

5 years of linking spatial data in the Netherlands

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31-05-2017, Open Geodag

@brinkwoman #linkeddatanl



Five years ago...

...we started a
community
called
“PiLOD”

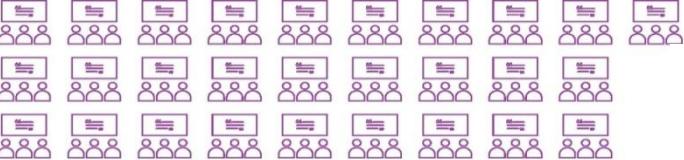


Gov, business & science
members e.g.

Tax office
Education sector
Microchip manufacturer
Univ. Amsterdam
Kadaster
TNO
Ministries
Etc.

Platform Linked
Data Netherlands
#linkeddatanl

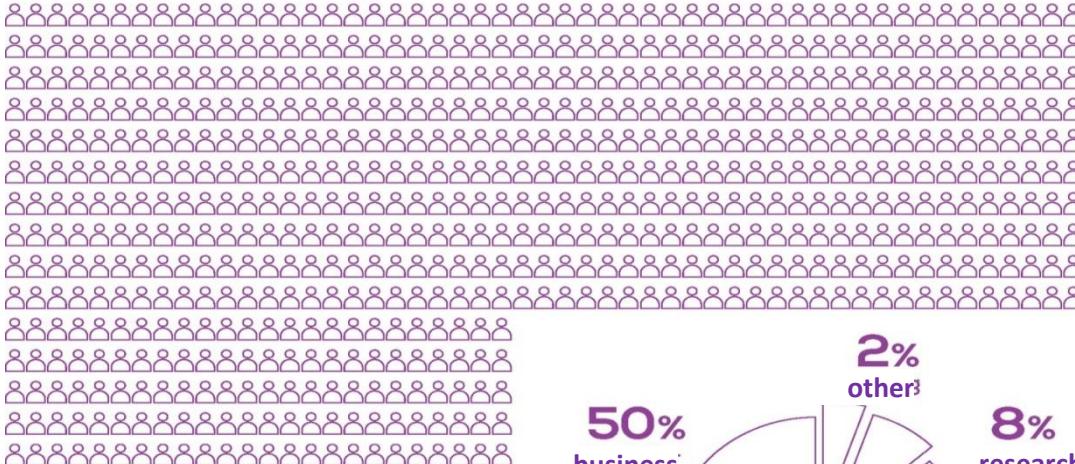
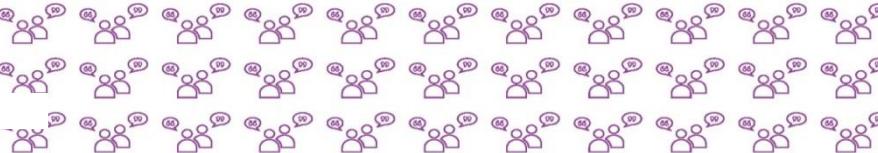
in



28

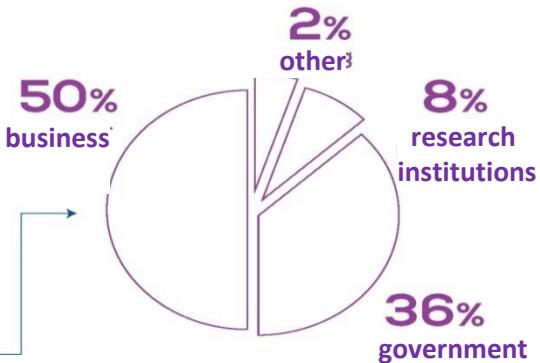
meetups
and

30
conceptual
fridays
participated



630
unique participants,
who together
represent

261
unique
organizations
from



Geonovum and linked data

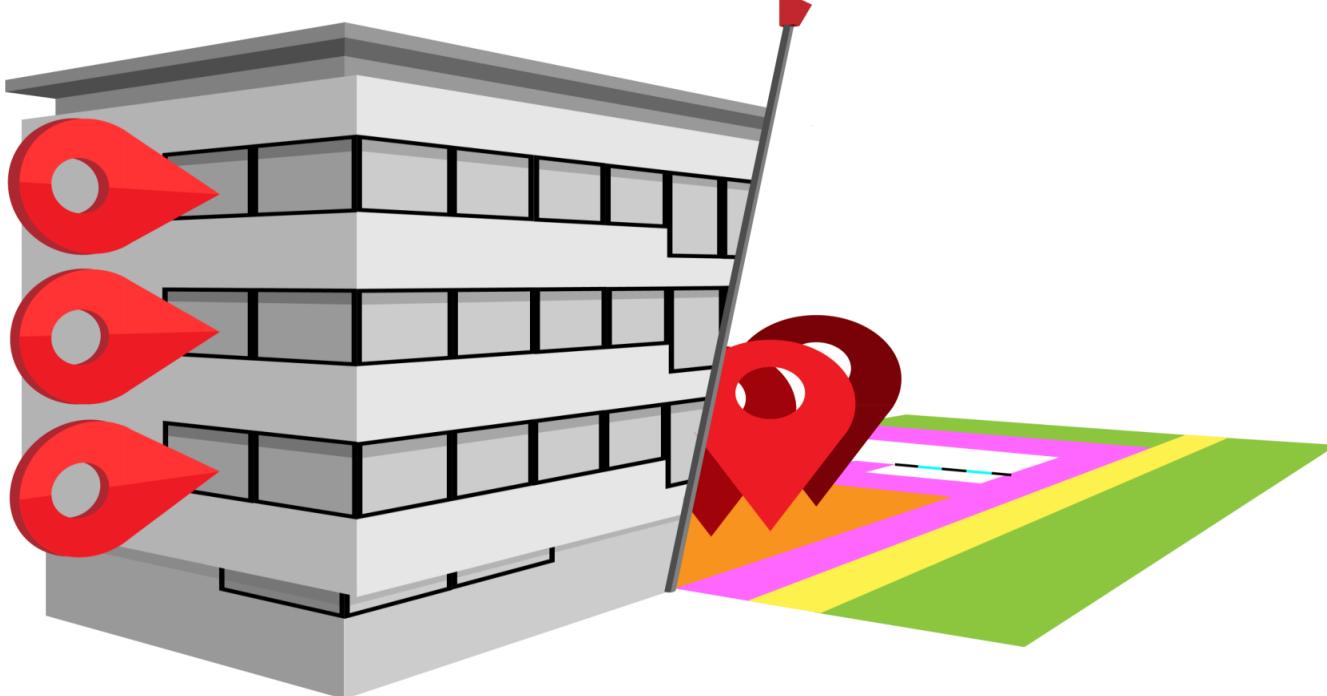
“What can the **geo** sector **gain**
from **linked data** technology?”

“What can the **linked data** community **gain**
from **spatial data**? ”

From pilot to platform
discovery - experimentation - implementation



Deriving vs asserting



Asserting
spatial relations
explicitly is
good practice

Geography is often described as the "glue that binds Linked Data"; the links between [spatial things](#) - and between other resources and spatial things - describe how the world around us is structured and interrelated and form an important facet of the Web of Data.

Source: <https://www.w3.org/TR/sdw-bp/>



URI Strategy - The coordinates of the WWW



From UML/GML to OWL/RDF in two easy steps?

We hoped we could transform automatically

GML > RDF: this works, the Object-property model rules!

But for UML/OWL there is a paradigm shift:



from **closed world**
to **open world**



Discovery - experimentation -implementation

2012-2014: Discovery

2014-2015: Experimentation

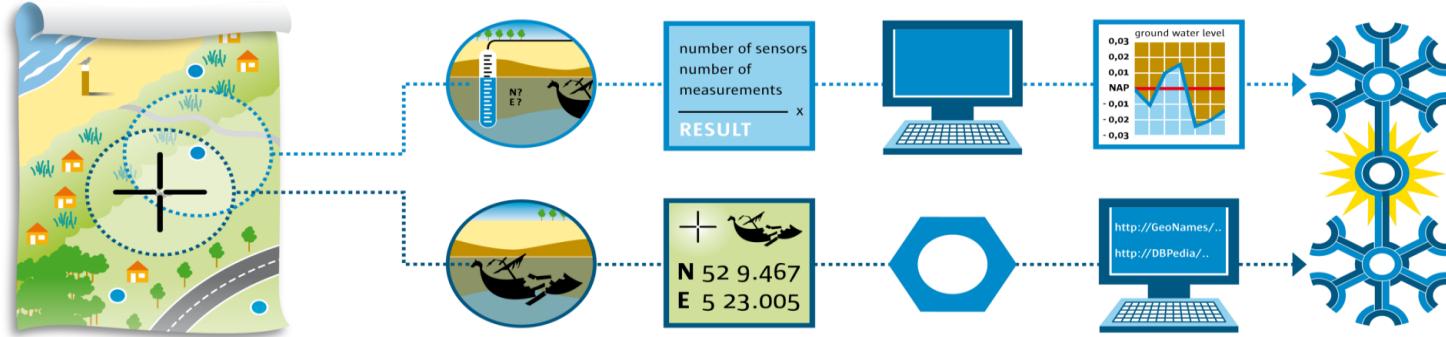
2015-2017: Implementation

<http://www.pilod.nl/wiki/Boek>



Experimentation - linked sensor data

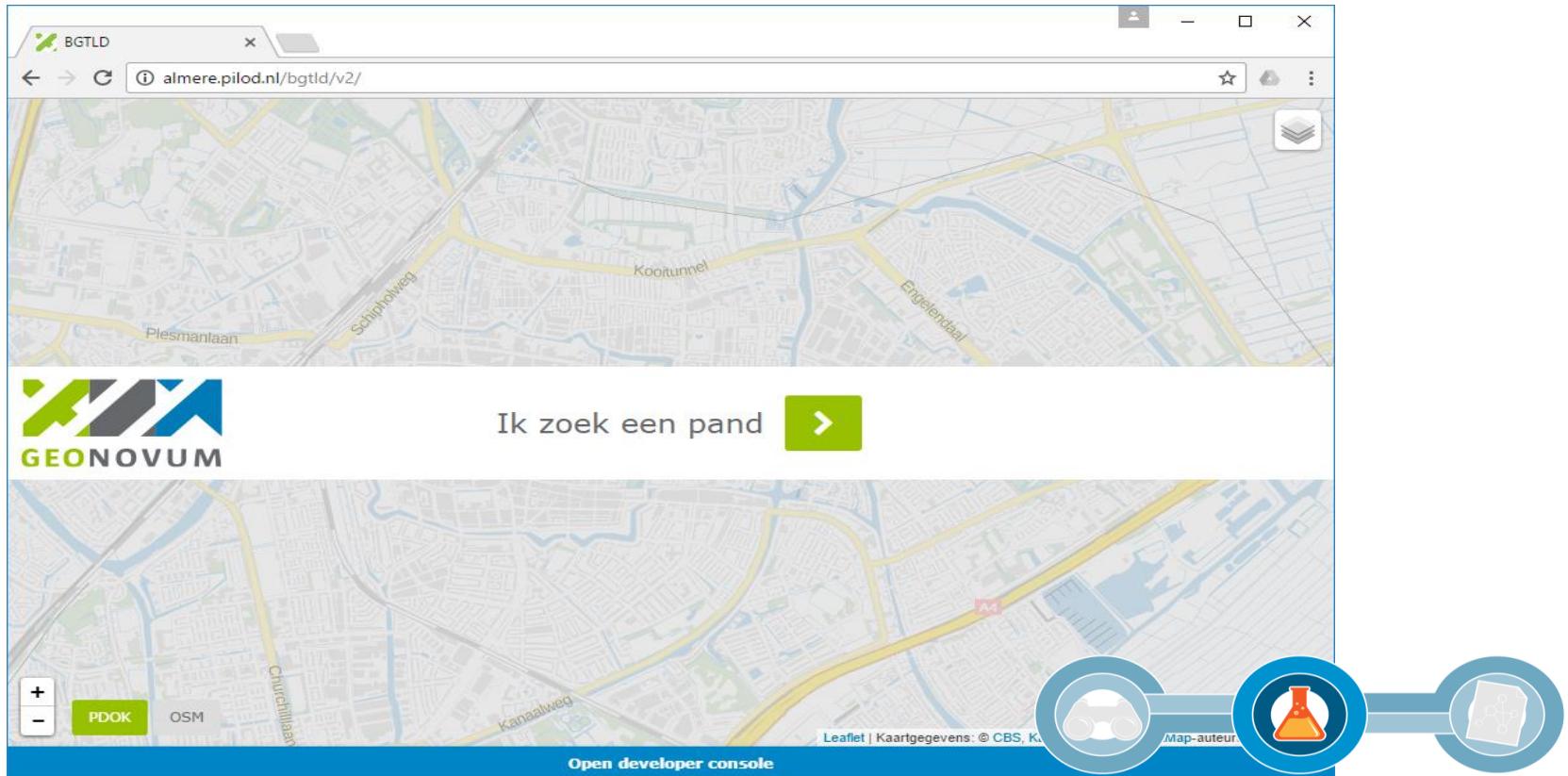
Published groundwater level observation data using SSN, noSql



Published vulnerable archeological areas as spatial things including coordinates, spatial relations and links to GeoNames



Experimentation - Base registry topography as linked data





LOD Laundromat



Immigration procedure glossary



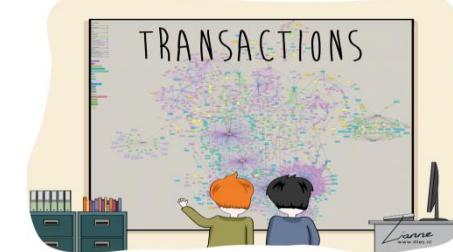
OpenPHACTS



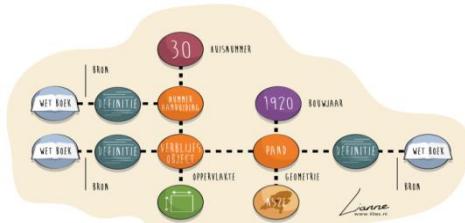
CERISE – linked energy data



Linked addresses & Dutch law



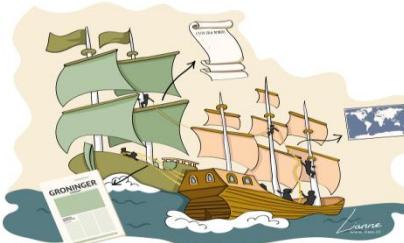
Fraud detection



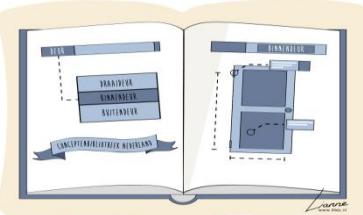
Exam app



Historic places



Linked enterprise data NXP

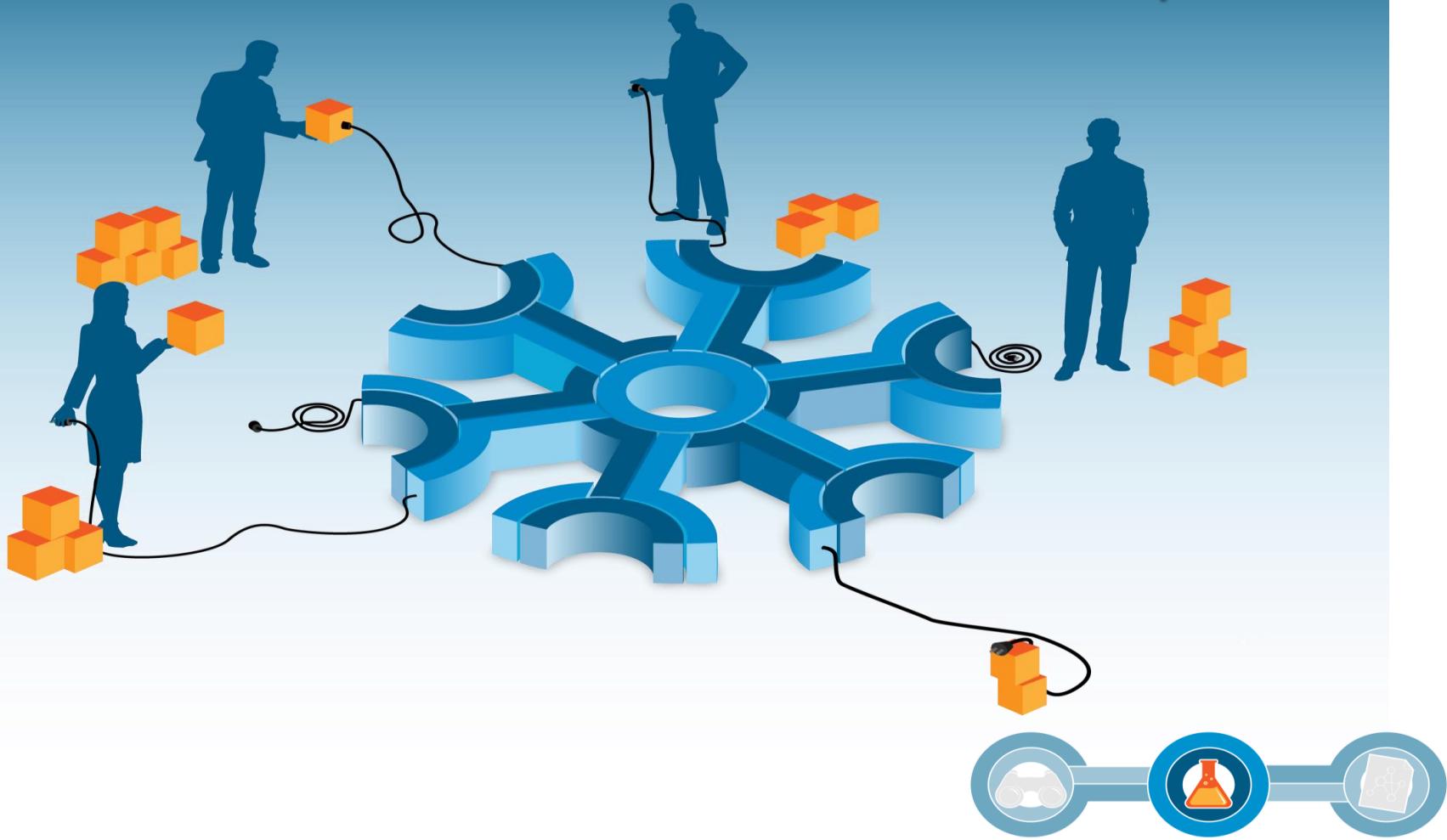


Concept library
built environment

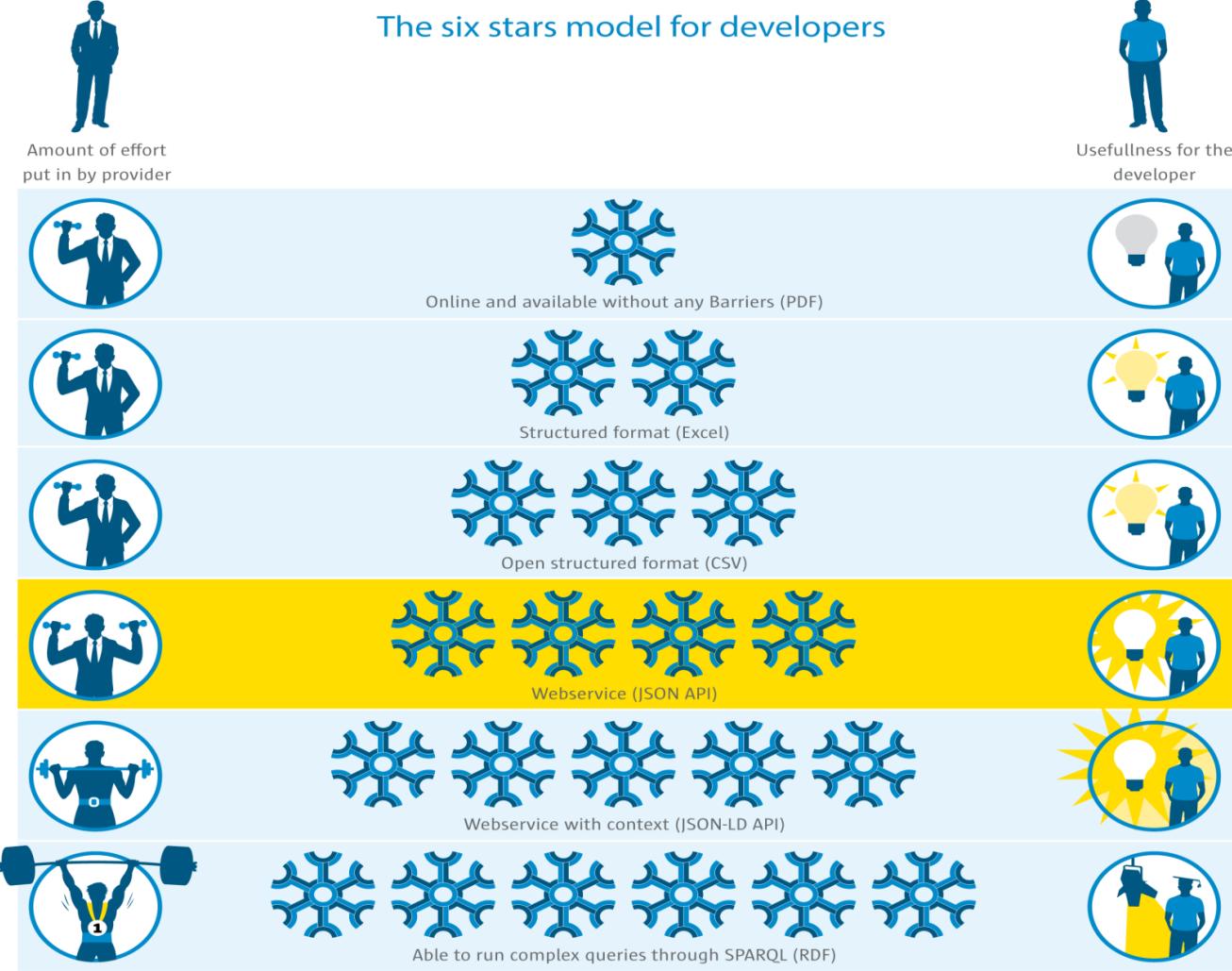
Dutch ships & sailors



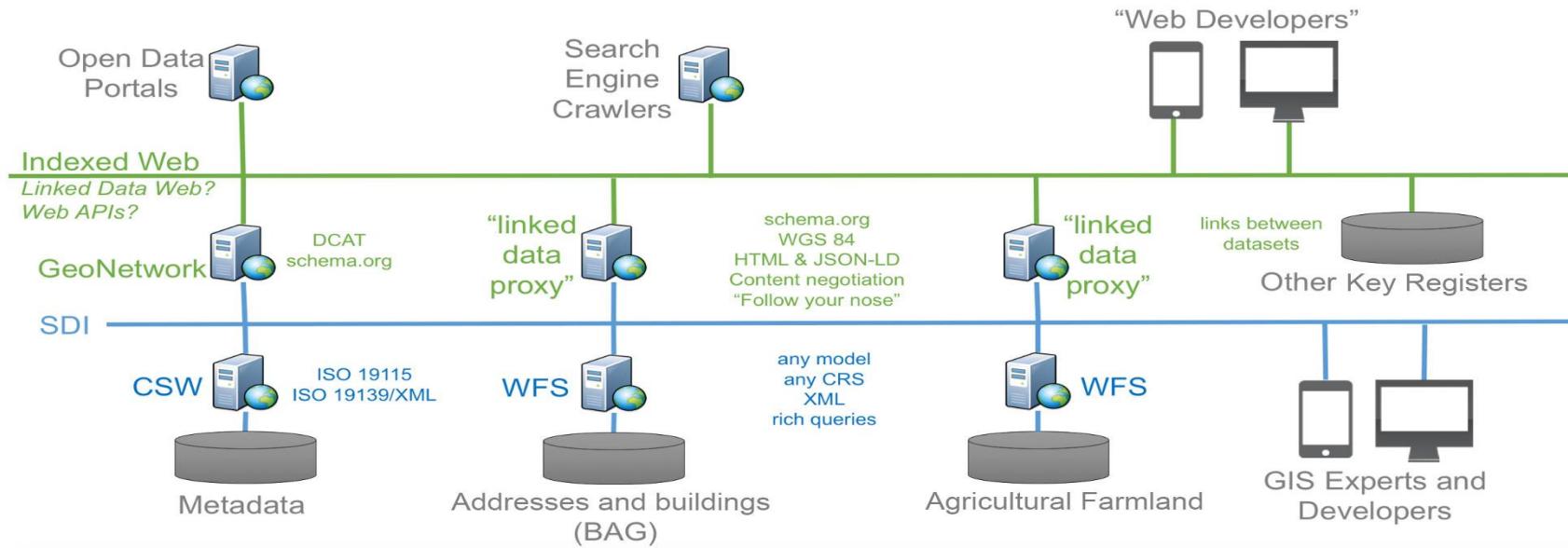
Broader focus: APIs for web developers



The six stars model for developers



Testbed #geo4web

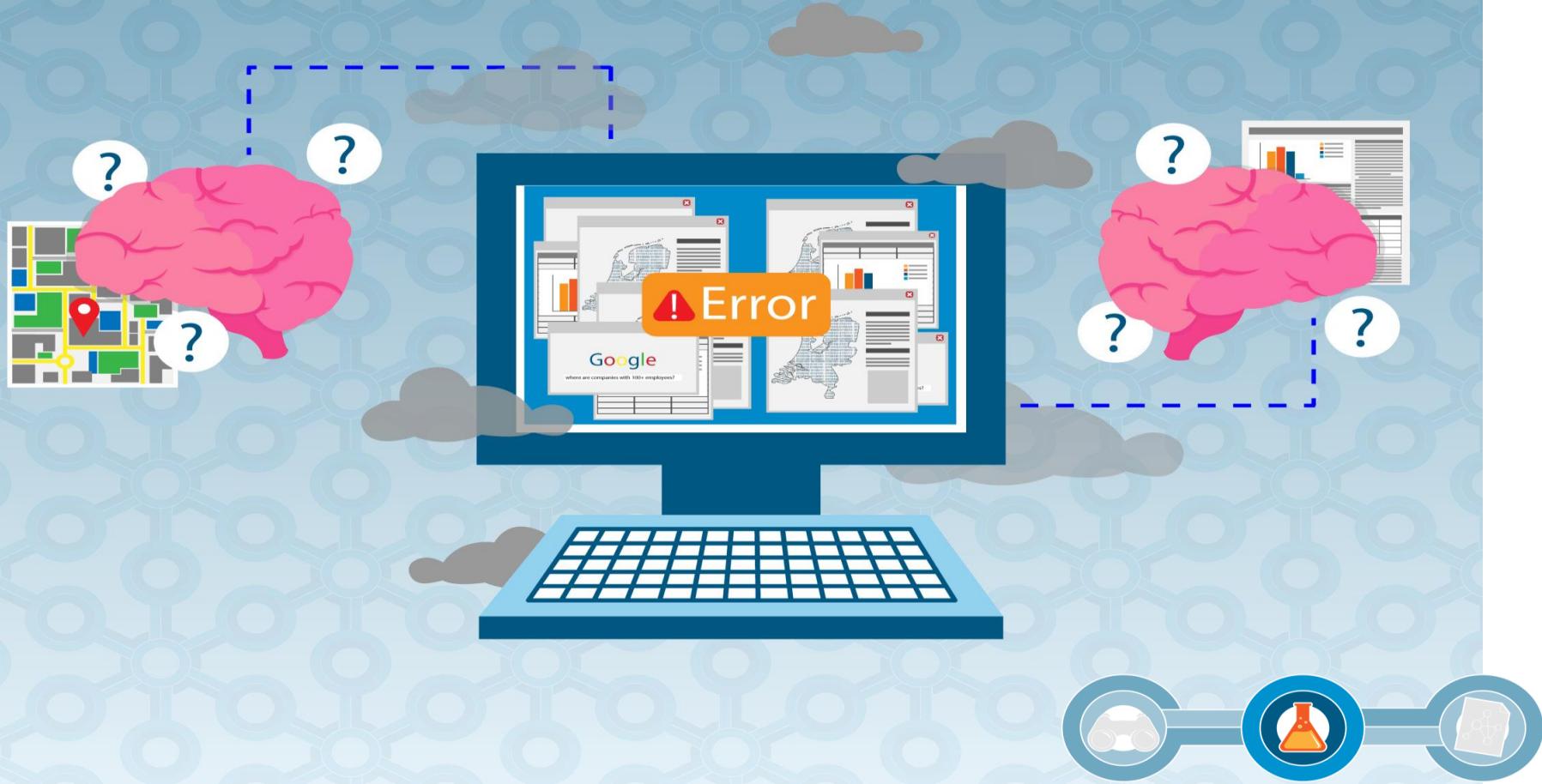


["Spatial data on the Web using the current SDI"](#)

by interactive instruments, GeoCAT and Linked Data Factory



Testbed #geo4web – the sequel



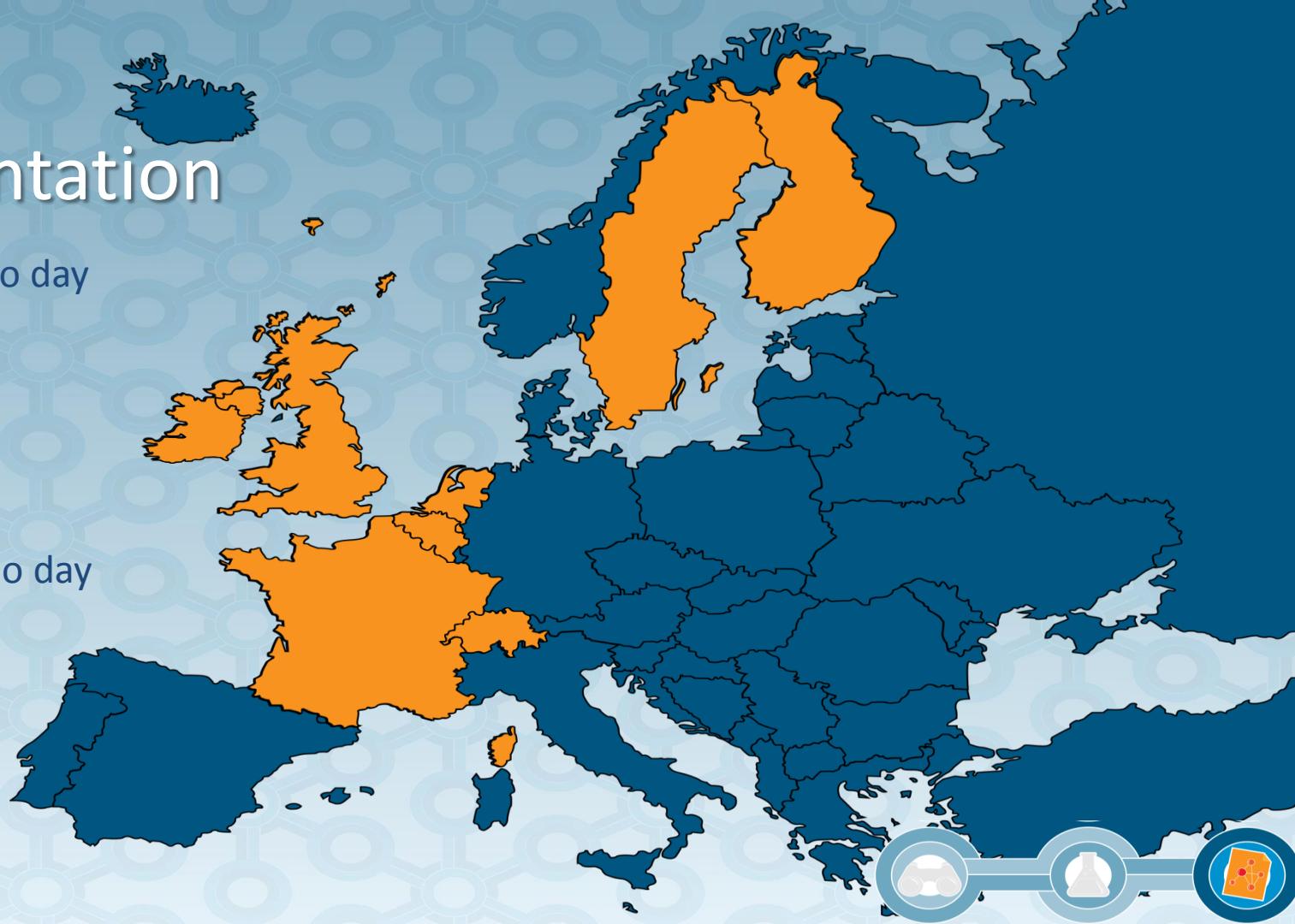
Implementation

Feb 2016 linked geo day

- Kadaster
- JRC
- W3C
- FR, FI, SE

Dec 2016 linked geo day

- IE, CH, BE



Working group

Spatial Data on the Web



Two standards bodies
working **together** towards
a **Web of Spatial and Linked**
Data



CovJSON &
Coverages in Linked Data



Semantic Sensor Networks
ontology



**Use cases &
Requirements**

**Best
Practices**

OWL Time ontology





5 years

From pilot to platform

From hype to practice

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