



Linked base registries as a key enabler for eGovernment in Flanders

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Linked Data Seminar – Culture, Base Registries & Visualisations
December 2nd, Location Waternet, Amsterdam

wateronet



Platform Linked
Data Nederland



INFORMATIE
VLAANDEREN



umec

OUTLINE

Rewiring authentic
data sources
to Linked Base Registries

How semantic
interoperability ~~is~~ became
the cornerstone of our
e-gov strategy

Discoverability of
linked base registries
~~on the web~~



OSLO

Open Standards for Local administrations

Once Only principle fails

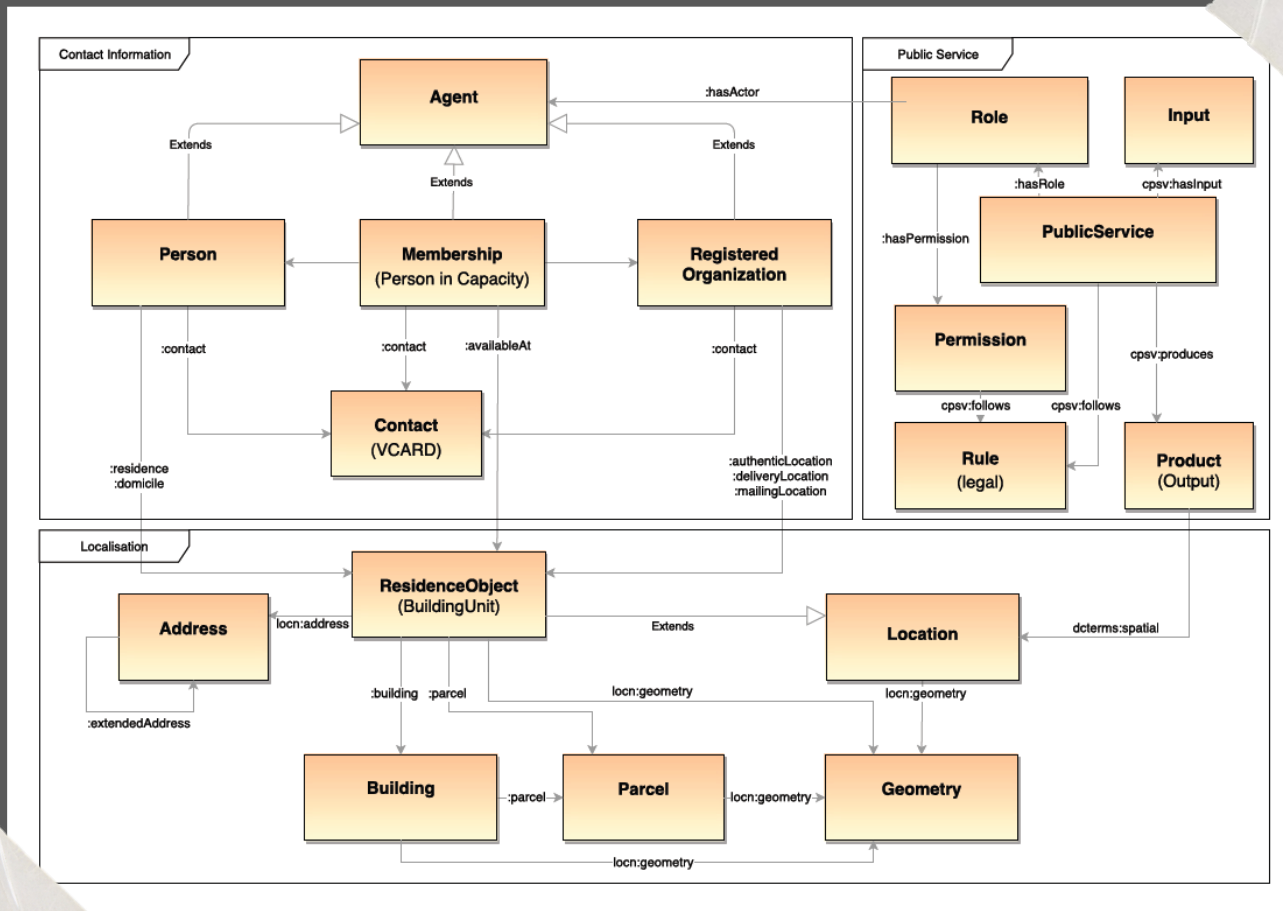
Integration expensive and inefficient

Lack of machine readable information



OSLO

Bottom-Up – Local Governments



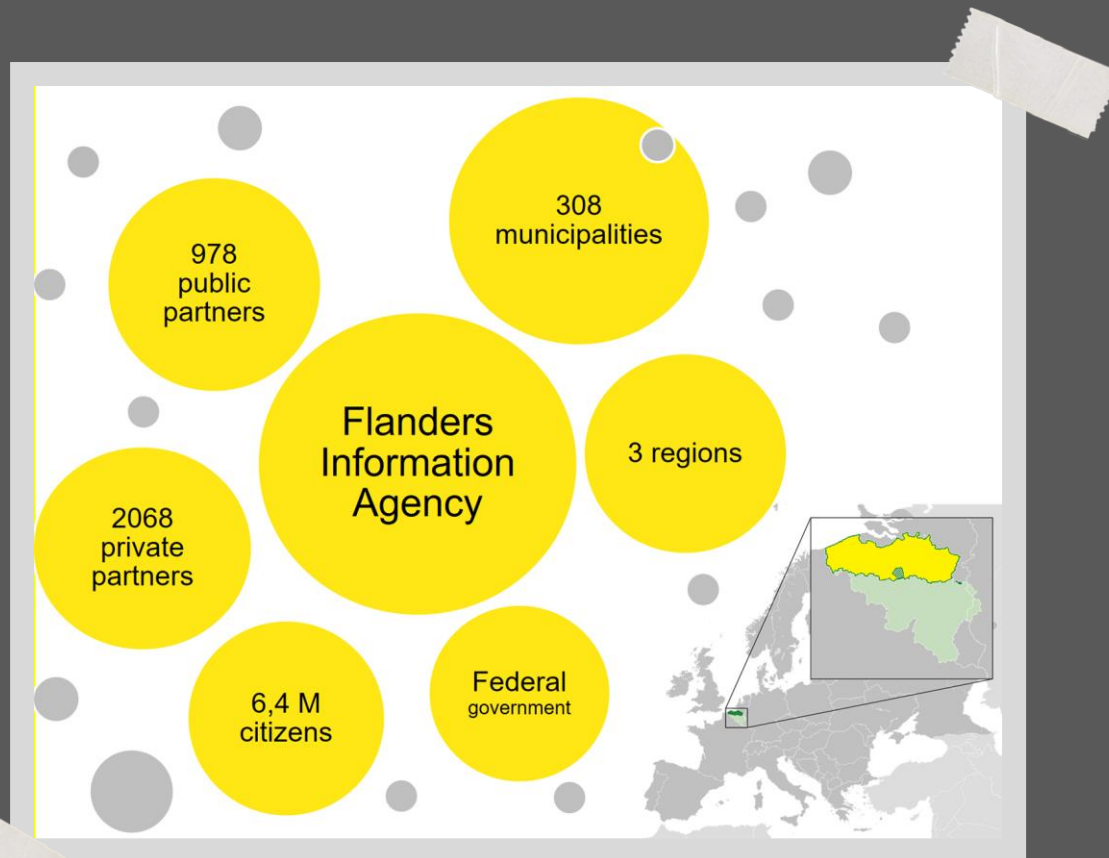


Flemish Government
endorses OSLO

OSLO² Embedded in the strategy of
Informatie Vlaanderen

FLANDERS

Informatie Vlaanderen & Vlaanderen Radicaal Digitaal



Motivation

Motivation for OSLO²

applications look at the 'real world'
from different perspectives

information is structured/modelled
from one perspective

authoritative sources exist as
independent silo's

multiple investments for
interlinking data

impact on the quality and the
efficiency of public services.



Objectives

Objectives for OSLO²

develop common standardisation methodology

create context neutral OSLO² semantic models

aggregate information from different national, regional and local government information systems

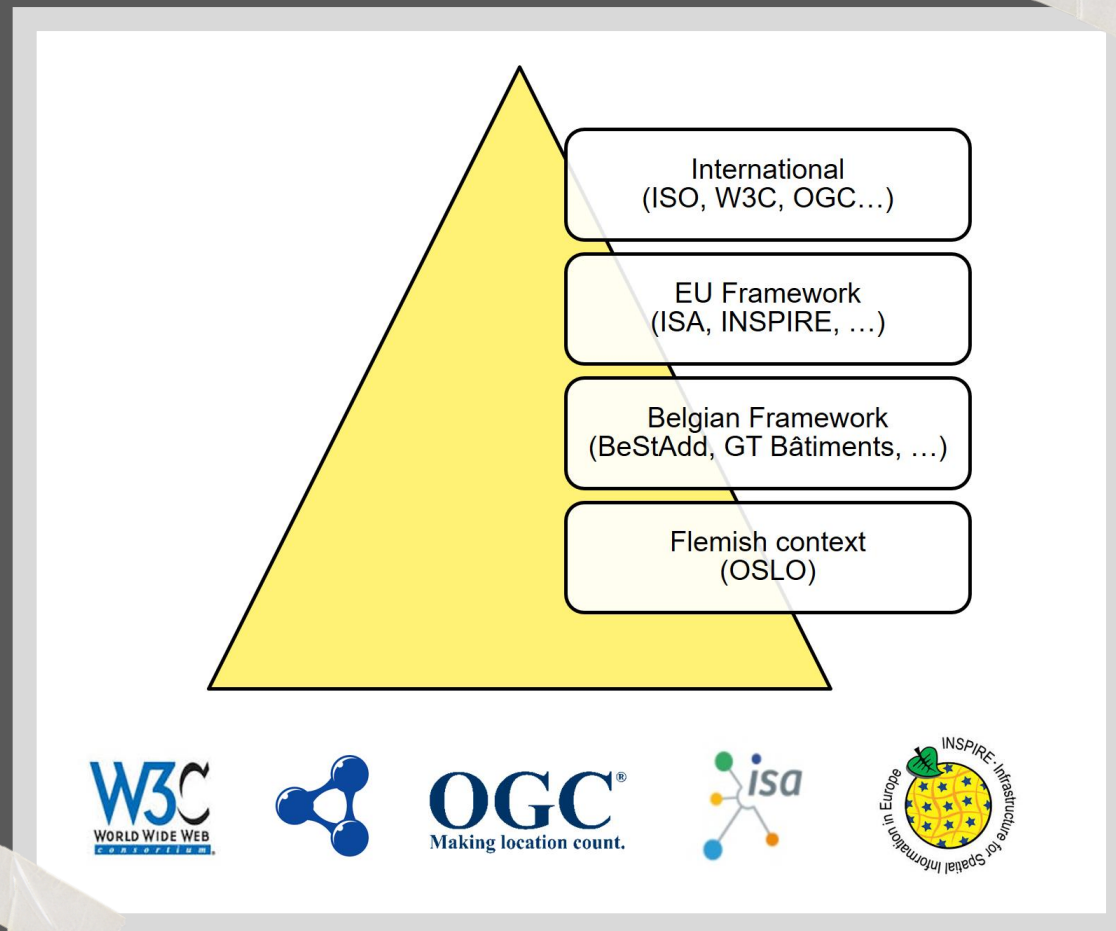
create OSLO² enabled products (address LOD product)



FarSide - Larson

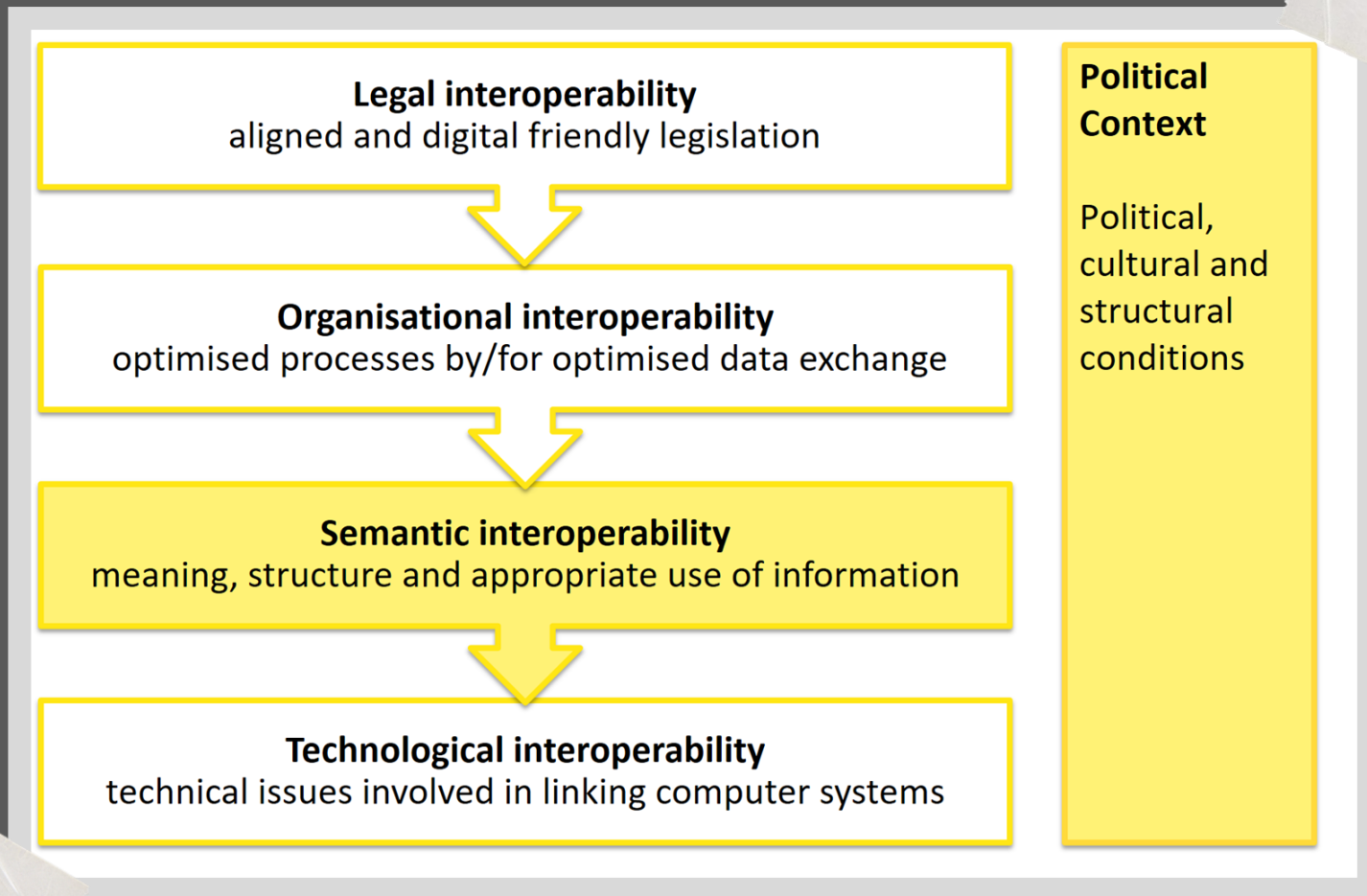
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Open Standards for Linked Organizations



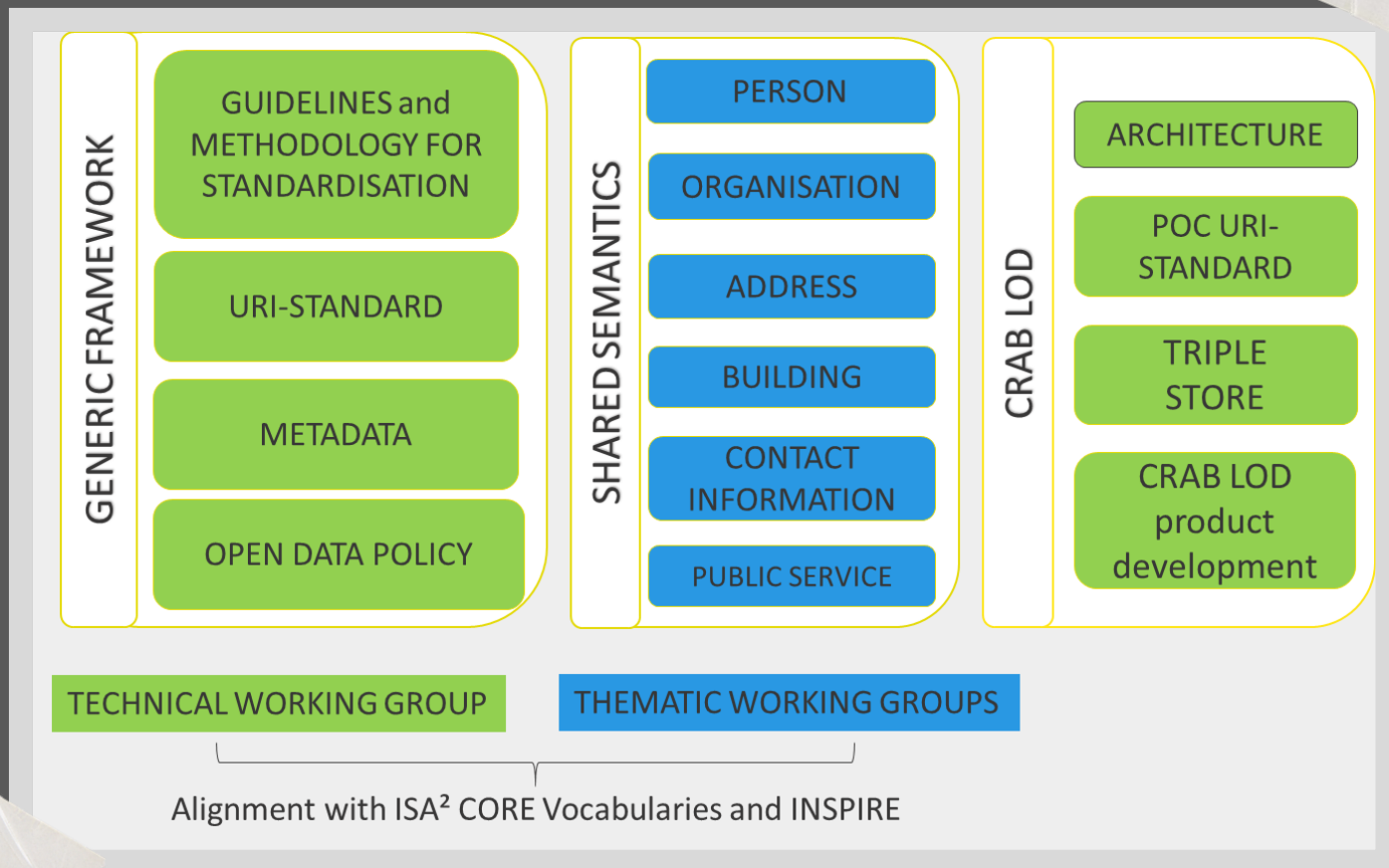
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Interoperability Levels



Scope

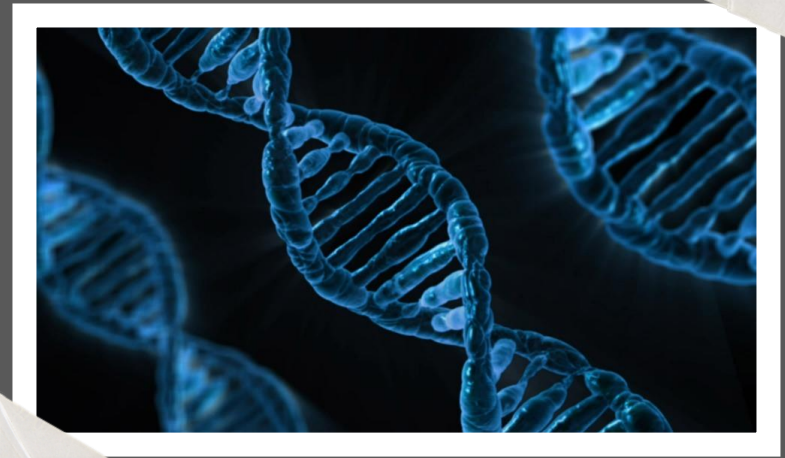
SCOPE OSLO² - March 2017



BASE REGISTRIES

For the public sector, Base Registries are a fundamental footprint like DNA for living organisms.

“trusted authentic sources of information under the control of an appointed public administration or organization appointed by the government¹” containing information about public services



¹ http://ec.europa.eu/isa/actions/documents/isa_1.2_d1.2_base_registry_definition.pdf
<https://pixabay.com/nl/dna-biologie-geneeskunde-gen-163466/>

BASE REGISTRIES

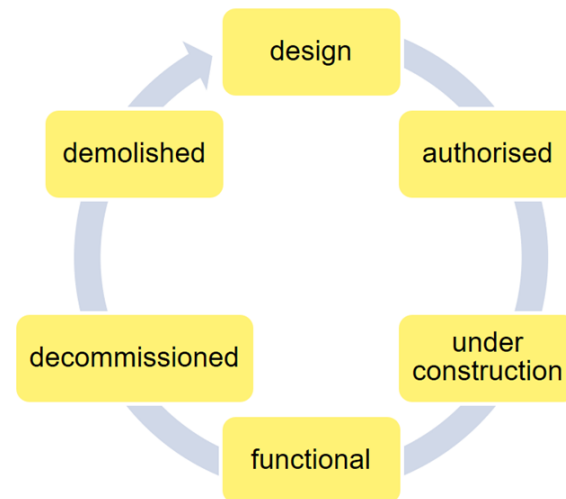
Base Registries Concept

Registers only contain core information

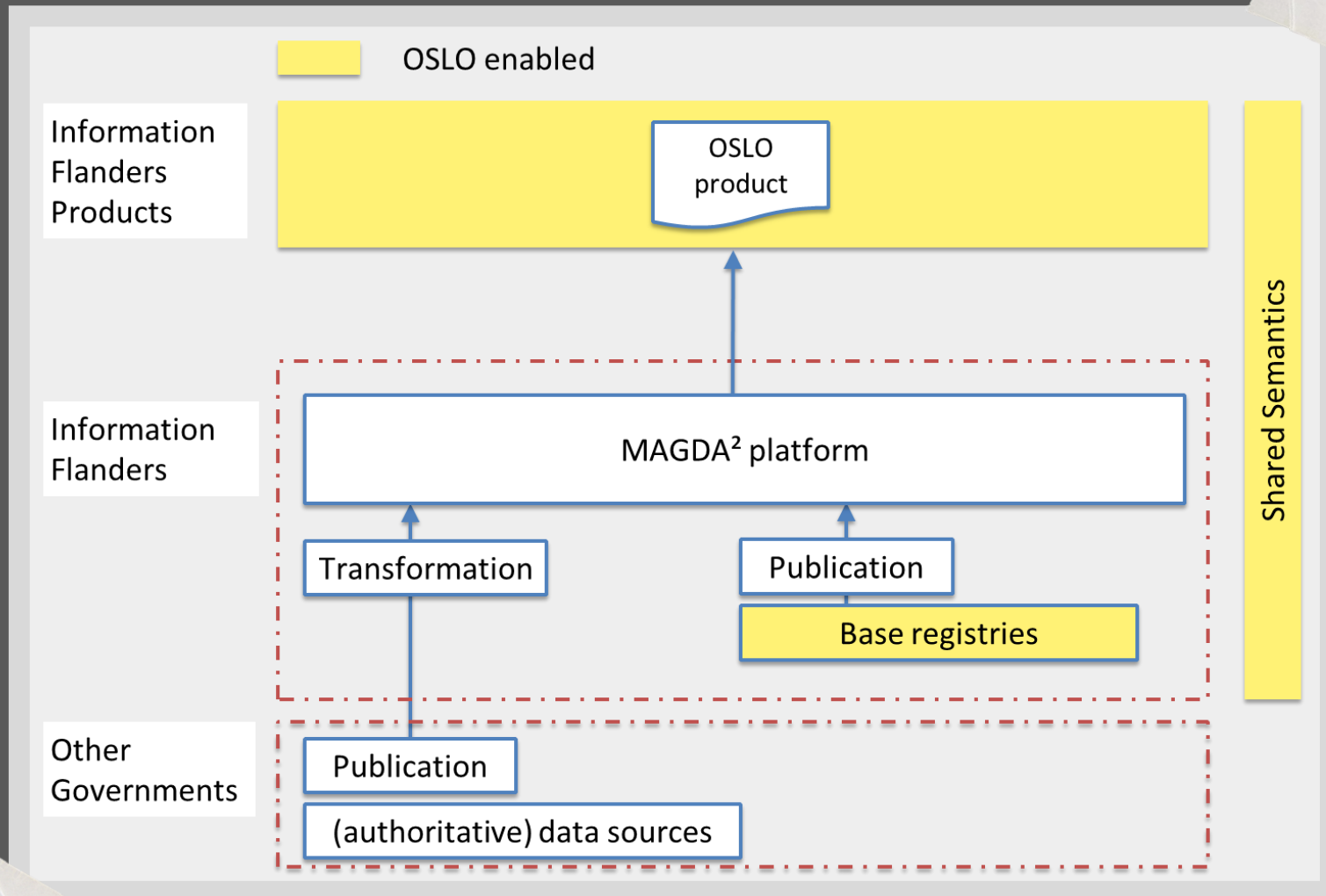
Data in Registries work together

Persistent identifiers / lifecycle

Compulsory use and error reporting

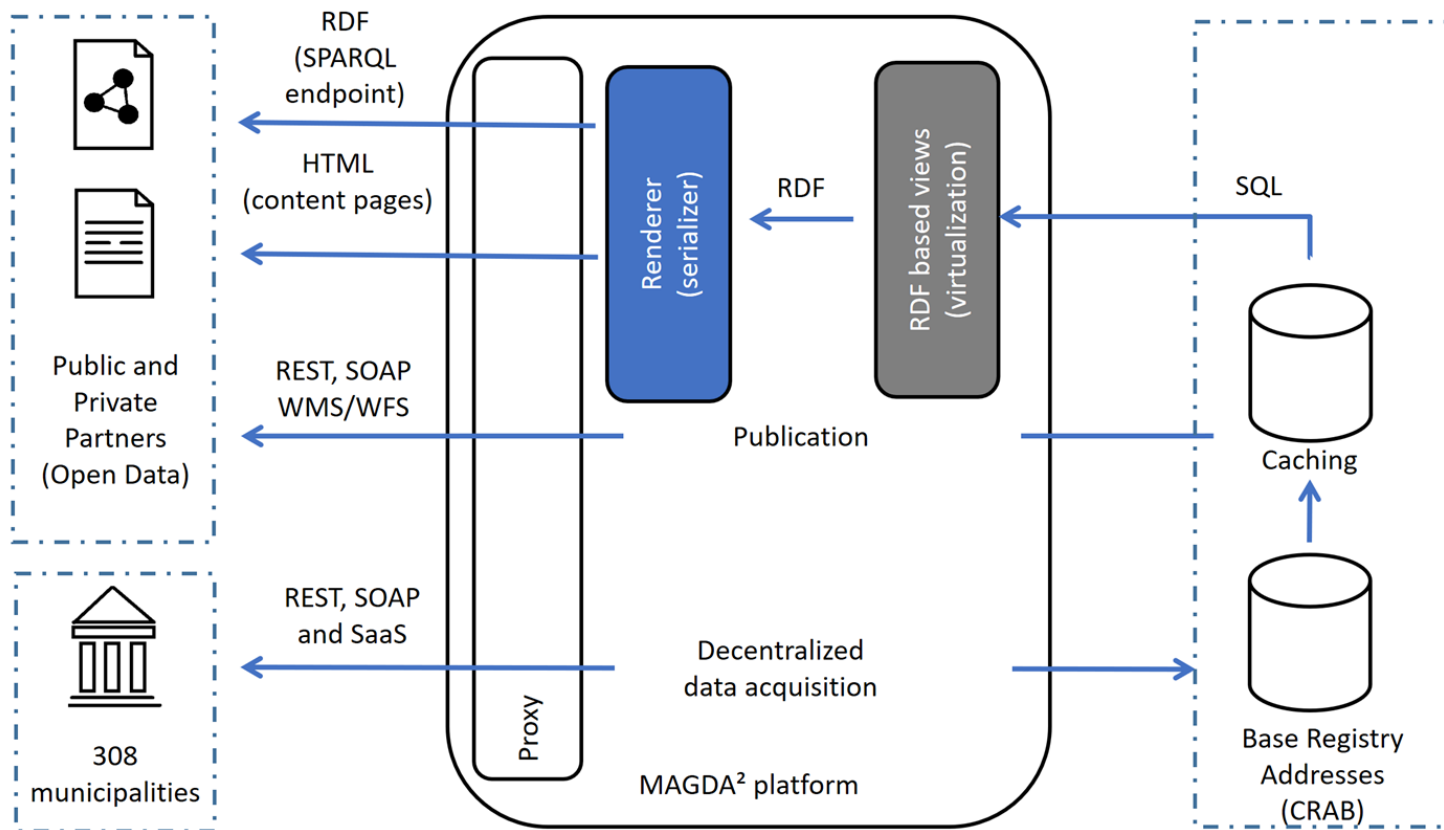


BASE REGISTRIES



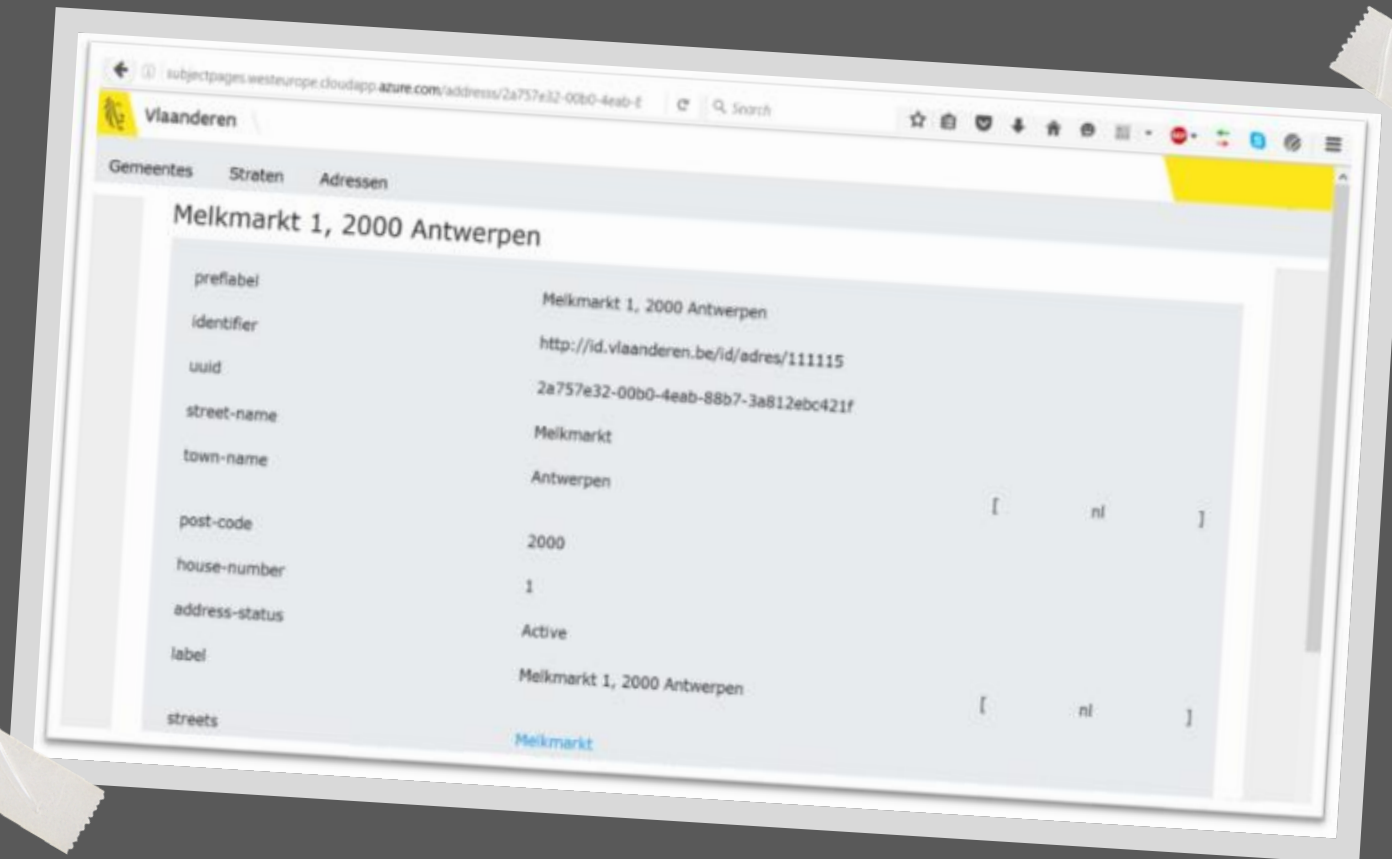
ADDRESSES LOD

MAGDA² platform, real time synchronization 308 municipalities



ADDRESSES LOD

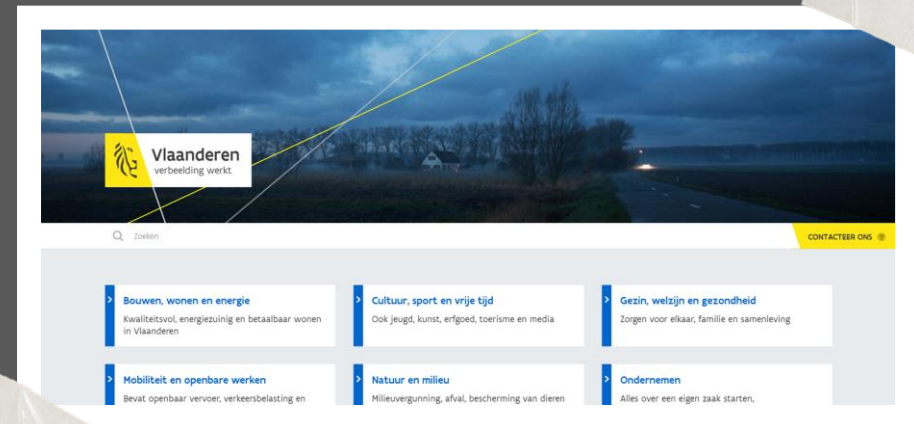
Human readable representation of an address subject page



ALTERNATIVE

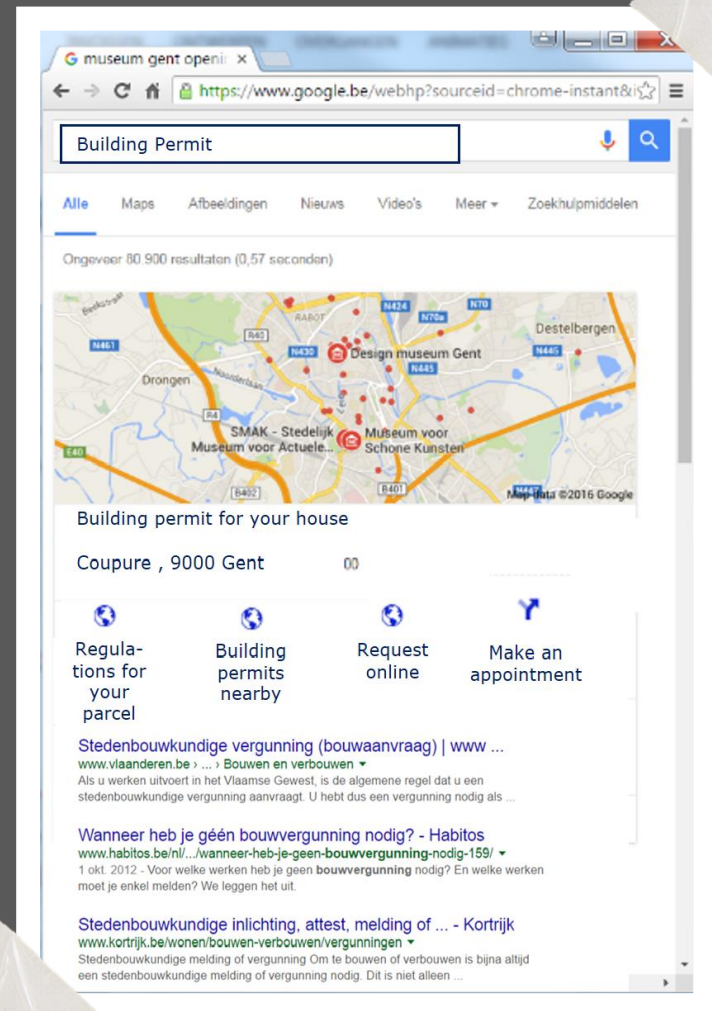
appropriate distribution model for government base registries

Flemish Government is working on a strategy to add markup to government portals to promote information about their public services on third-party platforms, using both schema.org and the ISA CORE vocabularies.



IMAGINE...

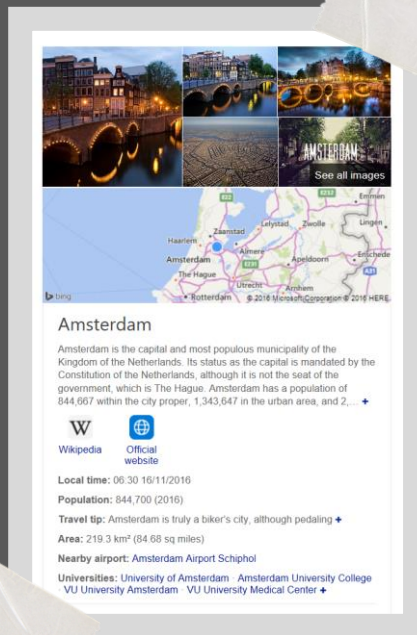
Qualitative,
personalized
information
about public
services at your
fingertips



Mock-Up based on Google SERP

>> SHIFT

Annotated Data: from the search engine result pages to an important data source



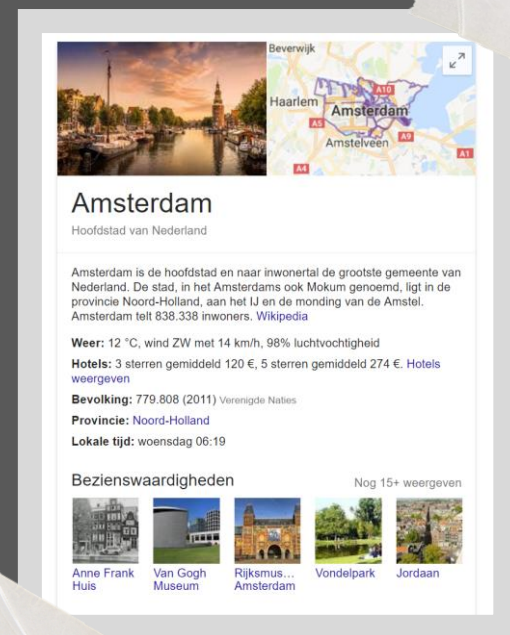
A screenshot of a Microsoft Bing search result for Amsterdam. The page features a grid of six images showing various views of the city, including bridges and canals. Below the images is a map of the Netherlands with Amsterdam highlighted. The text section provides a brief overview of Amsterdam as the capital and most populous municipality of the Kingdom of the Netherlands. It includes a Wikipedia link, an official website link, and various statistics such as local time, population, area, and nearby airport. The page is annotated with white tape corners.

Amsterdam

Amsterdam is the capital and most populous municipality of the Kingdom of the Netherlands. Its status as the capital is mandated by the Constitution of the Netherlands, although it is not the seat of the government, which is The Hague. Amsterdam has a population of 844,667 within the city proper, 1,343,647 in the urban area, and 2,...

W **Wikipedia** **Official website**

Local time: 06:30 16/11/2016
Population: 844,700 (2016)
Travel tip: Amsterdam is truly a biker's city, although pedaling +
Area: 219.3 km² (84.68 sq miles)
Nearby airport: Amsterdam Airport Schiphol
Universities: University of Amsterdam Amsterdam University College VU University Amsterdam VU University Medical Center +



A screenshot of a Google Knowledge Graph search result for Amsterdam. The page features a large image of a canal scene in Amsterdam and a map of the city. The text section provides a brief overview of Amsterdam as the capital and largest city of the Netherlands. It includes a Wikipedia link, a population figure, and a list of nearby airports. The page is annotated with white tape corners.

Amsterdam
Hoofdstad van Nederland

Amsterdam is de hoofdstad en naar inwonertal de grootste gemeente van Nederland. De stad, in het Amsterdams ook Mokum genoemd, ligt in de provincie Noord-Holland, aan het IJ en de monding van de Amstel. Amsterdam telt 838.338 inwoners. [Wikipedia](#)

Weer: 12 °C, wind ZW met 14 km/h, 98% luchtvochtigheid
Hotels: 3 sterren gemiddeld 120 €, 5 sterren gemiddeld 274 €. [Hotels weergeven](#)
Bevolking: 779.808 (2011) [Verenigde Naties](#)
Provincie: Noord-Holland
Lokale tijd: woensdag 06:19

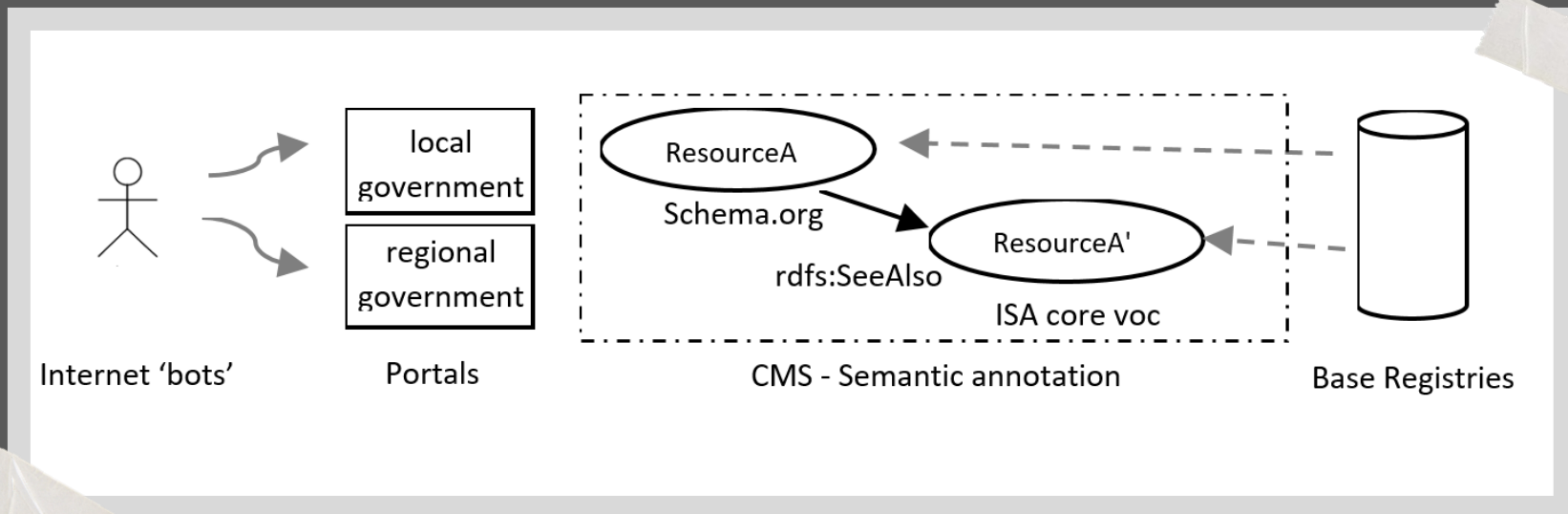
Bezienswaardigheden Nog 15+ weergeven

[Anne Frank Huis](#) [Van Gogh Museum](#) [Rijksmus... Amsterdam](#) [Vondelpark](#) [Jordaan](#)

PILOT

Annotating must be easy...

1. Users can annotate addresses, provisioned by the address base registry, and Opening Hours through a CMS (Proof-Of-concept)
2. The data is annotated both in Schema.org and EU ISA core vocabularies. The vocabularies are linked by a 'rdfs:SeeAlso' statement, used to indicate a resource that might provide additional information about the subject resource¹ ('loosely coupled' <> skos²)



¹ https://www.w3.org/TR/2004/REC-rdf-schema-20040210/#ch_seealso

² <https://www.w3.org/TR/skos-reference/>

TAKE AWAY

take away

Semantic interoperability in line with ISA/INSPIRE establishes a regional foundation for interoperability

From 'open standards for local administrations' to 'open standards for linked organisations'

Evolution from 'authoritative data sources' to 'Linked Base Registries'

Address Register will be available as Linked Open Data in 2016

'Linked Base Registries are a key enabler for eGovernment in Flanders'



@info_vlaanderen @rafke