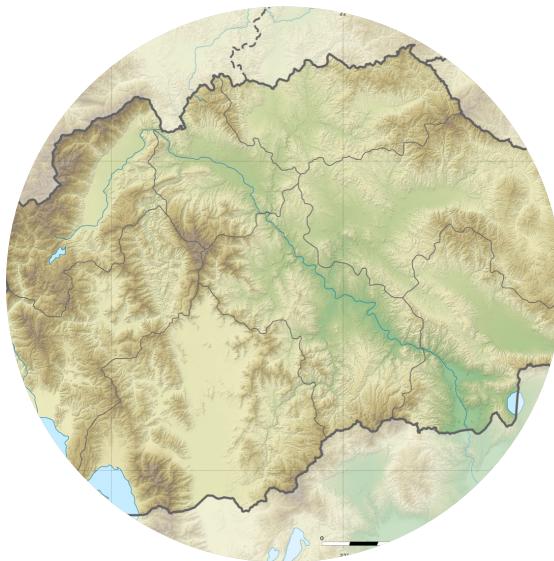


Organise data

Jandirk Bulens, Jeroen Hogeboom, Wouter Visscher

23-25 May



Organise data

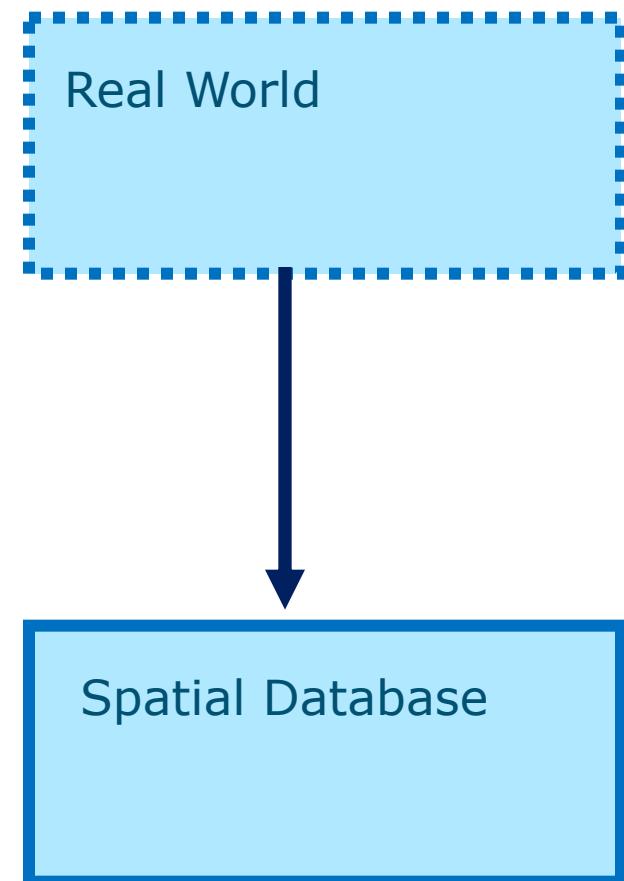
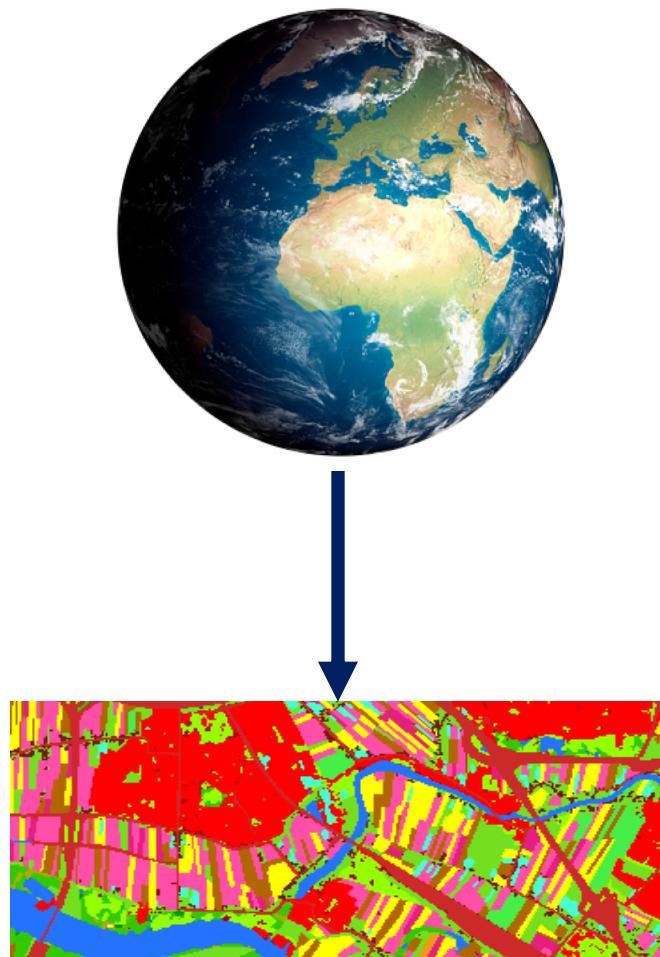
- What to tell about organising data?

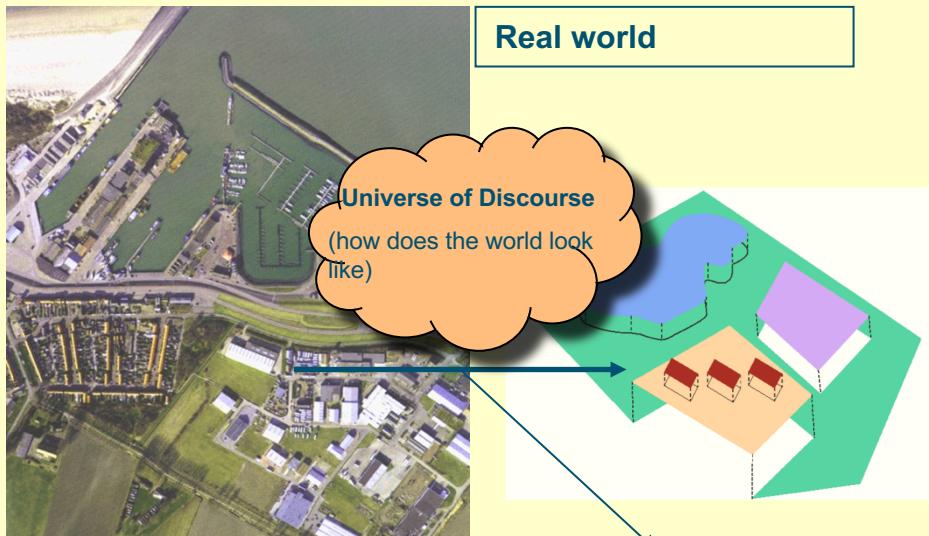


Organise data

- Modelling overview
- Determine domain (use and user needs)
 - Cultural heritage, traffic, emergence response)
- Spatial Data Quality
- Harmonisation
- Licensing

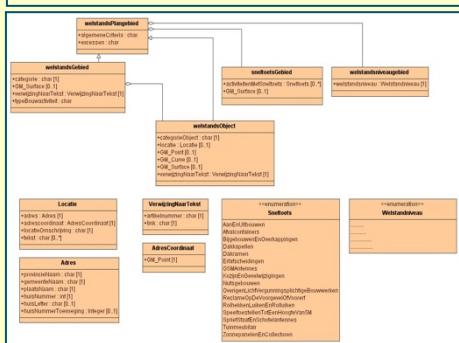
From real world to Data



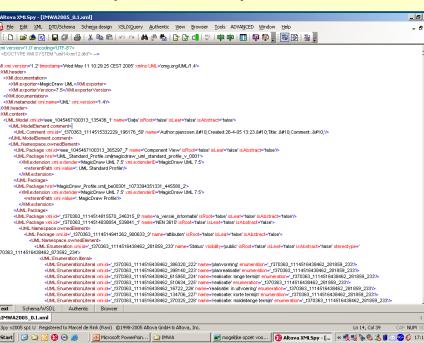


Data acquisition

IMWE (UML class diagram/OCL)

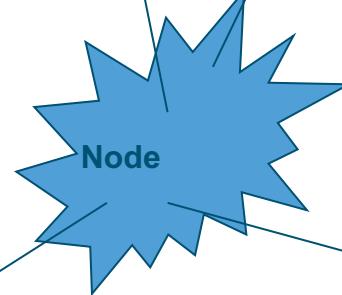


IMWE (GML-file)

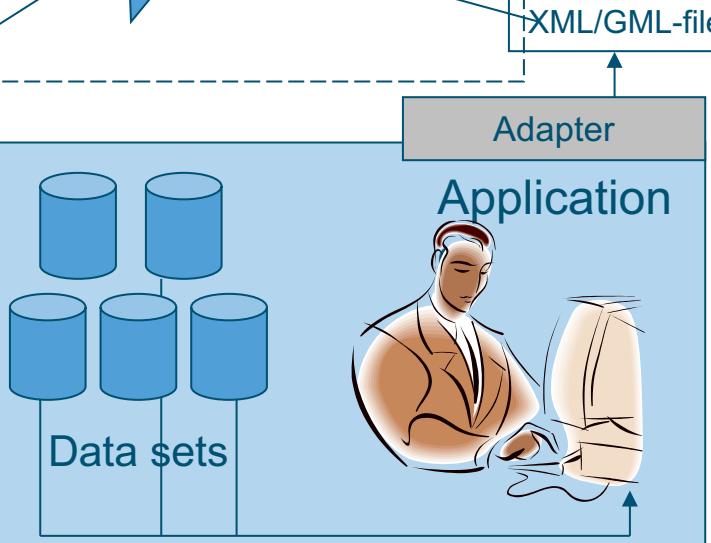


IMWA (GML-file)

Spatial data Infrastructure

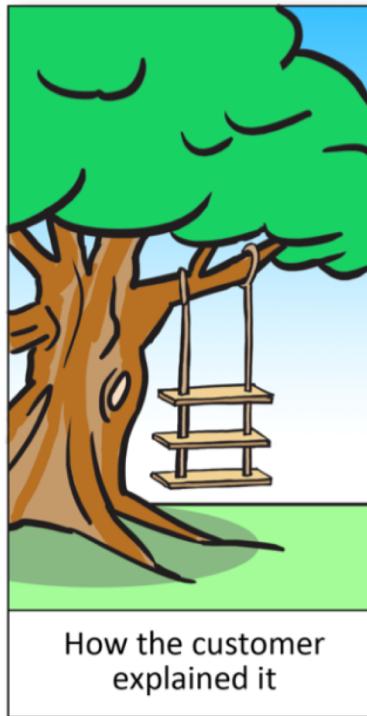


IMRO (GML-file)



Determine application domain & Spatial data quality

Data tailored to 'Fit the purpose'



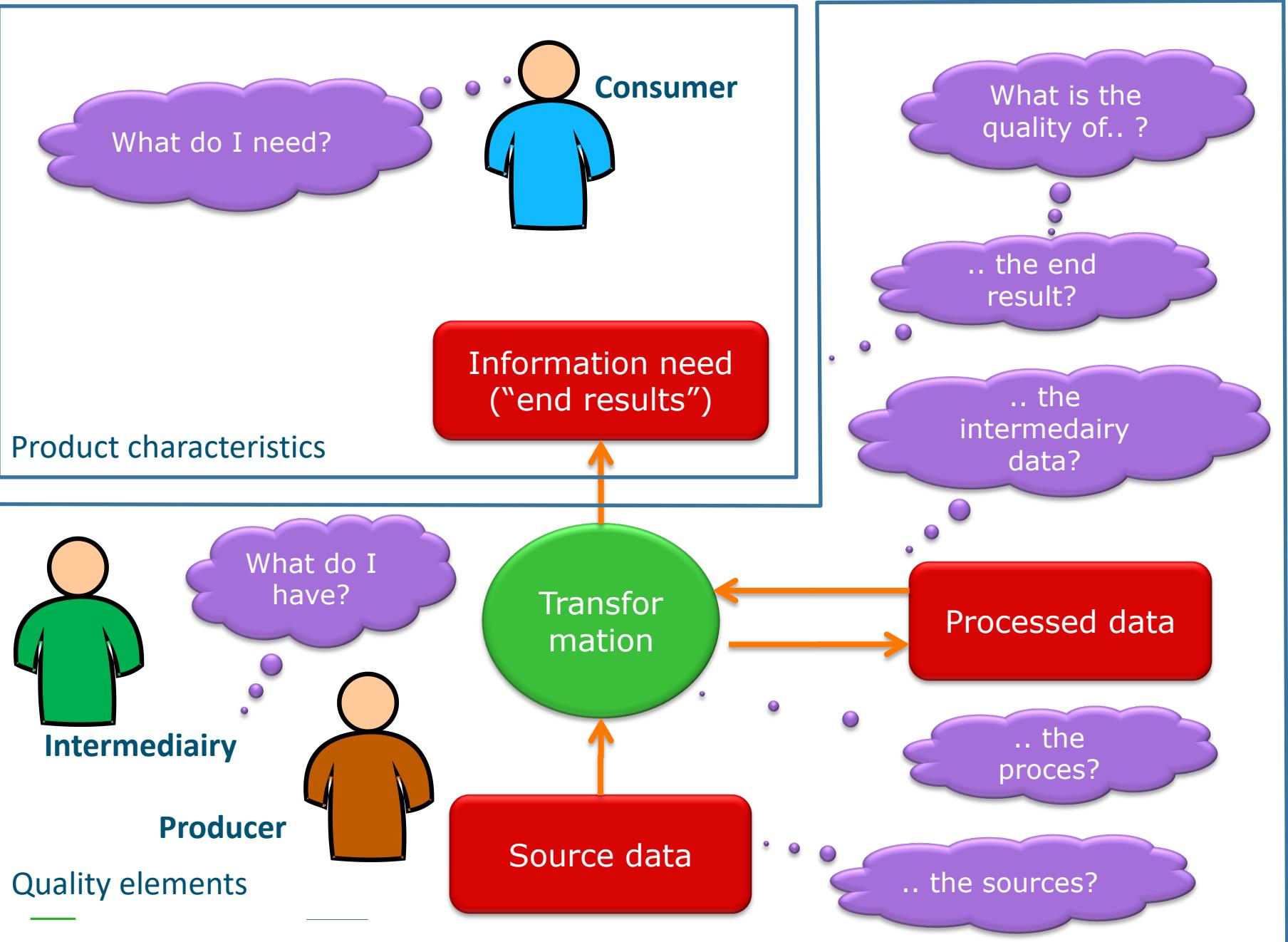
Identify use cases

- What is the intended use?
 - What is the problem/question
 - What is the context
- Who are potential users?
 - Identify the user needs
 - Specify the user requirements
- What data do I need?
 - Content
 - Level of detail/quality

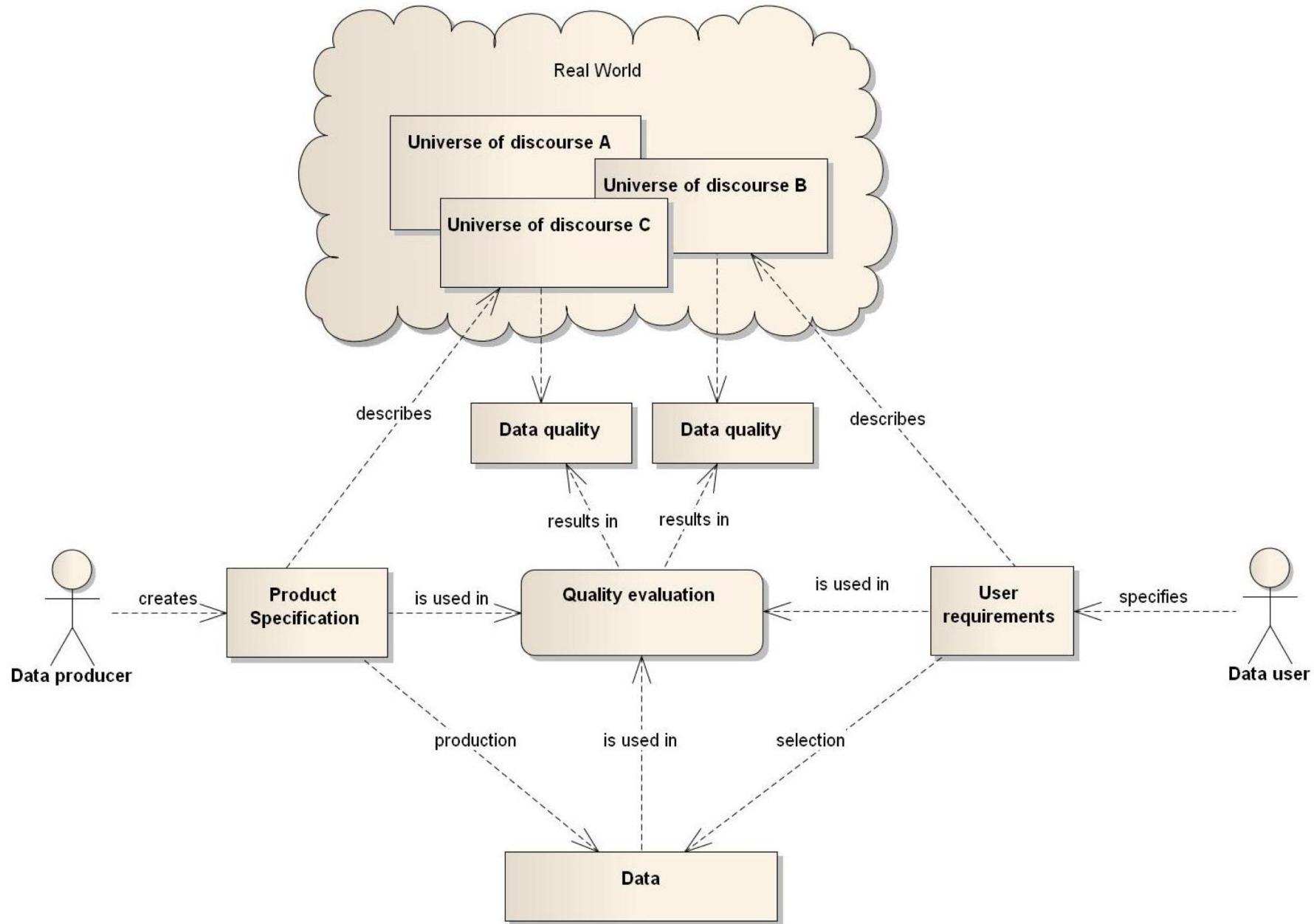
Definition SDQ

- the totality of characteristics of an entity that bear upon its ability to satisfy stated and implied needs. (ISO 9000 section 3.1.5)



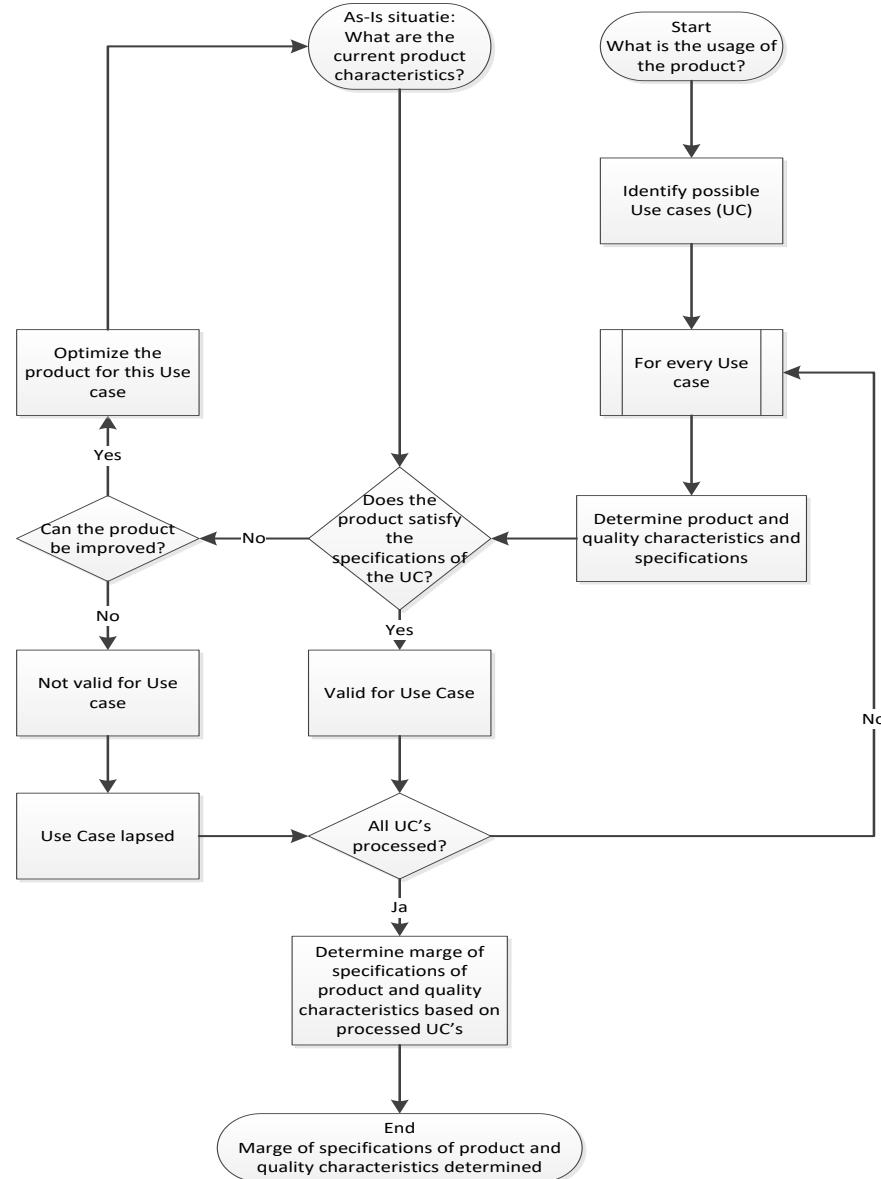


Producer vs consumer (ISO 19157)



Producer perspective

- process flow of identifying customer product and quality requirements by producer

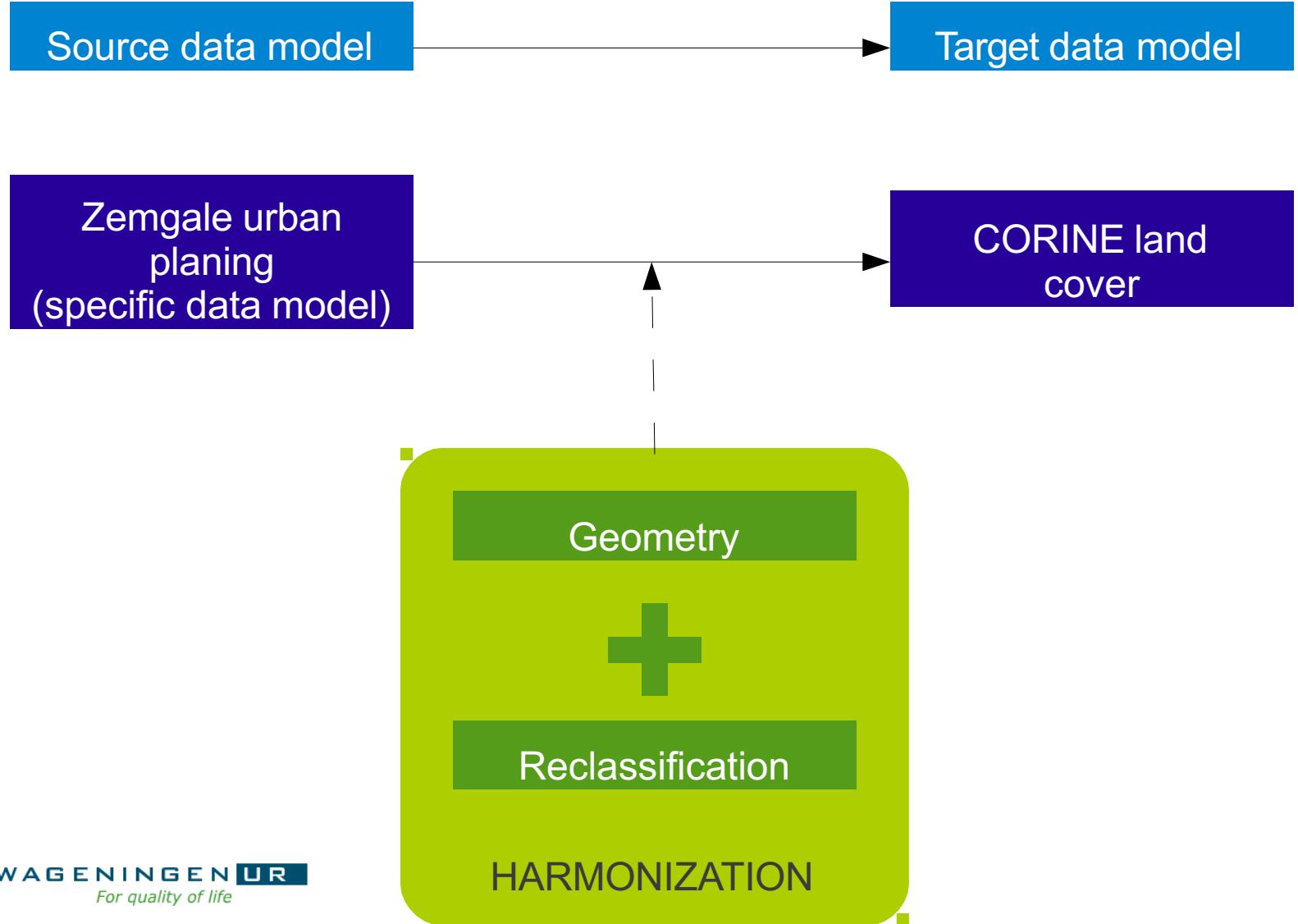


Exercise: Use cases

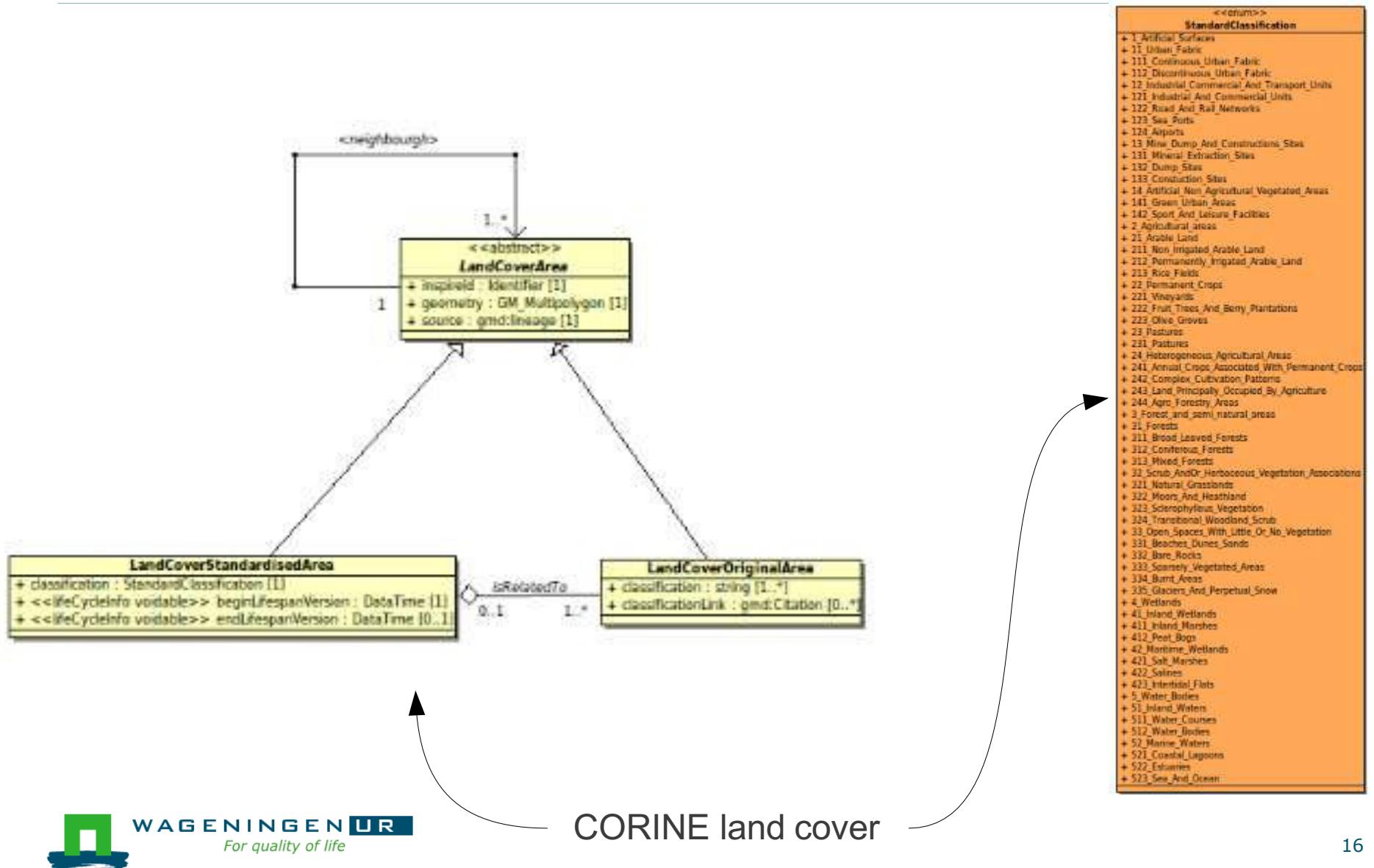
- Example: Roads
 - Navigation
 - Traffic control
 - Package delivery (routes/Traveling salesman)
 - Asset management
 - Etc.
- Describe a use case for your own data
 - Is for the case your data 'fit for purpose'?
(of the right quality)

Harmonisation

Basic principle (landcover example Plan4All)



Example Land cover data

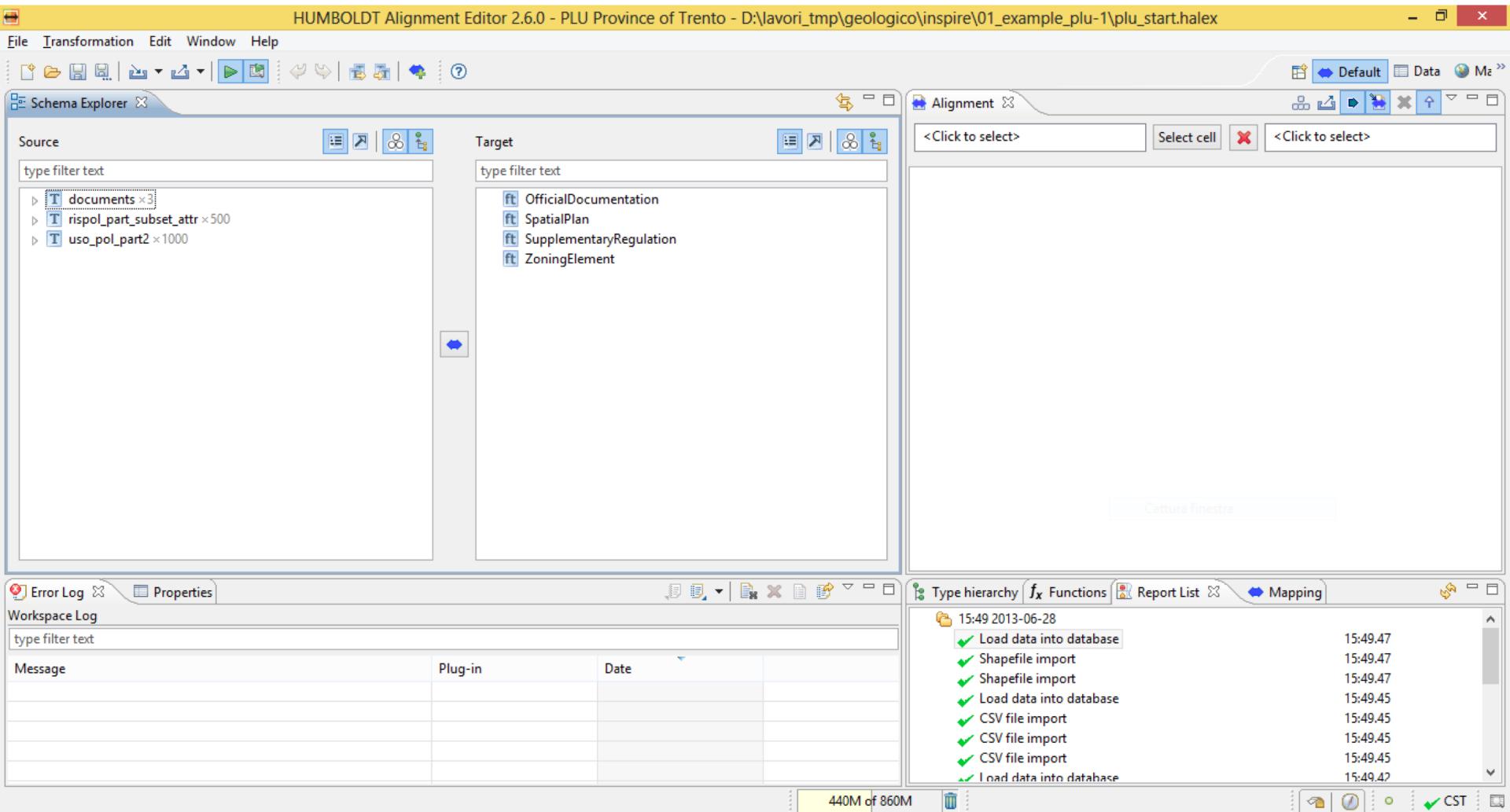


Reclass table

ZEMGALE CLASSIFICATION → CORINE NOMENCLATURE

1 DzM Low-rise residential dwellings	→ 11 Urban fabric
2 DzV Multi-residential dwellings	→ 11 Urban fabric
3 P Public Building	→ 11 Urban fabric
4 RR Production facilities and warehouses	→ 121 Industrial or commercial units
5 RD Mining area	→ 131 Mineral extraction sites
6 T Technical Building	→ 12 Industrial, commercial...
7 Ū Waters	→ 5 Water bodies
8 M Forests	→ 31 Forests
9 ZĪ Outstanding foliage sites	No corresponding class
10 ZC Other groomed greenery space	→ 141 Green urban areas
11 L Rural Land	→ 2 Agriculture areas
12 No data	No corresponding class

HALE (open source)



HUMBOLDT Alignment Editor 2.6.0 - PLU Province of Trento - D:\lavori_tmp\geologico\inspire\01_example_plu-1\plu_final.halex

File Transformation Edit Window Help

Schema Explorer X Alignment X

Source Target

type filter text

documents

- rispol_part_subset_attr ×500
 - AREA (0..1) ×500
 - CLASSE (0..1) ×500
 - COD_STA (0..1) ×500
 - COD_TOT (0..1) ×500
 - CODCSG (0..1) ×500
 - CODESO (0..1) ×500
 - CODVAL (0..1) ×500
 - DISCARICHE (0..1) ×500
 - PERIMETER (0..1) ×500
 - PESOF (0..1) ×500
 - PESOPOL (0..1) ×500
 - PESOTOT (0..1) ×500
 - PLAN_NAME (0..1) ×500
 - RISPOL_ (0..1) ×500
 - RISPOL_ID (0..1) ×500
 - the_geom (0..1) ×500
 - UPDATE (0..1) ×500
- uso_pol_part2 ×1000

OfficialDocumentation SpatialPlan ×1 SupplementaryRegulation ×500 ZoningElement

rispol_part_subset_attr ×500 Retype ft SupplementaryRegulation ×500

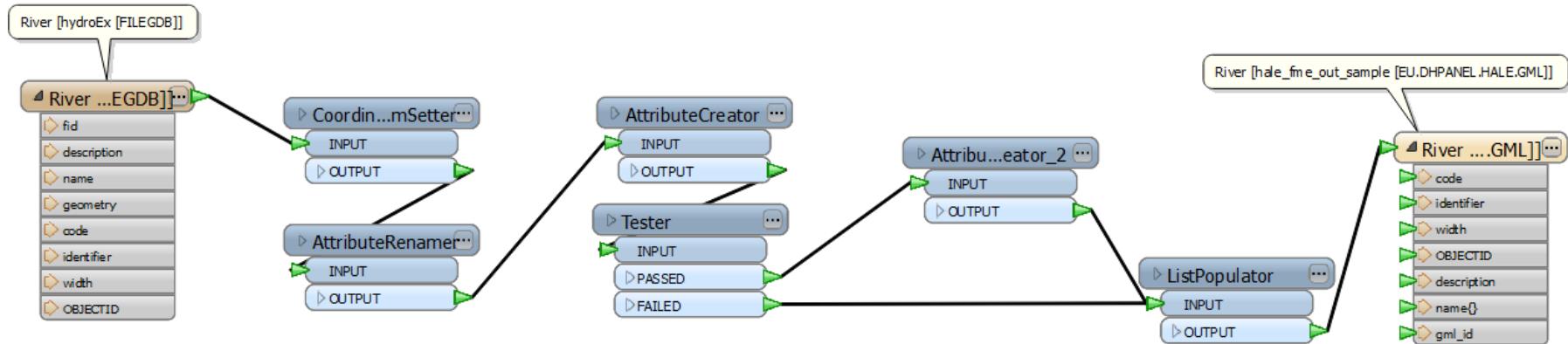
...pol_part_subset_attr → Retype ...mentaryRegulation
 CLASSE → Rename ...mentaryRegulation
 RISPOL_ID → Inspire Identifier inspireId
 UPDATE → Date extraction validFrom
 the_geom → Rename geometry
 → Generate Unique Id id
 → Assign ...ficialDocument.href
 → Assign plan.href
 → Assign regulationNature
 → Assign ...mentaryRegulation
 → Assign ...gulation.codeSpace

Error Log X Properties X Type hierarchy X Functions X Report List X Mapping X

Workspace Log Instance validation 16:54 2013-06-28 16:54.25

295M of 1085M CST

FME (proprietary & expensive)



Licensing

Licensing is about

- Allowed use
- Use restrictions
- User obligations

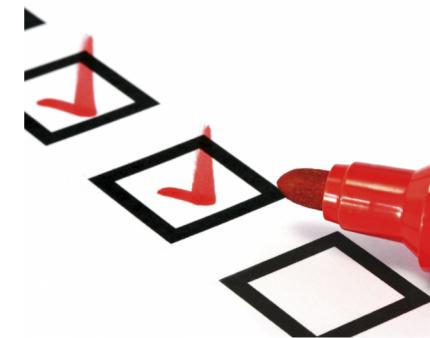


Allowed use

- Accessing
- Viewing
- Downloading
- Copying
- Distributing
- Derivative works
- Commercial reuse

Use restrictions

- No third party distribution
- No sublicensing
- No direct marketing
- Viral clause: share-alike requirement
- No disclosure to third parties
- Only internal use
- No derivative works
- No changes or adaptations of original data
- Limitation on number of copies, of views, of users
- Use restricted to a particular activity
- Use restricted to a particular user group



User obligations

- No misuse of the data or misrepresentation of the data provider
- No use of any identifiers/trademarks of the data provider
- Attribution
- Obligatory notification of misuse of the data and infringements of the license
- Obligatory reporting of errors in that data

Licensing spatial data

- Generic License frameworks
 - Creative commons (CC)
 - Open Database License (ODbL)
- Many country licenses
 - *Geo Shared* in the Netherlands
 - *Musterlizenzvereinbarung* in Germany
 - *GILF* in Queensland
 - *GeoConnections* in Canada
 - Etc.

CC symbols and combinations

Briefly...



Attribution means: You can copy, distribute, display, and perform this copyrighted work - and derivative works based upon it - but only if the artist is given credit.



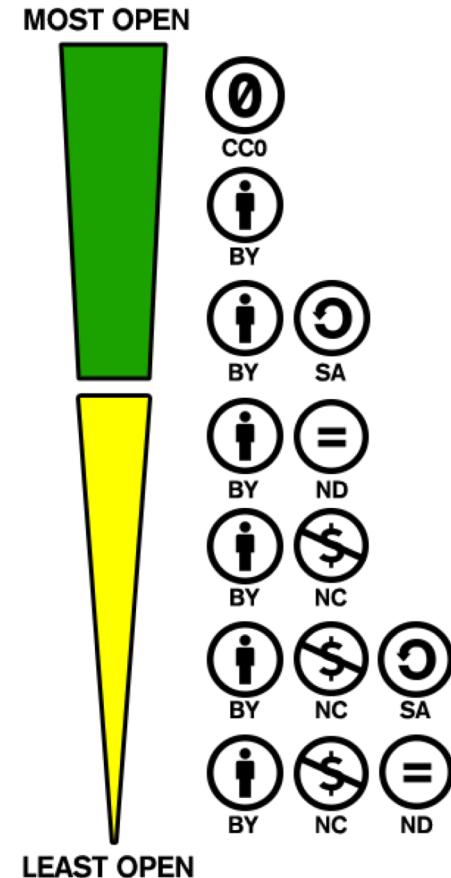
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Share Alike means: You can distribute derivative works only under a license identical to the license that governs your work.



cc0



Public domain

License chooser

- On line tool
- Step by step
- Provide license on 3 levels:
 - Legal code
 - Human readable
 - Machine readable



CC → License Compatibility Chart

	PUBLIC DOMAIN	PUBLIC DOMAIN	CC BY	CC BY SA	CC BY NC	CC BY ND	CC BY NC SA	CC BY NC ND
PUBLIC DOMAIN	✓	✓	✓	✓	✓	✗	✓	✗
PUBLIC DOMAIN	✓	✓	✓	✓	✓	✗	✓	✗
CC BY	✓	✓	✓	✓	✓	✗	✓	✗
CC BY SA	✓	✓	✓	✓	✗	✗	✗	✗
CC BY NC	✓	✓	✓	✗	✓	✗	✓	✗
CC BY ND	✗	✗	✗	✗	✗	✗	✗	✗
CC BY NC SA	✓	✓	✓	✗	✓	✗	✓	✗
CC BY NC ND	✗	✗	✗	✗	✗	✗	✗	✗

Wrap up

- What to take along?
- What to learn?
- Questions?

