







22-26 April, Hanoi, Vietnam







Dorus Kruse

■ Kadaster (Cadastre, Land Registry, Mapping Agency of The Netherlands)

How to increase the usage of an NSDI from 1 billion hits to 10 billion hits in 5 years.

The Dutch NSDI called PDOK (Public Services on the Map)

by: Kadaster Netherlands









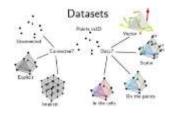
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Essence:

Distribution platform for Geo-Information in the Netherlands





















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Statistics PDOK:

Statistics PDOK:

- PDOK is growing:
 - 2015: 2,1 billion hits;
 - 2016: 4,4 billion hits;
 - 2017: 7 billion hits;
 - 2018: 10 billion hits;
 - 2019: 20 billion hits?
- 29 million datacalls per day (webservices)
- 158 datasets available at this moment
- > 60 INSPIRE datasets
- >400 view- en downloadservices
- > 450 governments registred at PDOK
- PDOK: open 24/7
- Availability > 99.5 %, therefore PDOK meets INSPIRE standards















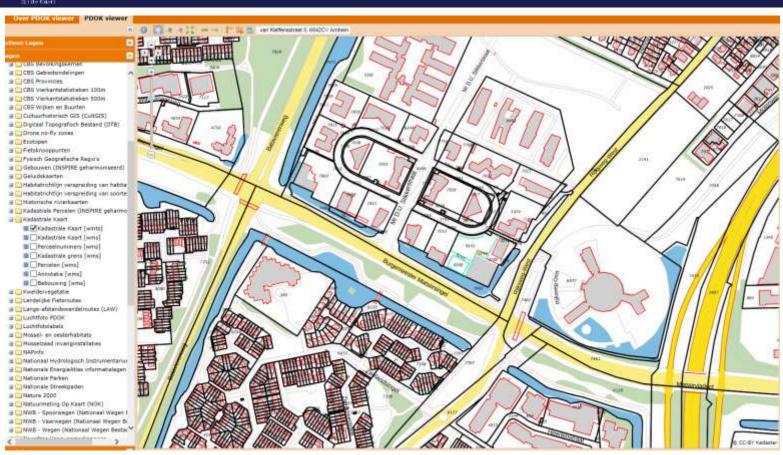


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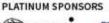


Cadastral Map:















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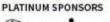


Drones fly- / no fly zones:















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Buildings and Addresses Key Register (BAG):















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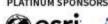


BGT(Large Scale Topographic Key Register):











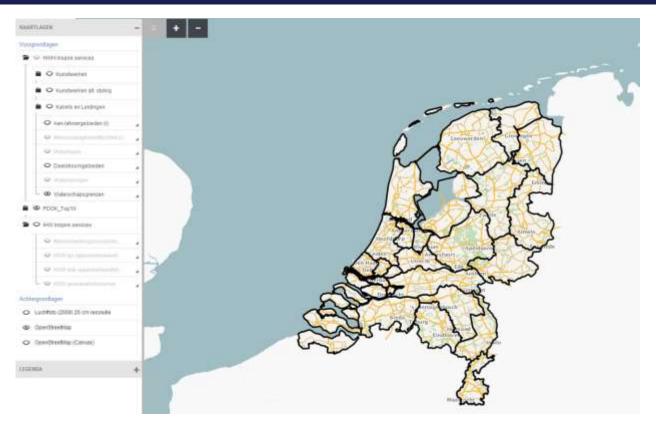


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Waterboards:















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Zeeland

Nature parks / areas:











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Province Zuid Holland Spatial Planning:













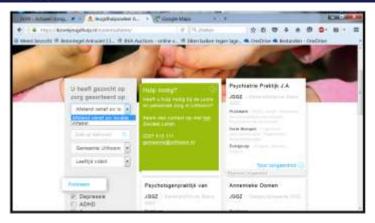


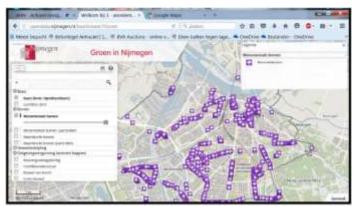
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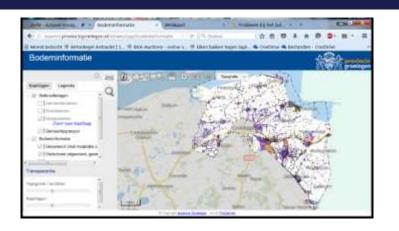


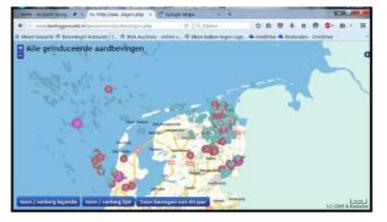


Applications using the PDOK data:



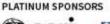


















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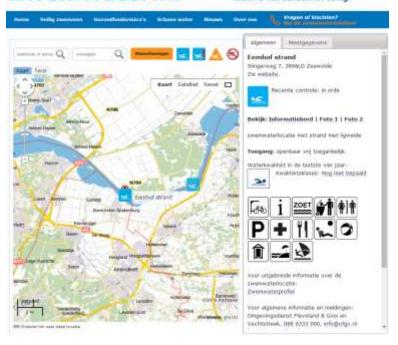


Viewers:

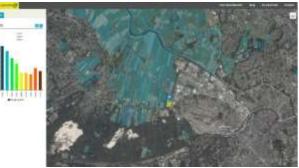




Zwemmen in natuurwater Waar is het schoon en veilig?





















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What is PDOK?

- PDOK is a central platform which stores and distributes (nationwide) datasets provided by government organizations
- Datasets are distributed via webservices and via direct downloads.
- Webservices contain online view- and downloadservices
- Data is free to use
- High update frequency
- Almost 100% up and running
- Data-owners are responsible for the content
- Data-owners decide (if) when and how data is provided via **PDOK**









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Authoritative data (1):

- ✓ UK Government will fund 80 million pounds to open OS MasterMap for small businesses!
 - ✓ This will unlock up to 11 billion pounds of extra value for the economy every year by:
 - ✓ improving the access to, links between, and quality of their data.









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Authoritative data (2):

- Poor quality data costs the US economy \$3.1 trillion each year!
 - This is an estimation by IBM.
 - Costs are management of poor data and consequences of applying incorrect data:
 - Time wasted by users validating and correcting data themselves and not providing this feedback to the data owner;
 - Lost revenue from misdirected sales, marketing en service efforts;
 - Resources wasted through acting on decisions built on bad data;
 - Lives put at risk through the inaccurate plotting of utility networks or the misrouting of emergency services.









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Governance of PDOK:

Partners:

- ✓ Ministry of the Interior and Kingdom Relations
- ✓ Department of Waterways and Public Works
- ✓ Ministry of Economic Affairs, Agriculture & Innovation
- ✓ Cadastre, Land Registry, Mapping Agency of NL
- ✓ Geonovum (NSDI executive committee)

















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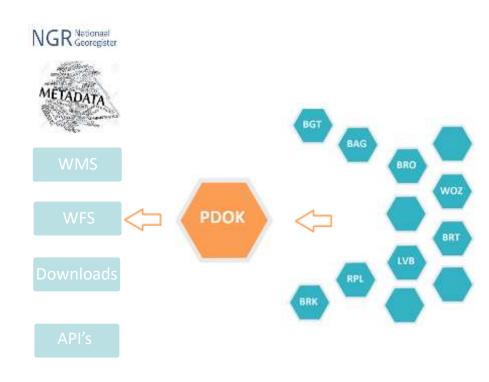




About PDOK:

















Nieuwste.

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Categorieen

Alle categorieën >





PDOK Forum:

https://forum.pdok.nl

GEO for um

Categorie Topics Datasets 4.1 work Heeff u hulp nodig bij of vragen over het gebruik van één van de vele (open) datasets die in Nederland beschikbaar zijn? Sterze Nier DRT THE AND BOT mutation Vector Tiles Toepassingen 1 / week Hier kunt u vragen stellen en kennis delen rond applicaties, diensten en inflatieven die vaak gebruik maken van meerdere Datasets. Standaarden 2 I week Hier Kunt u vragen stellen en kennis delen rond (het gebruik van) geo-standaarden, met name de OGC standaarden Organisaties 1 / wask Hier vinden instellingen, stichtingen, verenigzigen en/ofgroeperingen een pleik, ledere organisable heeft eigen subcategorie. Events 2 / week Hier kunt u geo-bijeenkomsten delen en vinden. Denk aan meetups. collegebles, bacicathons, etc. Ceef naam event en datum in tilet

Nieuwste		
9	Gebruik van GeoJSON in REST API's (input gewenstl)	5 2d
D	Trage download BGT zip-bestanden	5tl 8
D	GML naar DWG/DXF	12 2d
	Terugmeldingen API - Voorlichtingssessie 10 oktober	0 2d
•	Bêta versie BGT WMS en WFS beschikbaar via PDOK	29 2d
9	Conriectie maken met de BAG via PowerBi	3 3d
(3)	App om makkelijk het kadaster dataset in te zien	3
©	QGIS Gebruikersdag 3 Oktober bij Ordina (Nieuwegein) Events **spec, capacit	0 4d













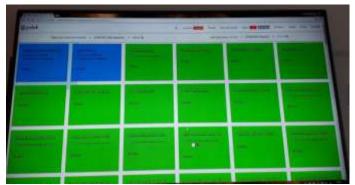
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PDOK quality checks

Quality control of the services and downloads





PDOK: open 7 x 24



continuous monitoring performance services











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Increase of Usage:













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Statistics:

Average availability of 99,5% (over 12 months)

















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Highest peak!











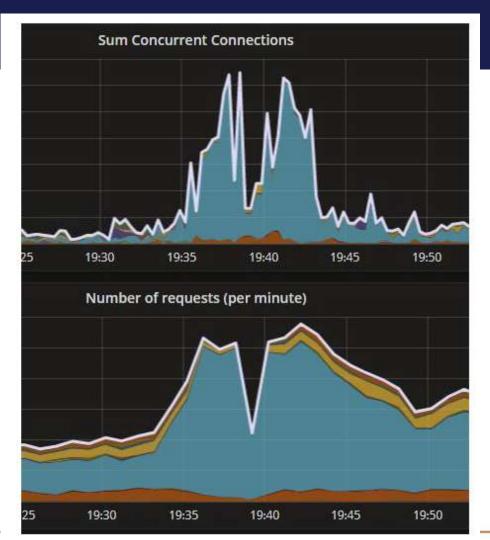




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Highest peak!













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Conclusion:

What is needed for starting this National Geo portal:

- Focus on most important datasets;
 - ✓ Topographical map
 - Background aerial ortho photo
 - **Buildings / Addresses**
 - Elevation data
- Increase content
- Usage will increase
- VAR's will increase to use it......













