

Where is everywhere: bringing location to the web

Spatial data on the web WG



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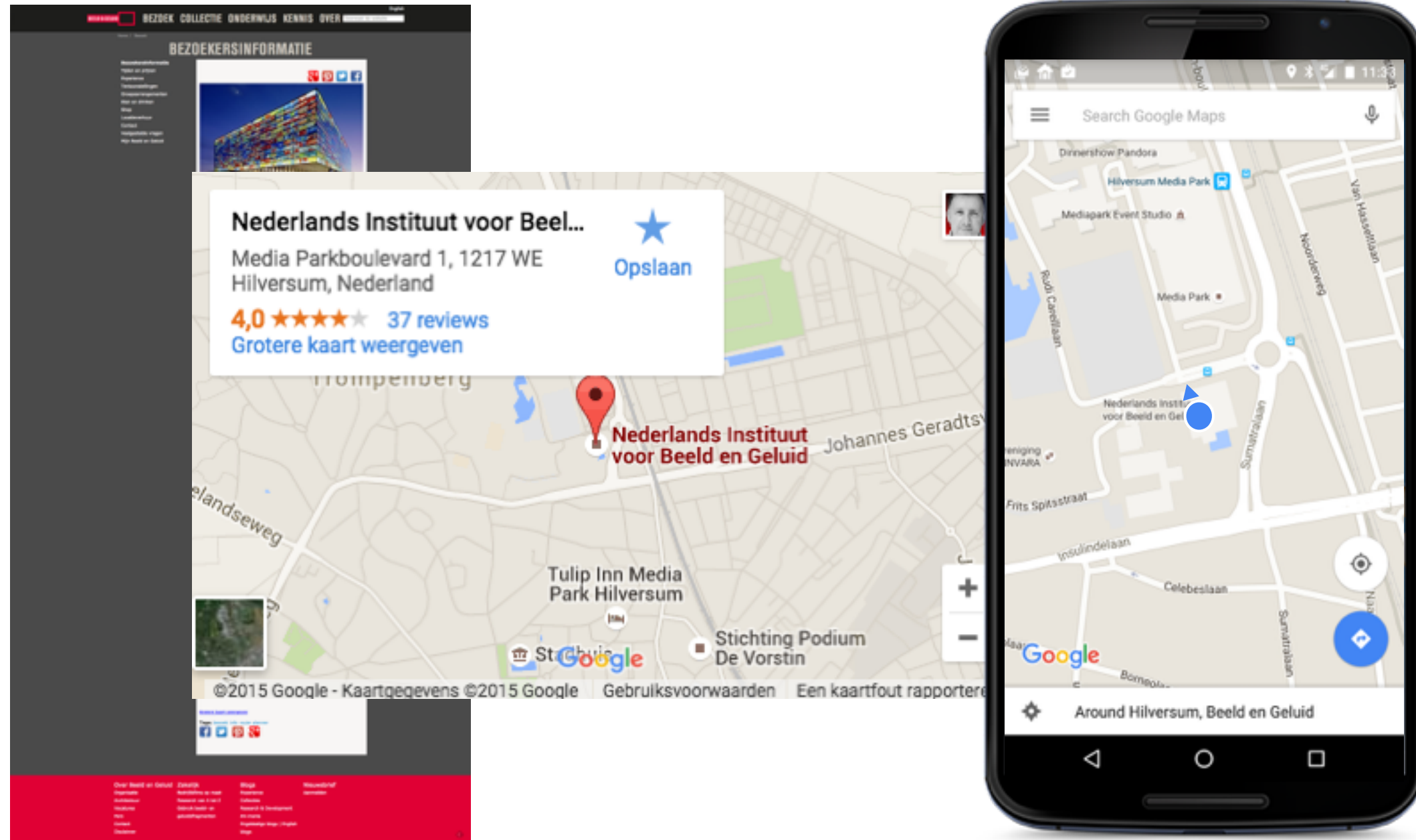


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What's the problem?

What we expect



What we get



INSPIRE GEOPORTAL

Enhancing access to European spatial data

What's new

Find a place in: Europe

Powered by GeoNames



Active Layers: 0

Search: Enter your query in any language of the European Union

Advanced Search

geonovum

sorted by relevance most relevant

displaying 1 to 1 out of 1 results

< 1 >

[dataset] Agrarische bedrijfsinformatie Nederland

Ligging en dierenaantallen van alle bij de Rijksdienst voor On ...[\(show more\)](#)

Two step search; unfamiliar protocols



INSPIRE GEOPORTAL

Enhancing access to European spatial data

Find a place in: Europe

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Active Layers: 0

INSPIRE Metadata CLOSE THIS WINDOW

Microsoft® Translator

Dutch

English

Translate this page Original

Microsoft® Translator



(NL) - Agricultural business information Netherlands

Metadata Language	Resource Language	Metadata Date
Dutch	Dutch	2014-07-03

Metadata Point Of Contact

Ministerie van Economische Zaken - Rijksdienst voor Ondernemend Nederland, E-mail: gegevensvragenASB@rvo.nl

Responsible Party

Owner: Ministerie van Economische Zaken - Rijksdienst voor Ondernemend Nederland, E-mail: gegevensvragenASB@rvo.nl

Spatial data set

Conditions Applying To Access And Use

No usage restrictions

Limitations On Public Access

Geogedeeld License <http://geogedeeld.geonovum.nl/> confidential

Resource Title

Agricultural business information Netherlands

Spatial Data Theme

Agricultural and aquaculture facilities (Faciliteiten voor landbouw en aquacultuur)

Topic Category

Farming

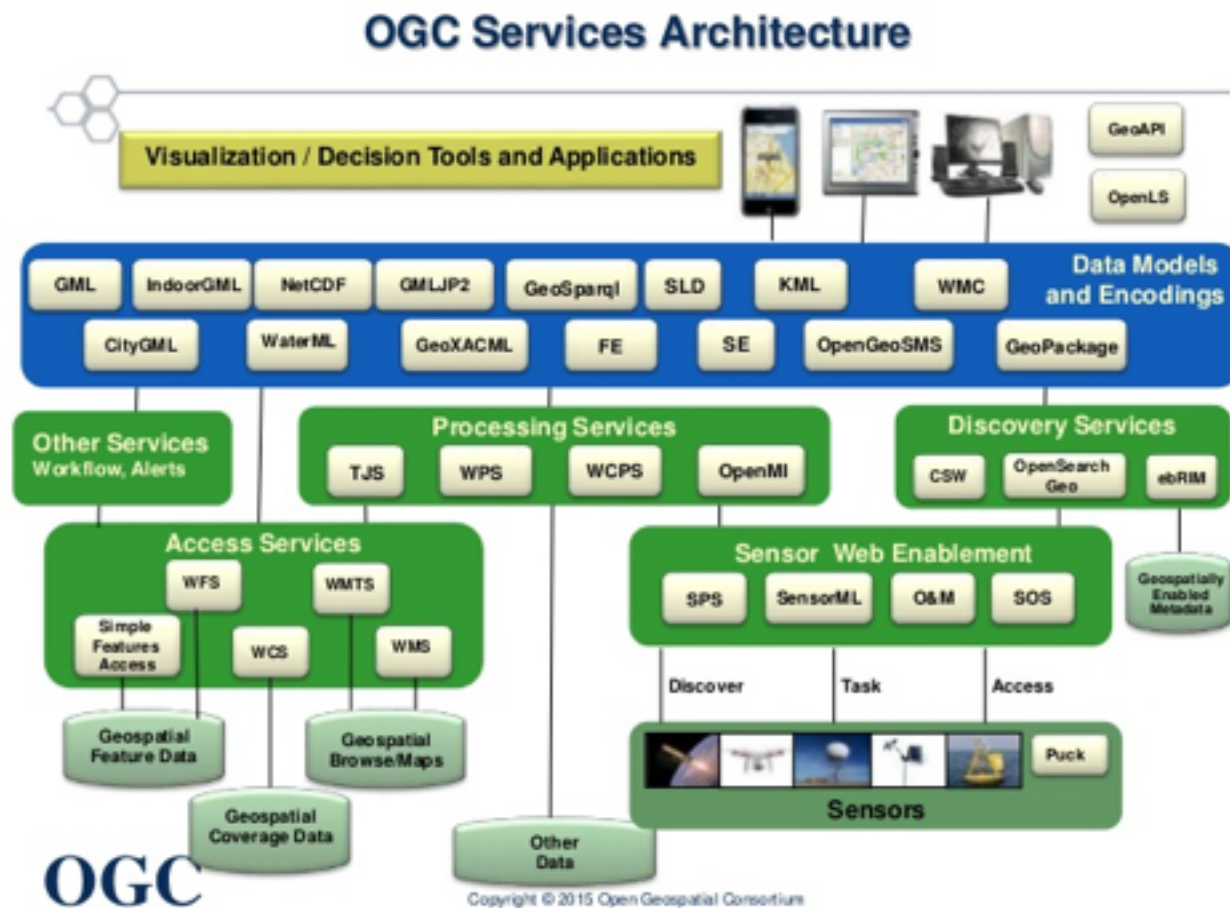
Resource Abstract

Location and animal numbers of all the national Entrepreneurial Netherlands (EZ) famous agricultural companies are active in Netherlands agrarian on april 1 of a given year and occur in the agricultural census or the combined task GDI of that year. The file contains information about the type of company, the location of branches, and animal numbers. Companies abroad which have ground in Netherlands also have a geographical point. The location of this point is the center of the largest plot that they on april 1 of the year in question have in use in Netherlands.

Lineage

-Activity Complex: main branches of agricultural companies in en: submitted by the national Entrepreneurial Netherlands (EZ) agriculture-may census, walk-GDI, relationship registry. There is one point for each company location as host is seen. Geotag based on BAG. There may be several main branches at 1 location. Business type based on NEC-typing (LEI). -Site:

The geospatial solution niche



- Geospatial industry has developed its own web services to publish Location information
- Dominated by large Government data publishers and Enterprise customers
- “Fit for purpose” for a niche industry?



geonovum amersfoort



Is data really “*on the web*” if you can’t find it
via a search engine?



So, we need to be more webby?

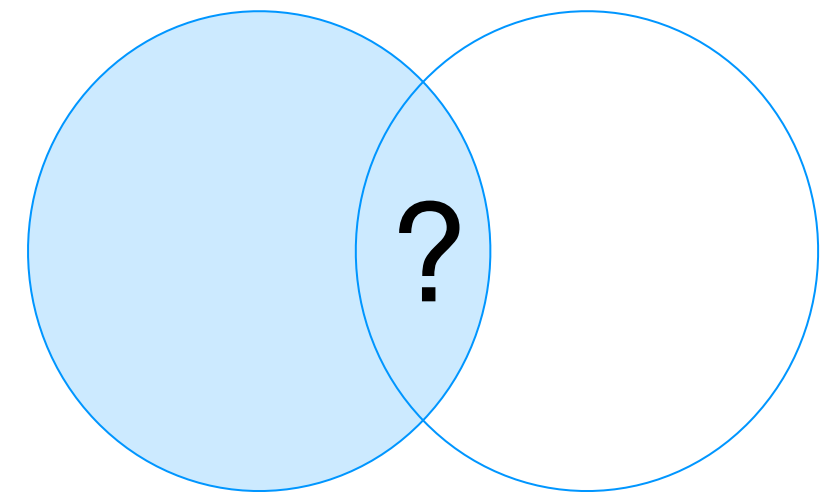
The reality? implicit and unstructured

- Most web content about places and location is unstructured
- Harvesting requires sophisticated NLP and inference
- Does not scale

```
<h3>Visiting Address</h3>
<p>Netherland Institute for Sound and Vision<br />Media
Parkboulevard 1<br />1217 WE Hilversum</p>
<p>If your navigation system does not recognize our
(new) adress, you can find us on Sumatralaan 45, 1217
GP Hilversum.</p>
<h2>Postal Address</h2>
<p>Nederlands Instituut voor Beeld en Geluid Media
Park, <br />Postbus 1060<br />1200 BB Hilversum</p>
<h2>Opening hours</h2>
<ul><li>The experience is open Tuesday - Sunday, 10.00
- 17.30h</li>
<li>Closed on monday</li>
</ul><h2>Entrance prices</h2>
<ul><li>Adults: € 16,00</li>
<li>Children between the ages of 4 and 12: € 9,00</li>
<li>Children up to age 3: Free</li>
</ul>
```

Did someone say Linked [Open] Data?

A problem shared ...



Linked Data

Geospatial



Linking Geospatial Data, Mar 2014, London



Miss Globe and Mister Cube ...



Linking Geospatial Data, Mar 2014, London



60 second summary: key questions

- how should we encode geometry?
- how and where should we implement topological functions?
- additional metadata is required for spatial datasets – how do we do that?
- where is the software support for spatial datatypes and functions?
- geometries expressed as WKT literals are large objects — the Linked data world is used to handling simple literals
- how do we help developers handle (or avoid) the steep learning curve to work with Linked Data?

<https://www.w3.org/2014/03/lgd/report>



Linking Geospatial Data, Mar 2014, London



Spatial Data on the Web working group

<http://www.w3.org/2015/spatial>

- to determine how spatial information can best be integrated with other data on the Web;
- to determine how machines and people can discover that different facts in different datasets relate to the same place, especially when 'place' is expressed in different ways and at different levels of granularity;
- to identify and assess existing methods and tools and then create a set of best practices for their use;
- to complete the standardization of informal technologies already in widespread use.

<http://www.w3.org/2014/05/geo-charter>

“

”

Where relevant, it will promote Linked Data using the 5 Stars of Linked Data paradigm, but this will not be to the exclusion of other technologies

Best practices deliverable



- 5-star data with a spatial rosette?
- [best] practice not theory

Editors: Jeremy Tandy, Payam Barnaghi, Linda van den Brink

Editors draft: <http://w3c.github.io/sdw/bp>

We're not alone ...

W3C® *Data on the Web Best Practices*

<http://www.w3.org/TR/dwbp/>

What's the current status?

First Public Working Draft (FPWD)

- 30 best practices organised into 5 themes & underpinned by dozens of use cases ...

Assigning identifiers | Expressing spatial data | Linking spatial data

Enabling discovery | Exposing datasets through web services

[Best Practice 1](#): Use globally unique HTTP identifiers for entity-level resources

[Best Practice 2](#): Reuse existing (authoritative) identifiers when available

[Best Practice 3](#): Convert or map dataset-scoped identifiers to URIs

[Best Practice 4](#): Provide stable identifiers for Things (resources) that change over time

[Best Practice 5](#): Provide identifiers for parts of larger information resources

[Best Practice 6](#): Provide a minimum set of information for your intended application

[Best Practice 7](#): How to describe geometry

[Best Practice 8](#): Specify Coordinate Reference System for high-precision applications

[Best Practice 9](#): How to describe relative positions

[Best Practice 10](#): How to describe positional (in)accuracy

[Best Practice 11](#): How to describe properties that change over time

[Best Practice 12](#): Use spatial semantics for Spatial Things

[Best Practice 13](#): Assert known relationships

[Best Practice 14](#): Provide context required to interpret observation data values

[Best Practice 15](#): Describe sensor data processing workflows

[Best Practice 16](#): Relate observation data to the real world

[Best Practice 17](#): How to work with crowd-sourced observations

[Best Practice 18](#): How to publish (and consume) sensor data streams

[Best Practice 19](#): Make your entity-level links visible on the web

[Best Practice 20](#): Provide meaningful links

[Best Practice 21](#): Link to spatial Things

[Best Practice 22](#): Link to resources with well-known or authoritative identifiers

[Best Practice 23](#): Link to related resources

[Best Practice 24](#): Use links to find related data

[Best Practice 25](#): Make your entity-level data indexable by search engines

[Best Practice 26](#): Include spatial information in dataset metadata

[Best Practice 27](#): Publish data at the granularity you can support

[Best Practice 28](#): Expose entity-level data through 'convenience APIs'

[Best Practice 29](#): APIs should be self-describing

[Best Practice 30](#): Include search capability in your data access API

FPWD: <http://www.w3.org/TR/sdw-bp/>

“

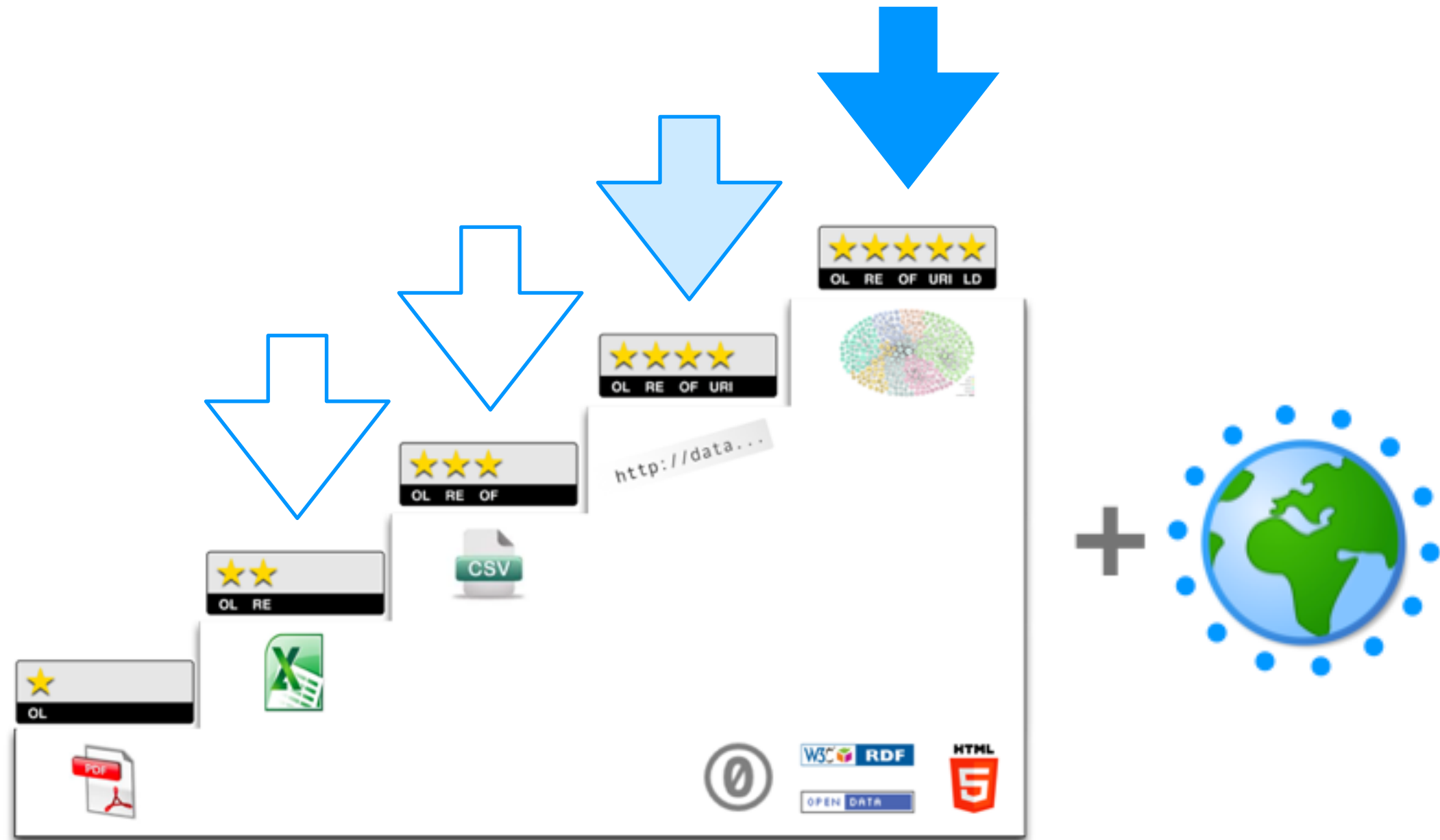
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Best Practice 1: *Use globally unique HTTP
identifiers for entity-level resources*

Who are we trying to help?

- Everyone - because spatial data is really useful! ...
- But we really need to focus on the gatekeepers:
 - Web developers
 - Spatial data custodians & publishers

Is this for '*Linked-Dataverts*' only?



Too focused on the `<http://dbpedia.org/resource/holygrail>*`?

And finally ...

We need you!

- help us provide something that's useful for you ...
- review the working drafts;
- participate in discussion;
- ...
- maybe even join the working group.
- specific requests:
 1. what [software] architectures are you using in your spatial applications?
 2. which formats do you typically publish data in today?
 3. what kind of spatial data are you trying to publish? 1d, 2d, 3d etc.
 4. what is preventing you from using spatial data in your applications / decision making?
 5. help us structure the BP doc to suit a short attention span
 6. tell us about examples of implementation from the real world
 7. tell us what we are missing
 8. tell us what you want from this

Questions please ...

<mailto:public-sdw-comments@w3.org>



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