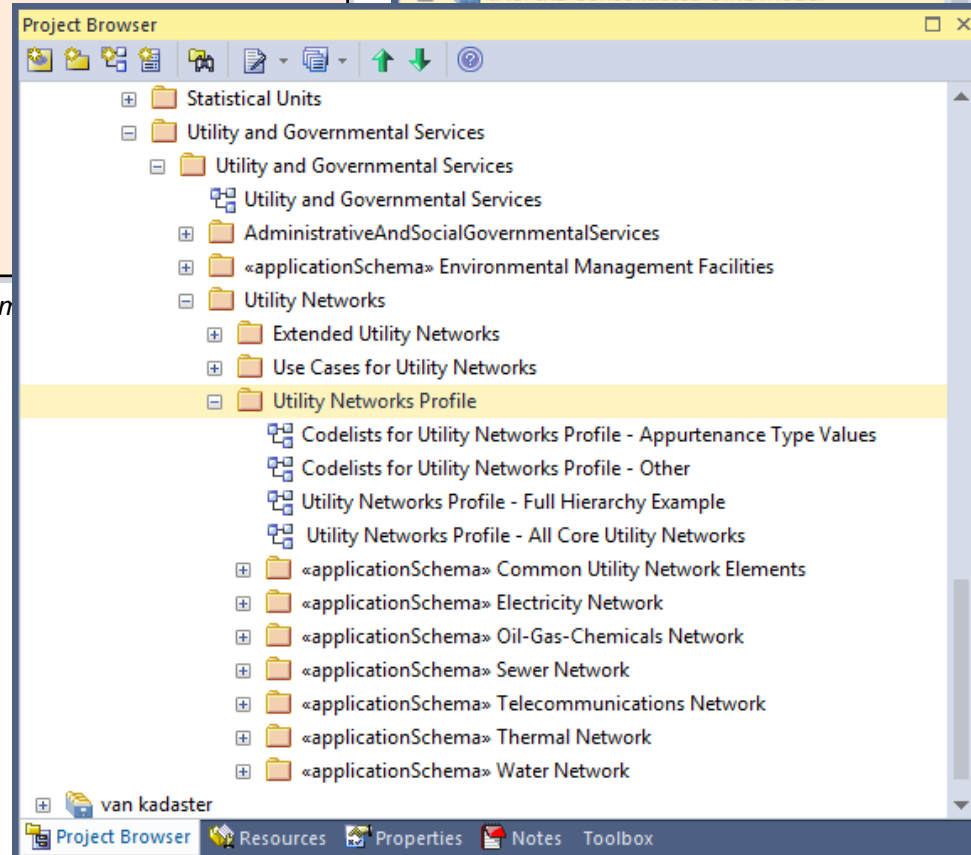
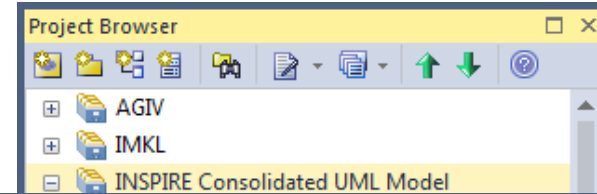
[a](#) | [b](#) | [c](#) | [d](#) | [e](#) | [f](#) | [g](#) | [h](#) | [i](#) | [j](#) | [k](#) | [l](#) | [m](#) | [n](#) | [o](#) | [p](#) | [q](#) | [r](#) | [s](#) | [t](#) | [u](#) | [v](#) | [w](#) | [x](#) | [y](#) | [z](#) | [alle lijsten](#)

Nr	Waardelijst
1	Afvalwatertype
2	AnnotatieTypeValue
3	BestandMediaTypeValue
4	ElectricityAppurtenanceTypeIMKLValue
5	ExtraDetailInfoTypeValue
6	ExtraTopografieTypeValue

Modelling environment

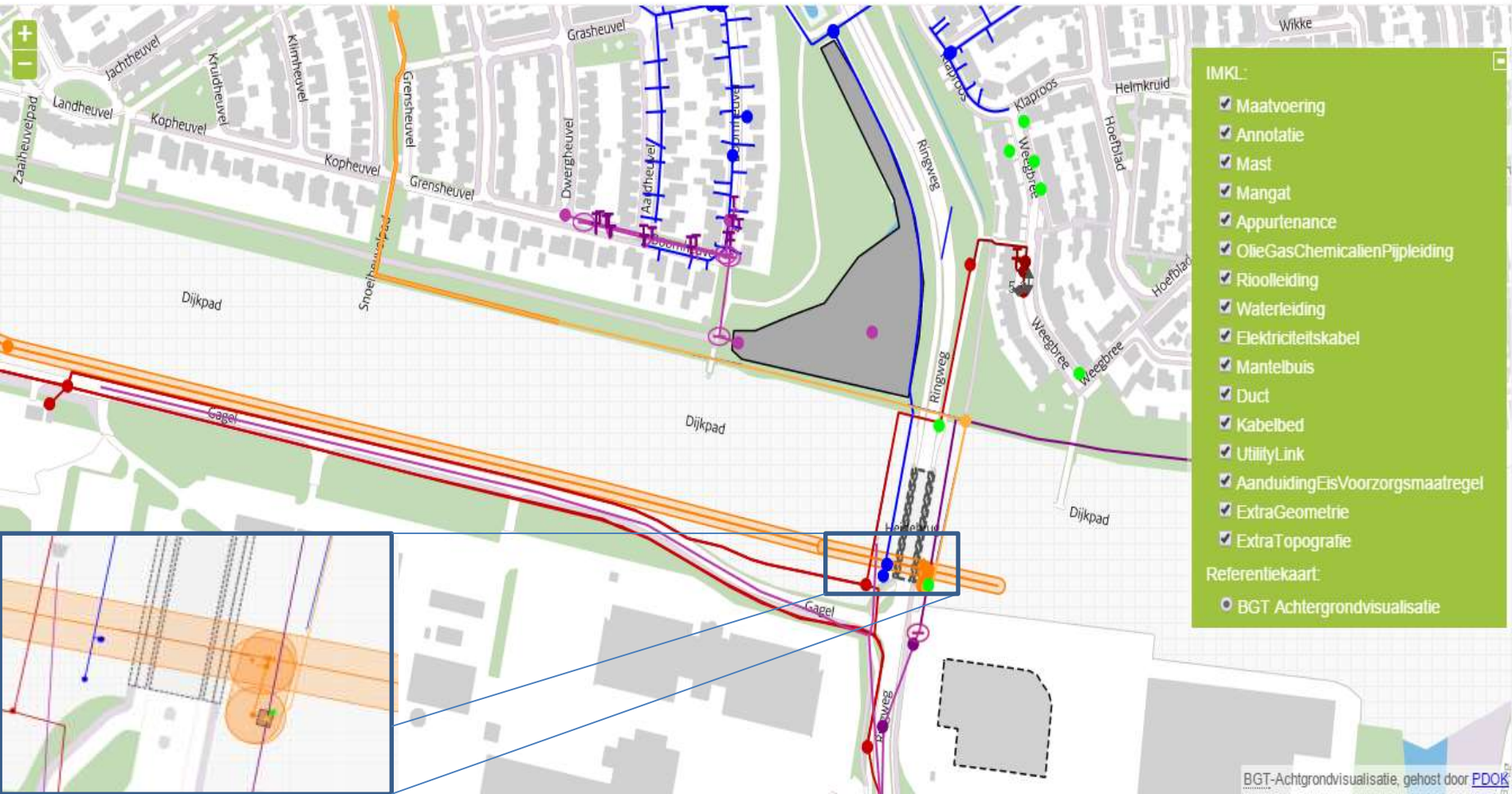


(from



No subversion to INSPIRE

Visualisatie IMKL 2015



INSPIRE toepassen in NL werkprocessen:

Geen ballast maar basis

