



Vlaamse  
overheid

# Interoperability between metadata standards

Towards a reference implementation for  
metadata catalogues

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# Introduction

- > How can **data providers**
- > **keep it simple** to describe and publish their data,
- > with the '**once only**' principle in mind,
- > **reaching the widest possible audience**, and
- > being at the same time **in line with all regulations** applicable to their data domain?

# Information?



# Solutions?

- > On **short** terms:
- > **Mappings, translations** from one metadata profile into another
  - In general, the mapping is **uni-directional** from the more specific niche metadata profile into the more basic / core metadata standard.

Taking into account the **loss of metadata** elements by adding the core elements of the niche profile, translated into the language of the simple profile, in its storage format, ...

# AS IS: METADATA STANDARDS, SYSTEMS, PORTALS

LEVEL: Flanders Belgian European

GEO

Standards:



Systems:

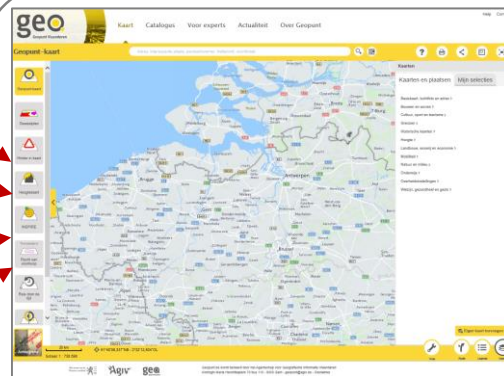
AGIV-metadatacenter

DOV

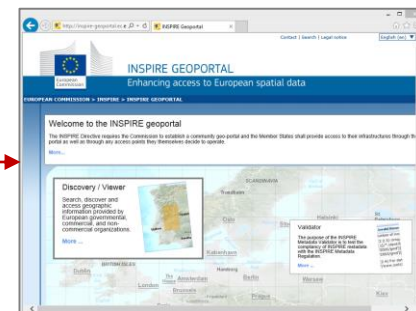
MercatorNet

Geopunt-Metadatacenter

GeoNetwork  
Opensource



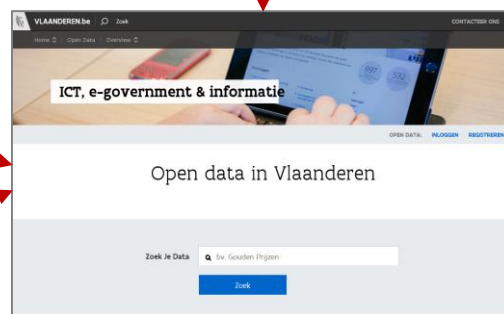
Portals:



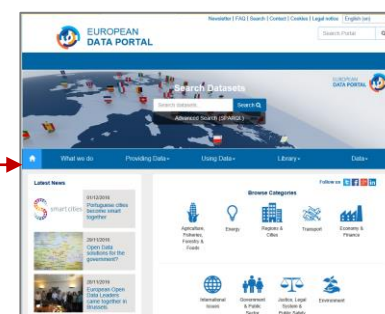
Open Geo

OPEN

Systems:



Portals:



Standards:



# Solutions?

- > On **long** terms:
- > The better solution would be to **reconsider**, possibly even **reshape** one (or both) standards, so that the differences which data providers encounter are converging one another.
  - But therefore the standardisation organisations / regulatory bodies have to come together, each with the experts in its niche, and try to **gather shared insights on semantics and standardisation**.
  - To come to a **loosely coupled but harmonized strategy** on metadata standards & catalogues

# Flanders (Belgium)

Agiv



bestuurszaken  
bz

Copyright Miss Globe & Mr Cube:  
Frans Knibbe, Geodan

## INFORMATIE VLAANDEREN

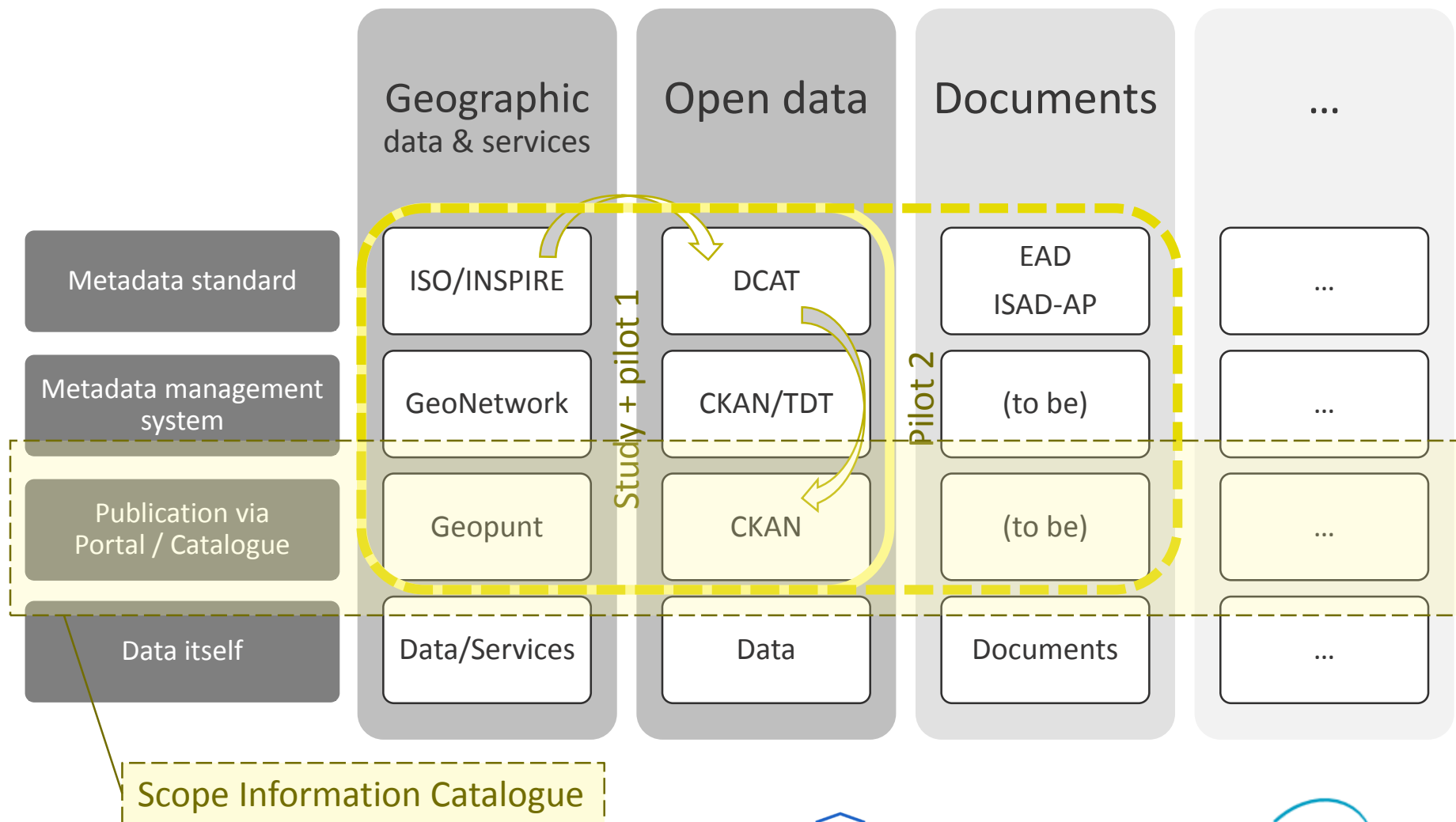
# Initiatives?

## How to solve the semantics in transcending the silos

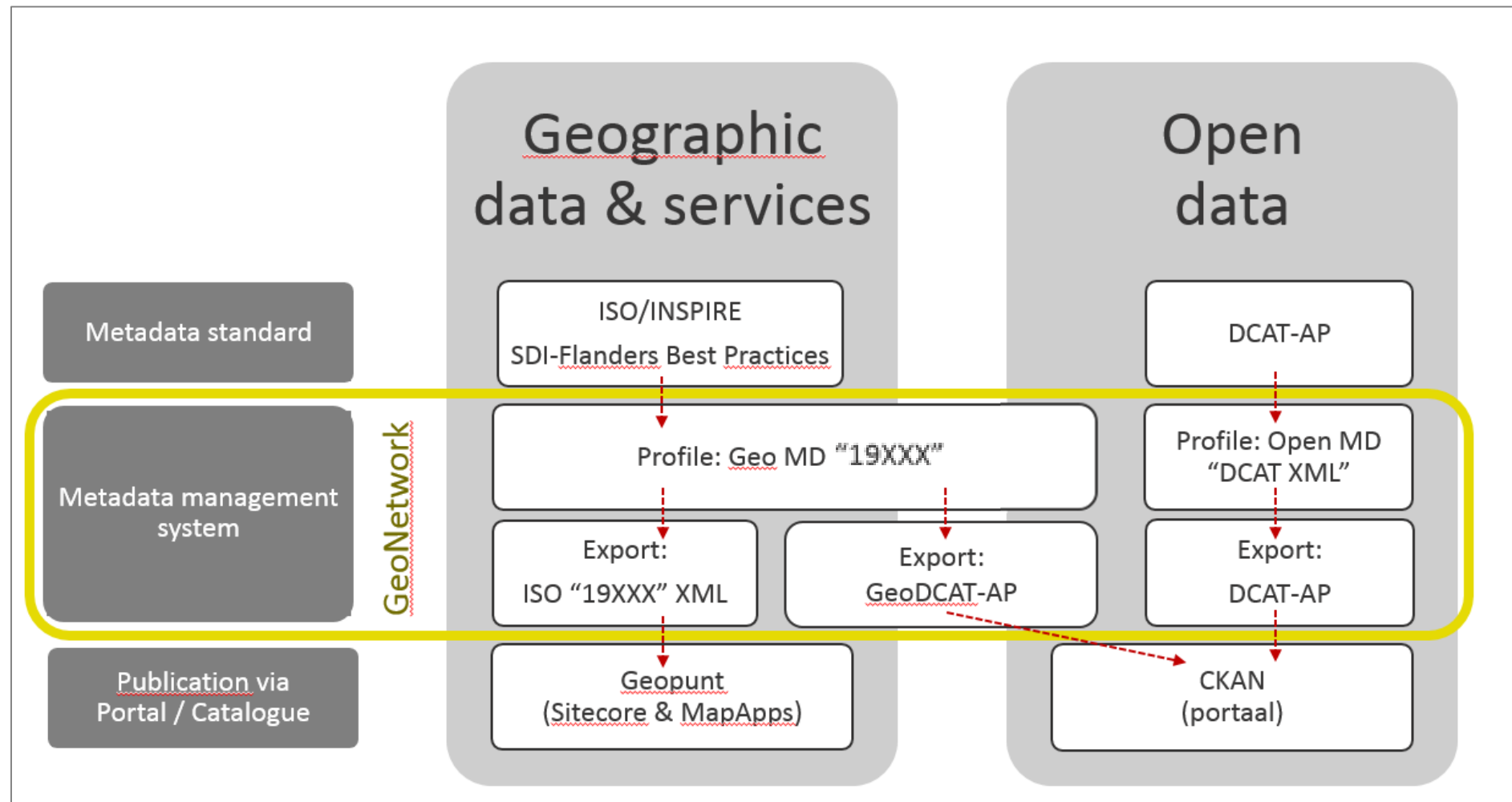
- > Comparative **study** to close the metadata gap between the **Geographic** and the **General Open government data** world
- > Implement a **pilot** to prove the effectiveness, automation, ... of the proposed solution
- > **Sharing knowledge** with other member states
- > Gather **feedback** on the uptake and effectiveness of the implementation
- > Continuation of the work in the pilot with **other data domains** (e.g. **Archival information**)
- > A **harmonized strategy** on Metadata Catalogues and a reusable reference implementation
- > **Publish and promote** a **Best Practices** paper
- > **Promote the results** at meetings and partner events (e.g. INSPIRE/JRC, ISA<sup>2</sup>, OGC, W3C, Semantic Web Conference, ...)



# Overview study & pilots



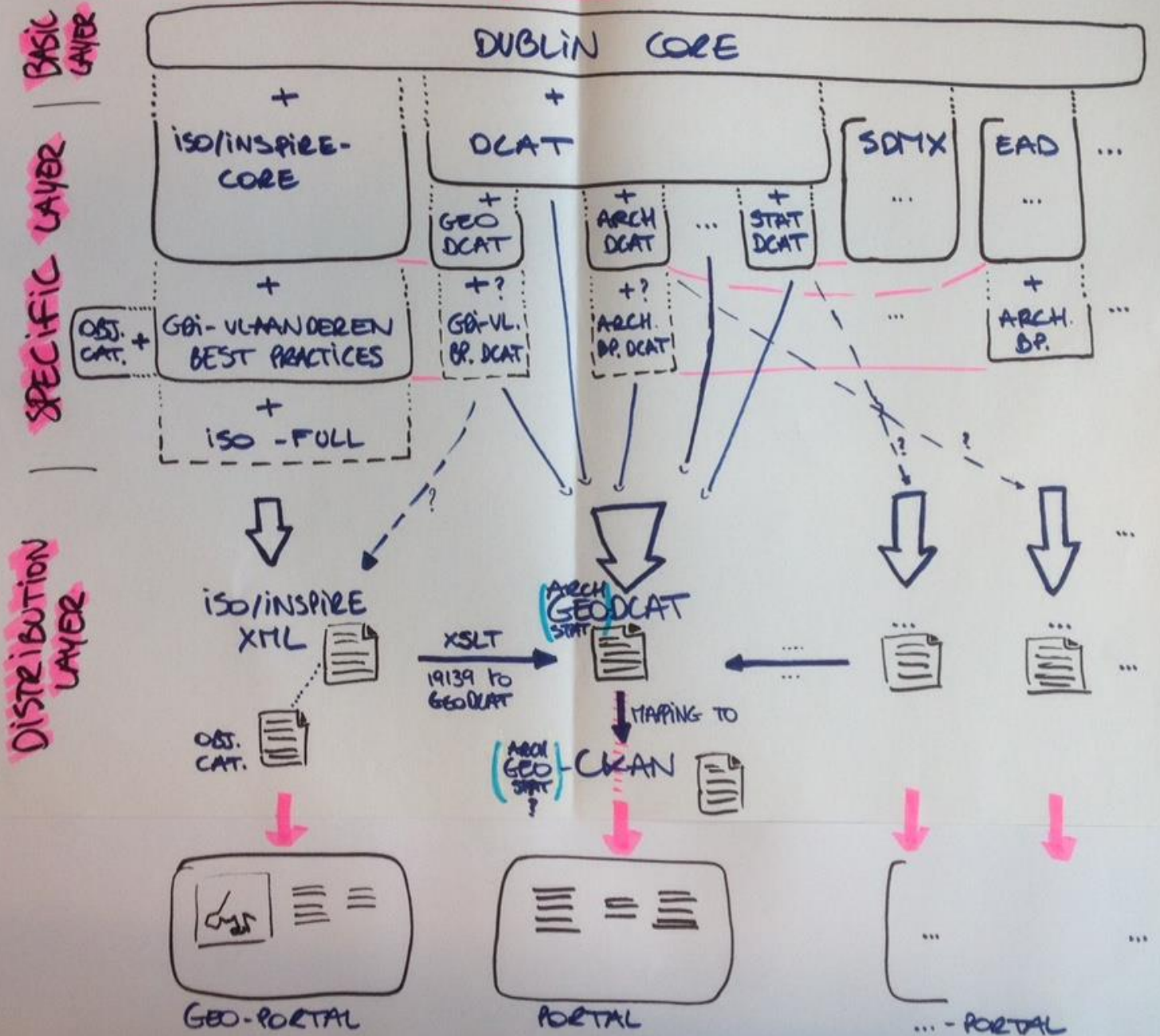
# Results on the study between Geo & Open data domains

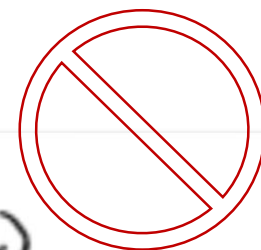


# Conclusion on bridging the gap

- > The study proves the gap between metadata standards and systems can be **reduced**
  - To improve exchange,
  - Reduce & simplify maintenance,
  - Reach efficiency, consistency, ...
  - And **keep it as simple** as possible for data providers in describing their data **once only**, while reaching the widest possible audience
- > **But** to really **close** the gap, the semantic differences should be picked up to solve by the standardization bodies itself (W3C, OGC, JRC, ISA<sup>2</sup>, ISO)

## META DATA - VISION TO BE





## HOW STANDARDS PROLIFERATE: (SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC)

SITUATION:  
THERE ARE  
14 COMPETING  
STANDARDS.

14?! RIDICULOUS!  
WE NEED TO DEVELOP  
ONE UNIVERSAL STANDARD  
THAT COVERS EVERYONE'S  
USE CASES.



**SOON:**

SITUATION:  
THERE ARE  
15 COMPETING  
STANDARDS.

xkcd



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# Questions?

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