

Open data portals as part of the open data ecosystem: lessons learned from geoportal research

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Overview

- Spatial data ecosystem
- Access network: geoportals
- Comparing geoportals and web search performance (2010 research)
- Comparing geoportals and open data portal performance (2016 research)
- Reflection
- Testing two portals of the EU

Spatial data ecosystem (formerly known as spatial data infrastructure)

- network-based solutions which enable easy, consistent and effective access to geo-information and services offered by public agencies and others

(Rajabifard and Williamson, 2002)

Spatial data ecosystem objective

- To enable users to save resources, time and effort when trying to acquire (new) data sets

(Rajabifard and Williamson, 2002)

Save resources, time and effort: user perspective



Backx 2003

Access network

- Geoportal:
 - one-stop shop for geoinformation (Crompvoets et al., 2004).

Access network

- Geoportal:
 - one-stop shop for geoinformation (Crompvoets et al., 2004).
 - **significant cost reductions** related to searching, assessing and accessing geo-information can be achieved (see Askew et al., 2005; Beaumont et al., 2005).
- Empirical evidence lacking

Assessing geoportals

- Geoportal (focus on supply):
 - one-stop shop for geoinformation (Crompvoets et al., 2004).
- Web (focus on use):
 - “illusion of an easy access” (Bates et al., 2002)
- Which one serves the user best?

Experiment: geoportal assessment

MSc students were assigned four tasks:

1. literature study on both (geo)portal theory and transaction cost theory: geoportal criteria
2. apply criteria to assess two portals of their choice
3. assess geoportals/ web from a transaction cost perspective (cost of time spent on finding, assessing, accessing, and acquiring geoinformation)
 1. Framework dataset at two sides of an administrative border
 2. For university assignment
4. discussion and experiences were reflected upon.

Goal: to experience the process of finding data, inquiring and acquisition

Assessing geoportals

Scenario	Number of students
Scenario 1 The students received information about the geoportal through which they should start searching for geoinformation	6 students
Scenario 2 The students not received any instructions where to search for geoinformation	7 students

Assessing geoportals

	Geoportal	Web
Succeeded		
Average time (minutes)		
Failed		
Average time (minutes)		

Assessing geoportals

	Geoportal	Web
Succeeded		4 (out of 14)
Average time (minutes)		158
Failed		10 (out of 14)
Average time (minutes)		70

Assessing geoportals

	Geoportal	Web
Succeeded	9 (out of 12)	4 (out of 14)
Average time (minutes)	253	158
Failed	3 (out of 12)	10 (out of 14)
Average time (minutes)	165	70

Characteristics experienced

	Geoportal	Web
validation data	yes	no
validation metadata	yes	no
structured provision of data	yes	no
support helpdesk	sometimes	no
sample data	sometimes	sometimes
data availability	some data only available through portal	some data only available through web

Experiences in 2010

- Where is the data? only metadata
- Contact portal manager failed: broken links/ mail addresses
- Language
- No direct access: registration process
- Payment required
- Limited use: no commercial use
- User friendliness: where should I go?
- Technical

Recommendations

- Fix the links
- Add at least sample data to test the data
- More coherency and compliancy of geoportals worldwide
- Perform user assessments to make the portal as user friendly as possible
- Make the portal known to the world: make sure it shows in the first ten hits in a general search engine

2016: how are the portals doing?

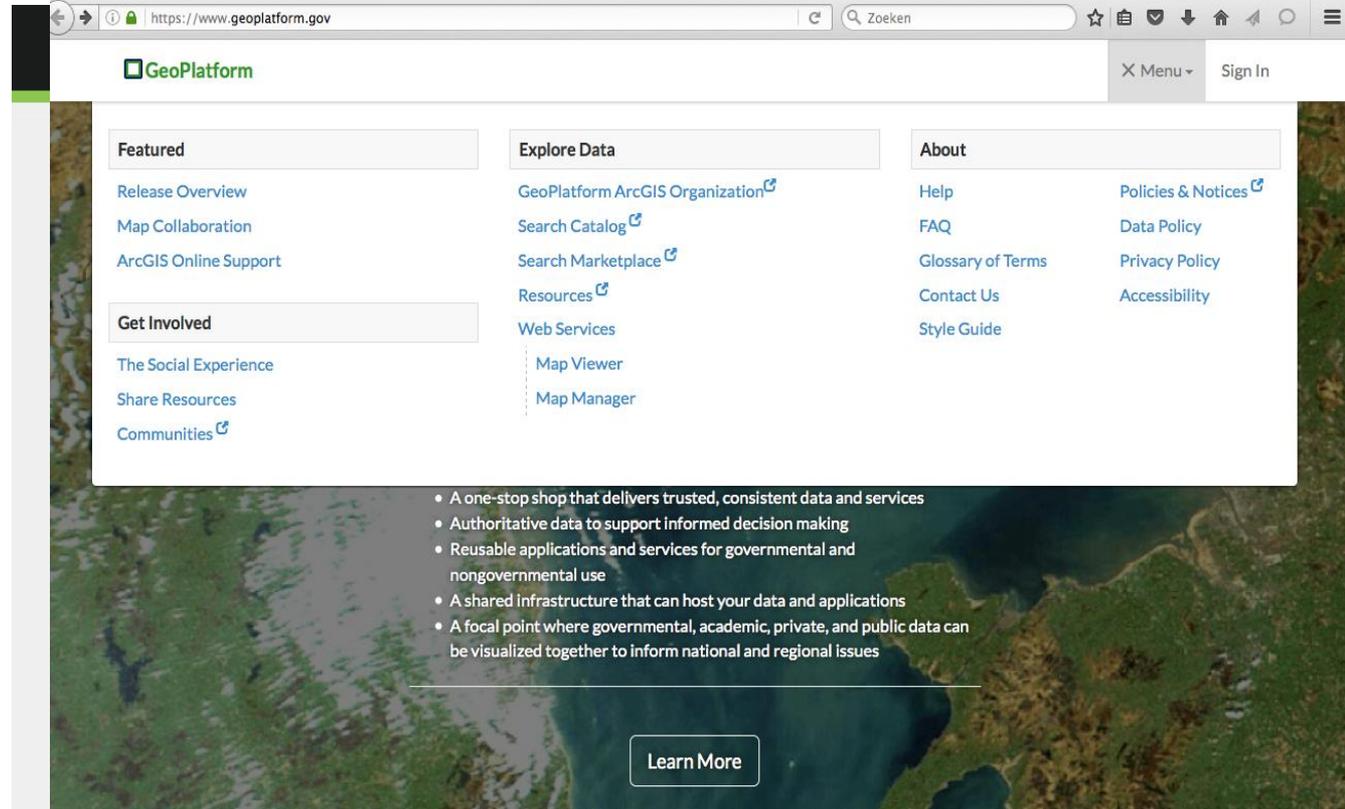
- Assessing geoportal and open data portals

14 students investigated

- 12 geoportals
- 13 open data portals
- 25 Key Performance Indicators developed

Geoportal development

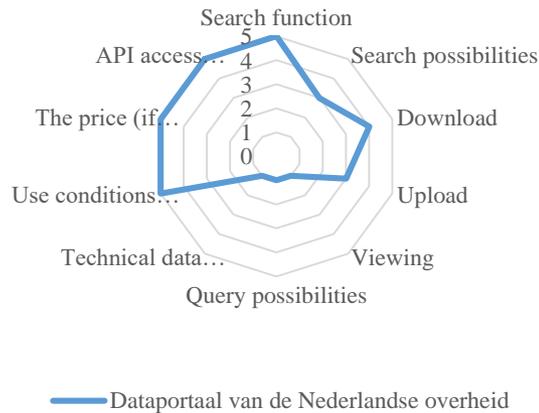
- No portal
- Project
- Product portal
- Clearinghouse
- Platform



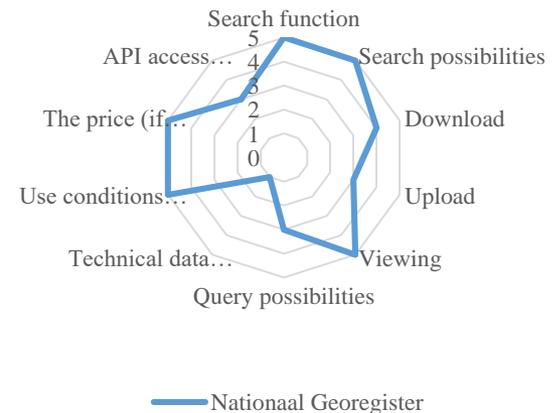
See: <http://www.sdiassessment.org/>

Comparing geoportal and open data portal (case NL)

Functionality (25%)



Functionality (25%)



Main overall findings (2016)

Open data portal

Scores well on:

- Q14 services (12/12)
- Contact possible (11/12)
- Moving between pages (12/12)
- User friendly search function (11/12)

- *Download for all data* (10/12)

- *No need to register* (12/12)

- *Link to other portals* (10/12)

Geoportal

Scores well on:

- Q14 services (11/11)
- Contact possible (10/11)
- Moving between pages (8/11)
- User friendly search function (11/11)

- *Standard metadata* (7/11)

Striking in 2016

Open data portal

- No (free) viewing for all data (5/12)
- Dead links 4/12
- But: statistics on dead links are also monitored, see <https://data.overheid.nl/statistiek/linkcheck>

Geoportal

- No free viewing for all data (6/11)
- Dead links 5/11
- No download for all data (9/11)

Remarkable findings geoportal

- Language:
 - Metadata in one 'home country' language
 - Searching in English possible, results in 'home country' language
- Jargon of spatial data
- Expert knowledge required to understand how to deal with the acquired files
- Free data but need to register
- Notification service for updates
- Functions on a mobile device, though the website is not adapted to screen size.

Remarkable findings open data portal

- Linking to the source for required information: depending on the source of the data finding a contact person varies from very easy to very difficult
- Rating datasets

Reflection

- Students and student assignment...!
- (geo)portals seem to add value in terms of successfully acquiring geoinformation
- No reliable results

If developing a portal, please note

A provider perspective

A screenshot of the Geonovum website showing a news article. The page has a blue header with navigation links: HOME, ACTUEEL, GEO-STANDAARDEN, DOSSIERS, DIENSTEN, and GEONOVUM. The article title is 'NATIONAAL GEOREGISTER GENOMINEERD ALS BESTE ICT-PROJECT VAN HET JAAR BIJ DE OVERHEID' in green and blue. The date is '28 mei 2010'. The text describes the nomination of the national georegister as the best ICT project of the year by the government, based on suggestions from readers of the magazine 'Computable' and website visitors. It mentions that four other projects were also nominated and that the award ceremony will be held on October 7, 2010. A small 'GEO' logo is visible on the right side of the article content.

HOME ACTUEEL GEO-STANDAARDEN DOSSIERS DIENSTEN GEONOVUM

[Home /](#)

NATIONAAL GEOREGISTER GENOMINEERD ALS BESTE ICT-PROJECT VAN HET JAAR BIJ DE OVERHEID

28 mei 2010

Het nationaal georegister heeft een nominatie te pakken. Deze nominatie voor 'beste ICT-project van het jaar bij de overheid' is gebaseerd op suggesties van de lezers van het weekblad *Computable* en bezoekers van de website. Naast het nationaal georegister zijn nog vier andere projecten genomineerd in deze categorie. Wie uiteindelijk op 7 oktober 2010 met de award naar huis zal gaan, bepalen de lezers van *computable.nl*.

Het project 'nationaal georegister' valt sinds 1 oktober 2010 onder het programma 'Publieke Dienstverlening op de Kaart'. Het nationaal georegister zelf wordt mogelijk gemaakt door de aanbieders van geo-informatie in Nederland. Dit zijn alle Nederlandse overheden, verschillende onderzoeksinstituten en bedrijven. In het nationaal

A user perspective

een oproep vanuit de Open Data wereld: "ArcGis World en Nationaal GeoRegister" [..]

"ArcGis World en Nationaal GeoRegister

In het kader van doorlopend onderzoek ben ik eens aan het klussen geslagen met de (open) datasets op Nationaal Georegister (<http://www.nationaalgeoregister.nl/geonetwork/srv/nl/main.home>) en ArcGis World (<http://www.arcgis.com/home/>).

"This website is not suitable at all for users to find any data. Even experienced users, like myself, remain puzzled about the offered content"

ten eerste krijg ik continue andere toelichtingen, of andere manieren waarna verder samen omhoog te gaan. Zelfs het me foutloos te zoeken, dan is er geen wegwijs te worden uit de aangeboden data. Als ik uit puur ongeduld maar wat datasets selecteer kan ik niets downloaden of als service benaderen. Kortom, de site is onbruikbaar binnen een Open Data strategie.

Overigens wil ik daarmee het initiatief van het Nationaal GeoRegister niet opzij zetten. Het is een belangrijk initiatief, dat marktpartijen en particulieren kan stimuleren allerlei kaarten en apps te ontwikkelen via oplossingen zoals ArcGis World.

Wel zou ik GeoNovum willen aanraden contact op te nemen met Paul SuijkerBuijk als mr. OpenData binnen de ICTU voor opname van de datasets binnen de op voeten staande OpenData catalogus Nederland. De presentatie en vindbaarheid van data zal daarmee sterk verbeteren. [...]

Save resources, time and effort: user perspective



Backx 2003

Testing two portals of the EU

- Looking for address data of the Netherlands



INSPIRE GEOPORTAL

Enhancing access to European spatial data

EUROPEAN COMMISSION > INSPIRE > INSPIRE GEOPORTAL

What's new

Welcome to the INSPIRE geoportal

The INSPIRE Directive requires the Commission to establish a community geo-portal and the Member States shall provide access to their infrastructures through the geo-portal as well as through any access points they themselves decide to operate.

[More...](#)

Discovery / Viewer

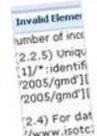
Search, discover and access geographic information provided by European governmental, commercial, and non-commercial organizations.



[More ...](#)

Validator

The purpose of the INSPIRE Metadata Validator is to test the compliance of INSPIRE metadata with the INSPIRE Metadata Regulation.



[More ...](#)

Metadata Editor

Create metadata according to the INSPIRE implementing rules.



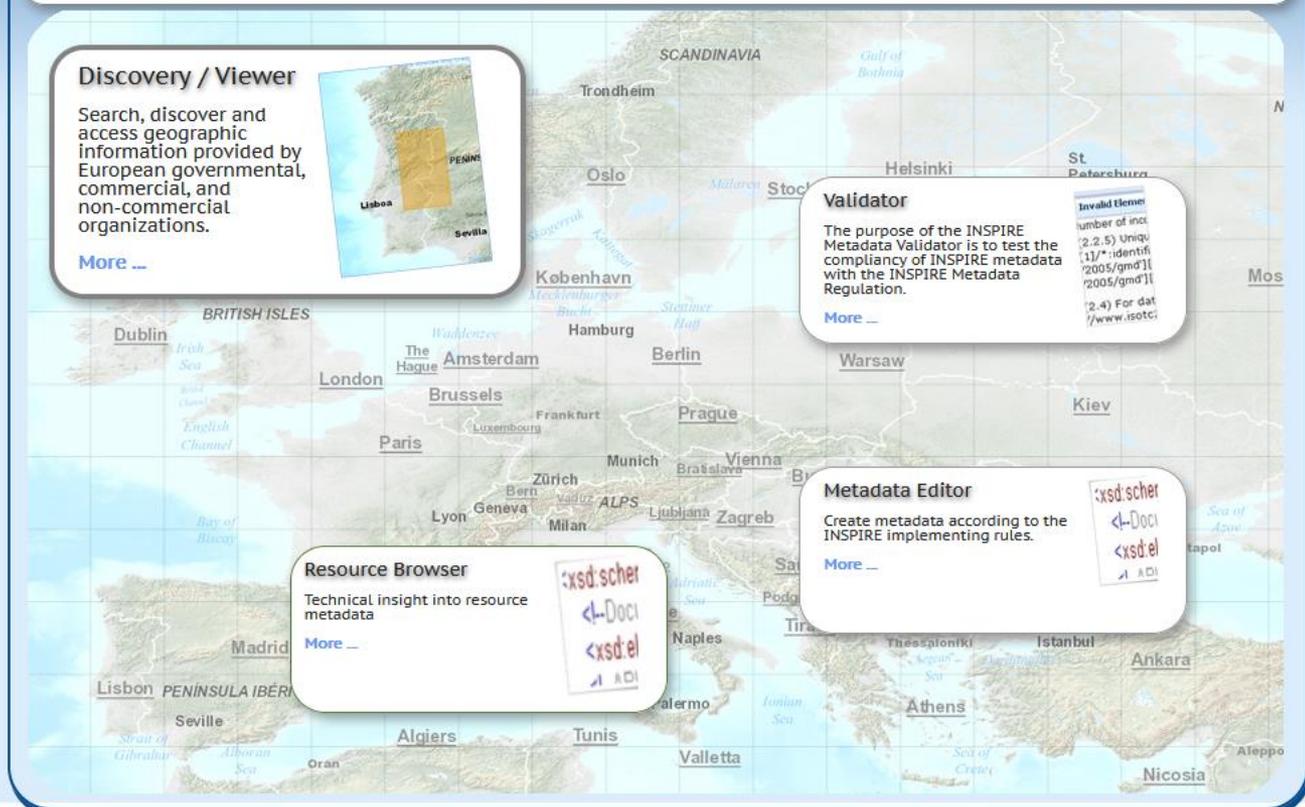
[More ...](#)

Resource Browser

Technical insight into resource metadata



[More ...](#)



Search for address Netherlands



Search:

address netherlands

sorted by

displaying 0 to 0 out of 0 results

But if 1. addresses and 2. Netherlands

Find a place in: Europe Powered by GeoNames



Active Layers: 0

INSPIRE Metadata CLOSE THIS WINDOW

Microsoft Translator Translate this page? English

Translate this page English
Microsoft Translator

 (NL) - Adressen (INSPIRE geharmoniseerd)

Metadata Language	Resource Language	Metadata Date
Dutch	Dutch	2015-12-30

Metadata Point Of Contact
Kadaster
E-mail: PPB-GVA@kadaster.nl

Responsible Party
Point Of Contact: Kadaster
E-mail: kcc@kadaster.nl

Spatial data set

Conditions Applying To Access And Use
Geen gebruiksbeperkingen

Limitations On Public Access
<http://creativecommons.org/publicdomain/zero/1.0/deed.nl> Geen beperkingen

Get Map

Resource Title
Adressen (INSPIRE geharmoniseerd)

Spatial Data Theme
Addresses (Adressen)

Topic Category
Location
Transportation

Resource Abstract
INSPIRE Adressen themalaag, geharmoniseerd. Gevuld met relevante objecten uit de Basisregistratie Adressen en Gebouwen (BAG), beheerd door het Kadaster.

Lineage
Ontwikkeld uit de Basisregistratie Adressen en Gebouwen (BAG)

Search Datasets

Enter keywords...



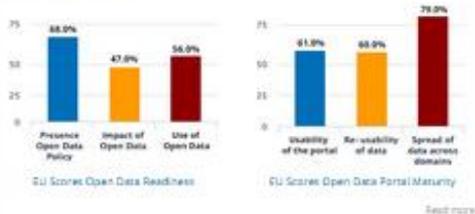
Browse Datasets by Categories

- Agriculture, Fisheries, Forestry & Food
- Energy
- Regions & Cities
- Transport
- Economy & Finance
- International Issues
- Government & Public Sector
- Judice, Legal System & Public Safety
- Environment
- Education, Culture & Sport
- Health
- Population & Society
- Science & Technology
- Catalogues
- All data

Latest News

- Workshop on the Data Economy during the Digital Assembly 2017 08/05/2017
 - Results from Italian Open Data research published 05/05/2017
 - Dutch Data Science Week 04/05/2017
 - Open Data Hackathon Deutsche Bahn 03/05/2017
- [RSS](#) [More news](#)

Open Data in Europe



Open Data Events in Europe

- Tue, 09 May to Fri, 12 May**
Agile 2017
Wageningen, Netherlands
 - Tue, 09 May**
Open Data for Open Cities, AGILE Workshop
Wageningen, the Netherlands
 - Wed, 10 May**
PSI Alliance roundtable
Brussels, Belgium
 - Fri, 12 May to Sat, 13 May**
4th OD Open Data Hackathon, German Railway
Berlin, Germany
- [View calendar](#)

Featured Highlights

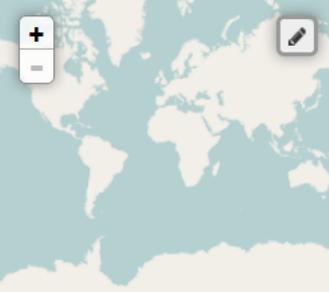
- Barriers in working with Open Data 03/03/2017
 - Version 2.0 of the European Data Portal now live! 01/03/2017
 - How to make an Open Data Portal sustainable 13/02/2017
 - How is Open Data being re-used in Europe? 11/01/2017
 - The most popular datasets 12/04/2017
 - Featured data: Open Data on business climate 28/03/2017
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Tweets by @EU_DataPortal

Tweets by @EU_DataPortal

 Filter by location [Clear](#)

Search Location...



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Y Countries

- Czech Republic (209549)
- Germany (207016)
- United Kingdom (44162)
- Italy (30599)
- France (26630)

 Datasets Feed [Save Query](#)

address netherlands 

84 datasets found for "address netherlands"

Order by: Last Modified ▾

Take limit EHS and nature and water zone

The National Ecological Network (EHS) is a consistent network of nature and agricultural areas with high ecological value. The EHS is aimed at preserving, protecting and...

 National Georegister of the Netherlands | June 11, 2016

Very sensitive areas,

The for ammonia very sensitive areas, designated on the basis of Article 2(1) Amendment of Ammonia and Stockbreeding Act (Wav). — The Ammonia and Stockbreeding Act (Wav)...

 National Georegister of the Netherlands | June 11, 2016

Very sensitive areas according to Ammonia and Stockbreeding Act

Filter by location [Clear](#)



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▼ Countries

Czech Republic (209549)

Germany (207016)

United Kingdom (44162)

Italy (30599)

France (26630)

Spain (26195)

Netherlands (18478)

Finland (9388)

Belgium (5993)

Greece (5337)

Show More Countries

▼ Catalogues

Geoportal Czech Office for

 Datasets Feed

187 datasets found for "address" Order by: ▼

Countries: Netherlands

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 National Georegister of the Netherlands | October 31, 2016

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The ammonia very sensitive areas designated under Article 2(1) Amendment of Ammonia and Stockbreeding Act (Wav). — The Ammonia and Stockbreeding Act (Wav) protects against the...

 National Georegister of the Netherlands | October 31, 2016

For public buildings, energy labels registered utiliteit-en

Addresses (INSPIRE) WFS

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Catalogue



National Georegister of the Netherlands

Geo Data Portal Netherlands
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Licence

No licence information found.

[Dataset](#)
[Categories](#)
[Activity Stream](#)

[Feedback](#)

The title and description of this dataset are machine translated.
Original language: Dutch

Addresses (INSPIRE) WFS

INSPIRE addresses themalaag, filled with relevant objects from the Basic Register of Addresses and Buildings (BAG), managed by the land register.

Distributions

[download \(UNKNOWN\)](#)

Tags

[Addresses](#)
[Adressen](#)
[WFS](#)
[infoFeatureAccessSe...](#)

Dataset extent



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Additional Info

Field	Value
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Wrap up

- national geoportals added value for users if data published in the portal (& some data only published in a portal)
- Performance national geoportals and open data portals comparable
- Test the performance of your portal frequently:
 - Fix the links!
 - Involve users
- Users?
 - Who are the envisioned users of the portal?
 - User friendliness?
 - Multilingual portal?

- Visit www.sdiassessment.org for the status of geoportals worldwide

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