Where is everywhere: bringing location to the Web

Spatial data on the Web Best Practices (OGC 15-107)

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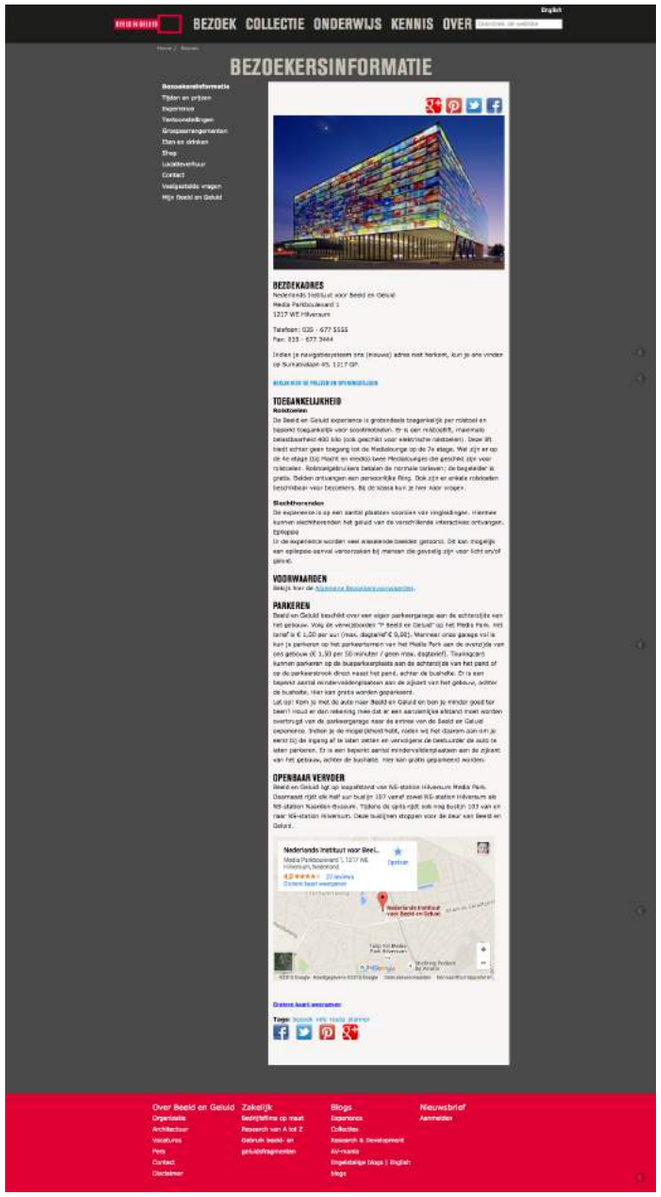
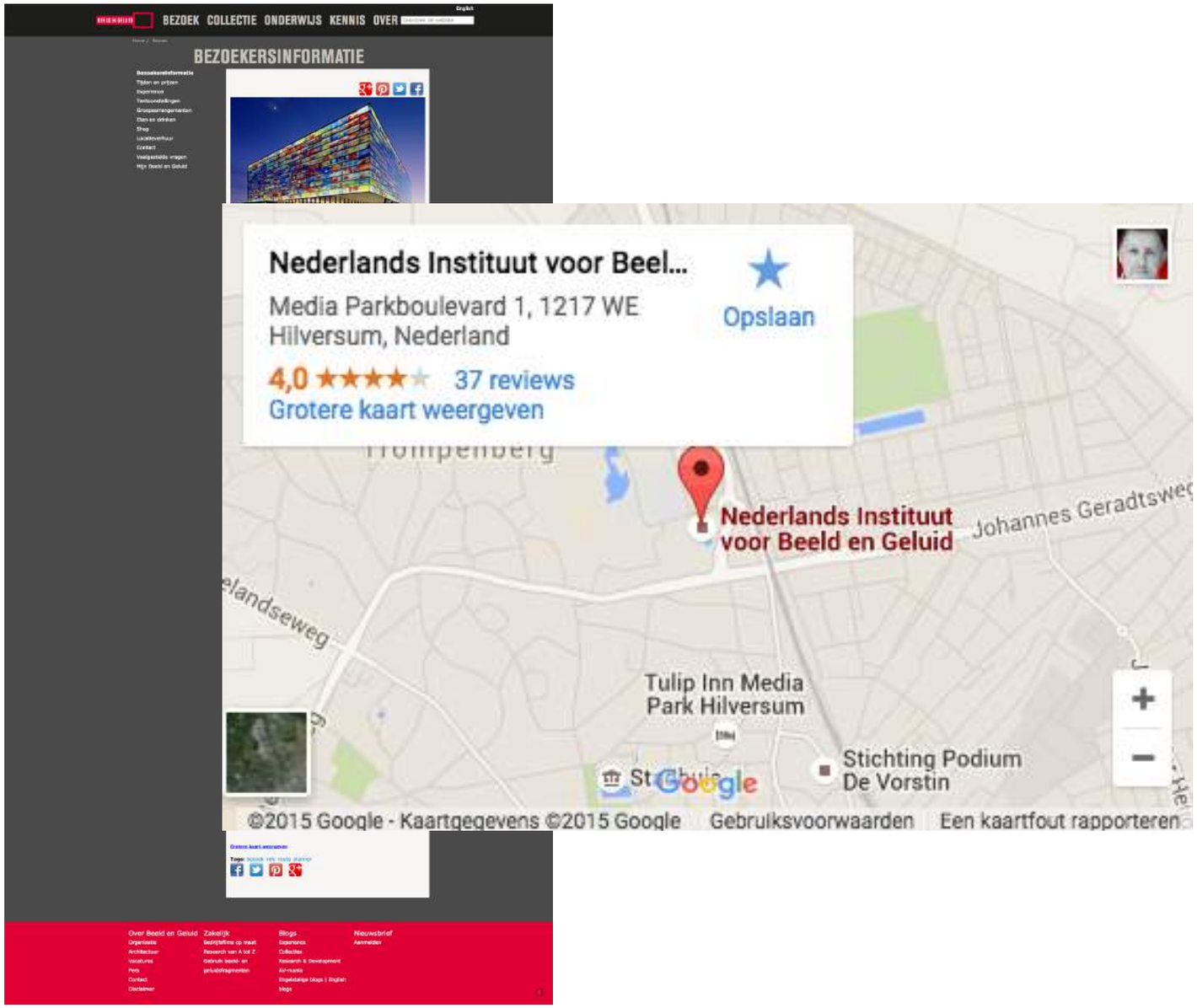
What’s the problem?

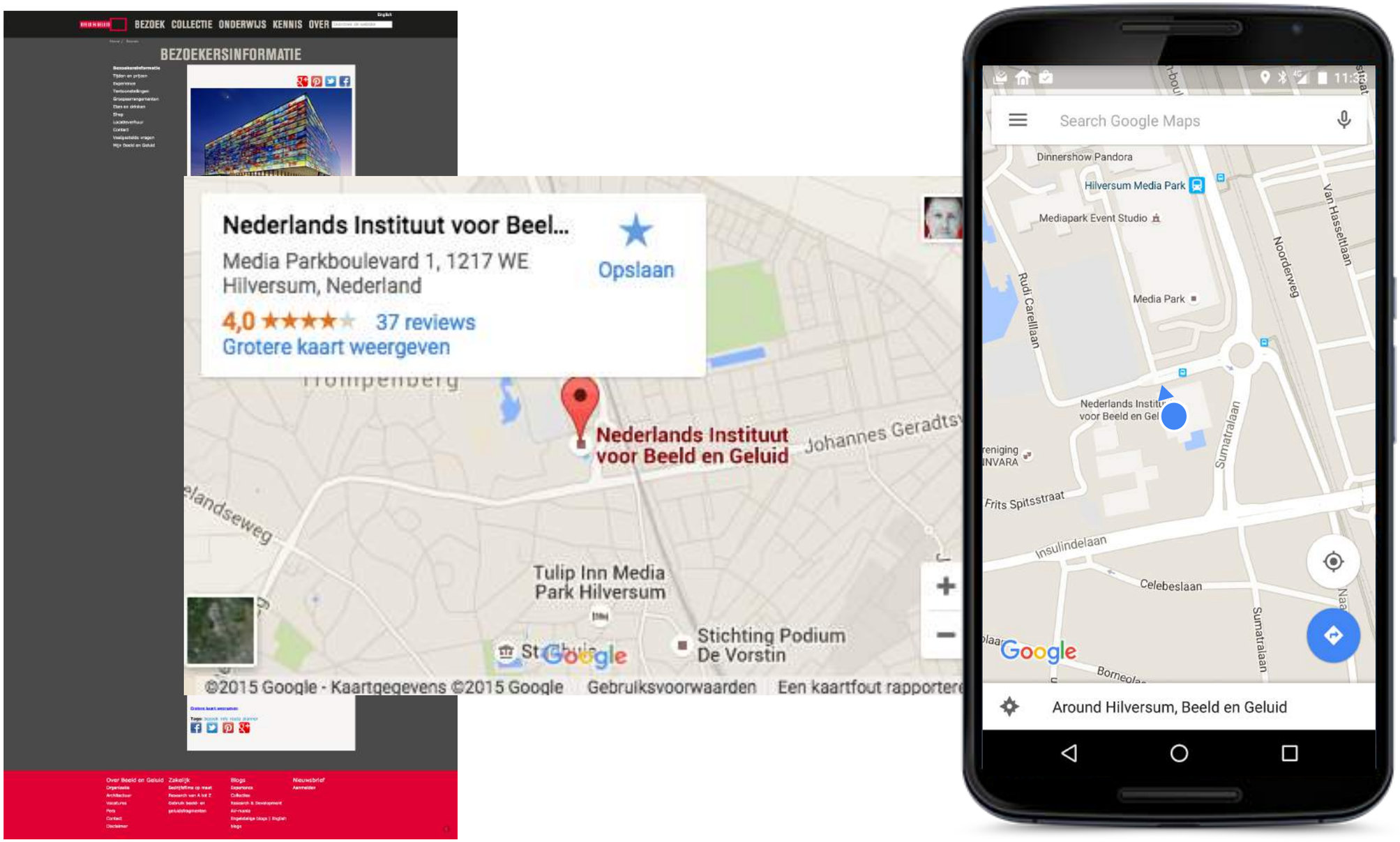
What we expect



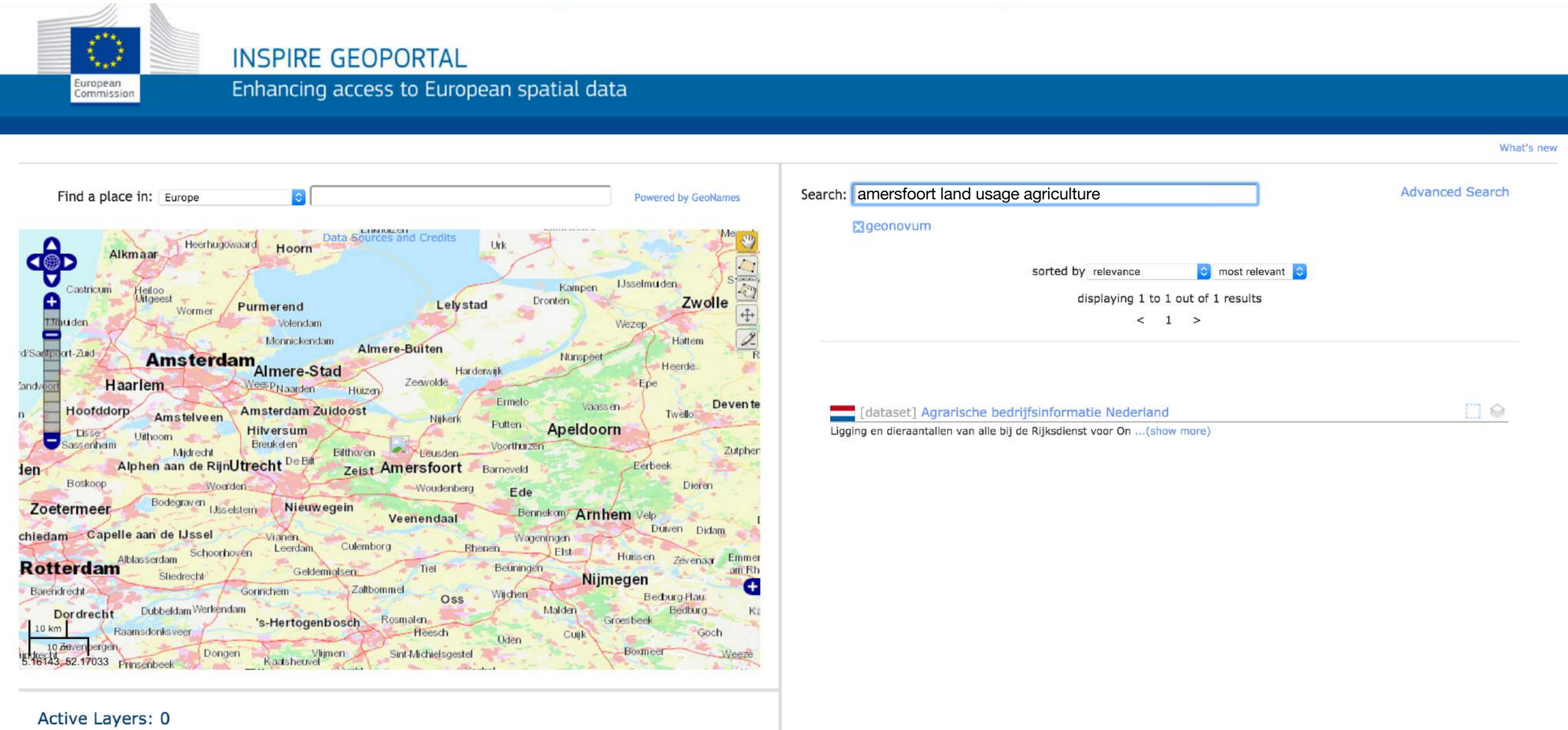
What we expect



What we expect



What we get: spatial data infrastructures



Two step search; unfamiliar protocols

INSPIRE GEOPORTAL

Enhancing access to European spatial data

Find a place in: Europe

Powered by GeoNames

Data Sources and Credits

Active Layers: 0

INSPIRE Metadata CLOSE THIS WINDOW

Translate this page Original

Microsoft® Translator

(NL) - Agricultural business information Netherlands

Spatial data set

Metadata Language Dutch

Resource Language Dutch

Metadata Date 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

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

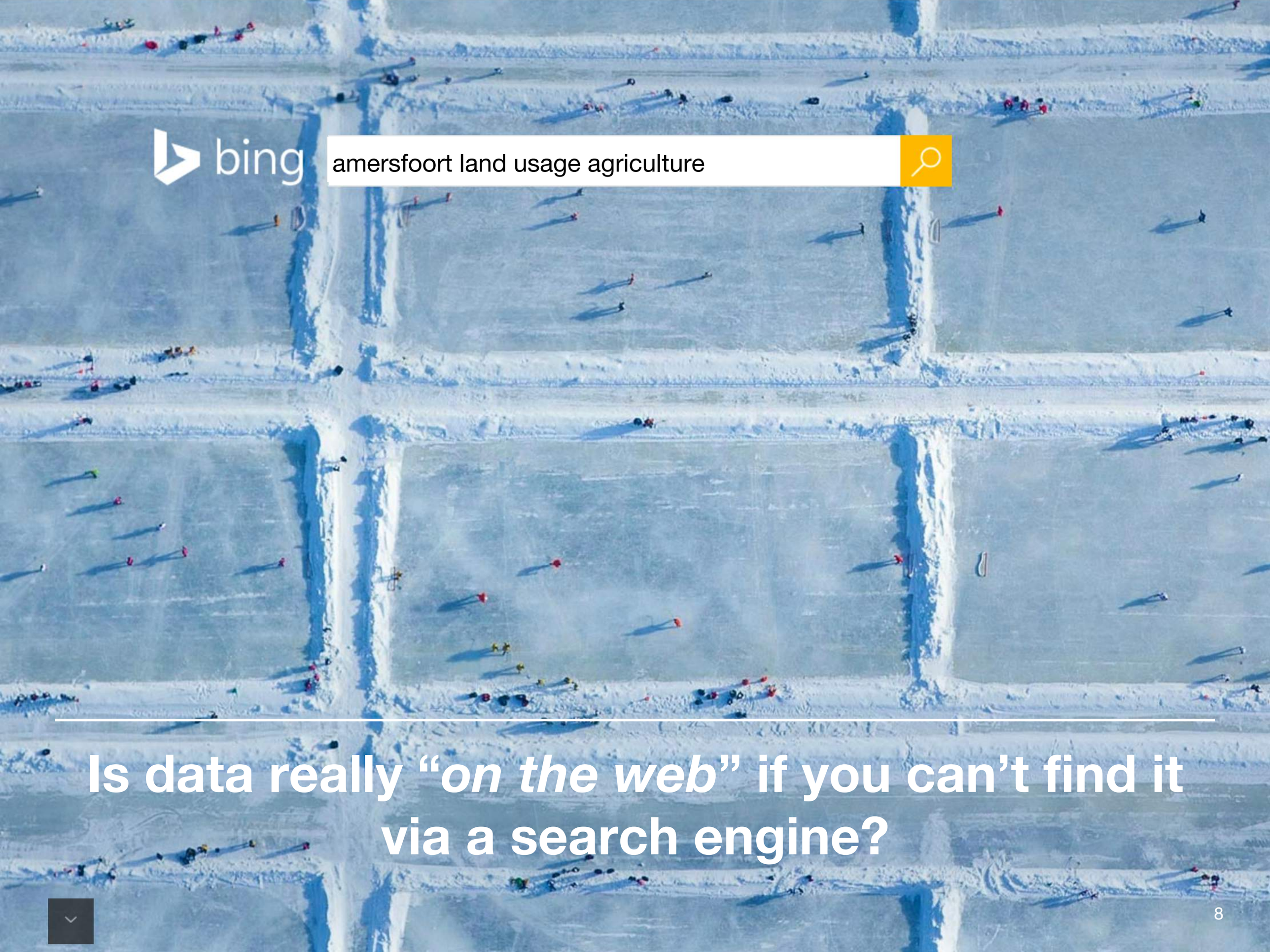
Farming

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:



Is data really "*on the web*" if you can't find it via a search engine?

The other end of the spatial data spectrum: implicit and unstructured

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

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<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>
```

60 second summary: key questions

- how should we encode geometry?
- how and where should we implement topological relations?
- 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

SDW working group charter

- 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.

https://www.w3.org/2014/05/geo-charter

Best Practices deliverable

https://www.w3.org/TR/sdw-bp/

Overview

- best practice not theory
- focus mainly *geo*spatial data (not broader spatial data)
- building on:

W3C *Data on the Web Best Practices*

https://www.w3.org/TR/dwbp/

- 5-star data with a spatial rosette?

Audience

- Everyone - because spatial data is really useful! …

- But we really need to focus on the gatekeepers:
  - Web developers
  - Spatial data custodians & publishers

Introductory material

6. Spatial Things, Features and Geometry

7. Coverages: describing properties that vary with location (and time)

8. Spatial relations

9. Coordinate Reference Systems (CRS)

10. Linked Data

11. Why are traditional Spatial Data Infrastructures not enough?

Best practices

Best Practice 1: Use globally unique persistent HTTP URIs for Spatial Things

Best Practice 2: Make your spatial data indexable by search engines

Best Practice 3: Link resources together to create the Web of data

Best Practice 4: Use spatial data encodings that match your target audience

Best Practice 5: Provide geometries on the Web in a usable way

Best Practice 6: Provide geometries at the right level of accuracy, precision, and size

Best Practice 7: Choose coordinate reference systems to suit your user's applications

Best Practice 8: State how coordinate values are encoded

Best Practice 9: Describe relative positioning

Best Practice 10: Use appropriate relation types to link Spatial Things

Best Practice 11: Provide information on the changing nature of spatial things

Best Practice 12: Expose spatial data through 'convenience APIs'

Best Practice 13: Include spatial metadata in dataset metadata

Best Practice 14: Describe the positional accuracy of spatial data

Gaps

13. Gaps in current practice

13.1 Requesting different representations of geometries

13.2 Spatial data vocabulary

13.3 Describing dataset structure and service behaviors

13.4 Publishing dynamic and large datasets on the Web

13.5 Helping software understand units of measure

13.6 Defining that two places are the same

13.7 Discovering what refers to a Spatial Thing

Questions please …

mailto:public-sdw-comments@w3.org

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