



Ministerie van Infrastructuur en Milieu



INSPIRE in the Netherlands

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Michel Grothe, Geonovum*

19 November 2015

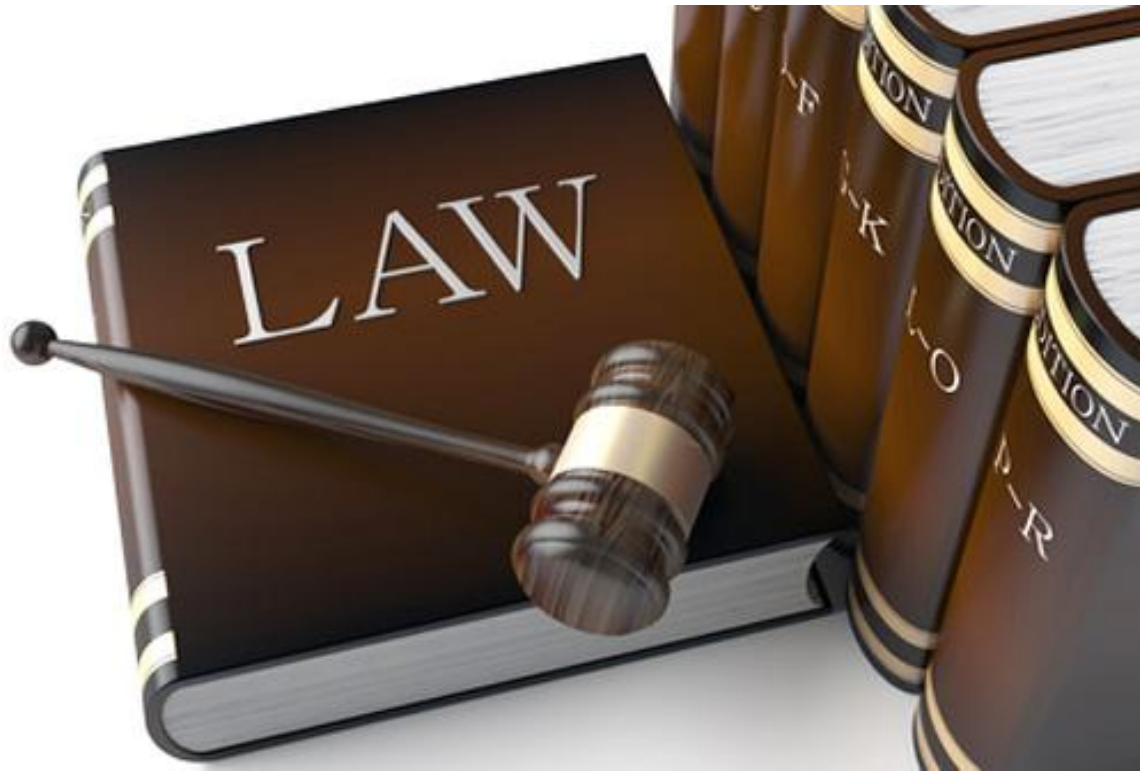
INSPIRE in the Netherlands

Agenda

1. INSPIRE organisation and responsibilities
2. The Dutch approach
3. INSPIRE data providers
4. INSPIRE data infra nodes
5. National georegistry & INSPIRE data guide
6. INSPIRE data licensing framework & open data in NL
7. Best practises!
8. Conclusions & challenges

1. INSPIRE organisation and responsibilities

One INSPIRE Law of **July 2nd 2009** to implement **Directive nr. 2007/2/EG** of the European Parliament and Council of March 14th 2007 to create an infrastructure for spatial information in the Union (**INSPIRE**)



1. INSPIRE organisation and responsibilities

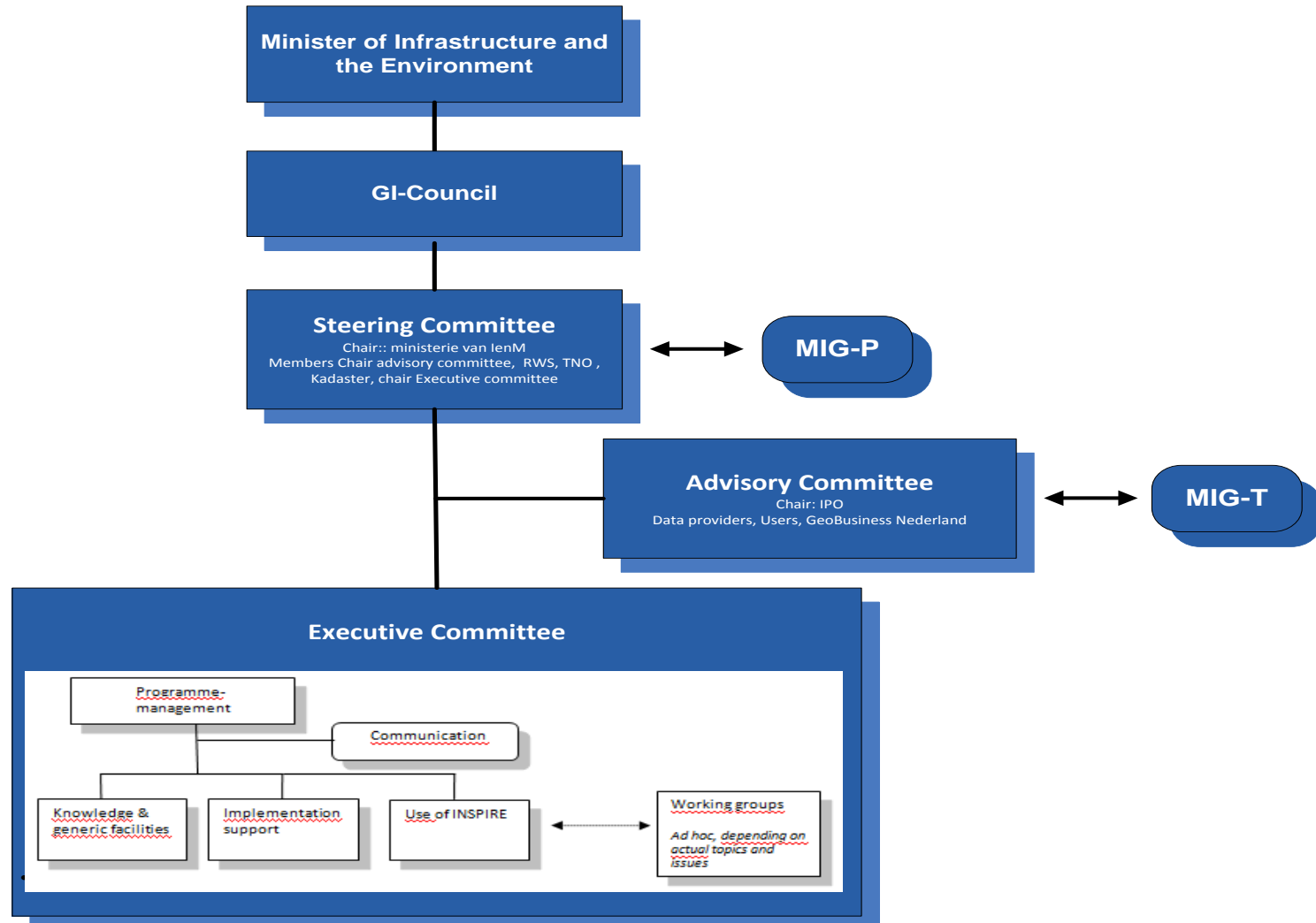


The Minister of Infrastructure and
Environment is overall responsible



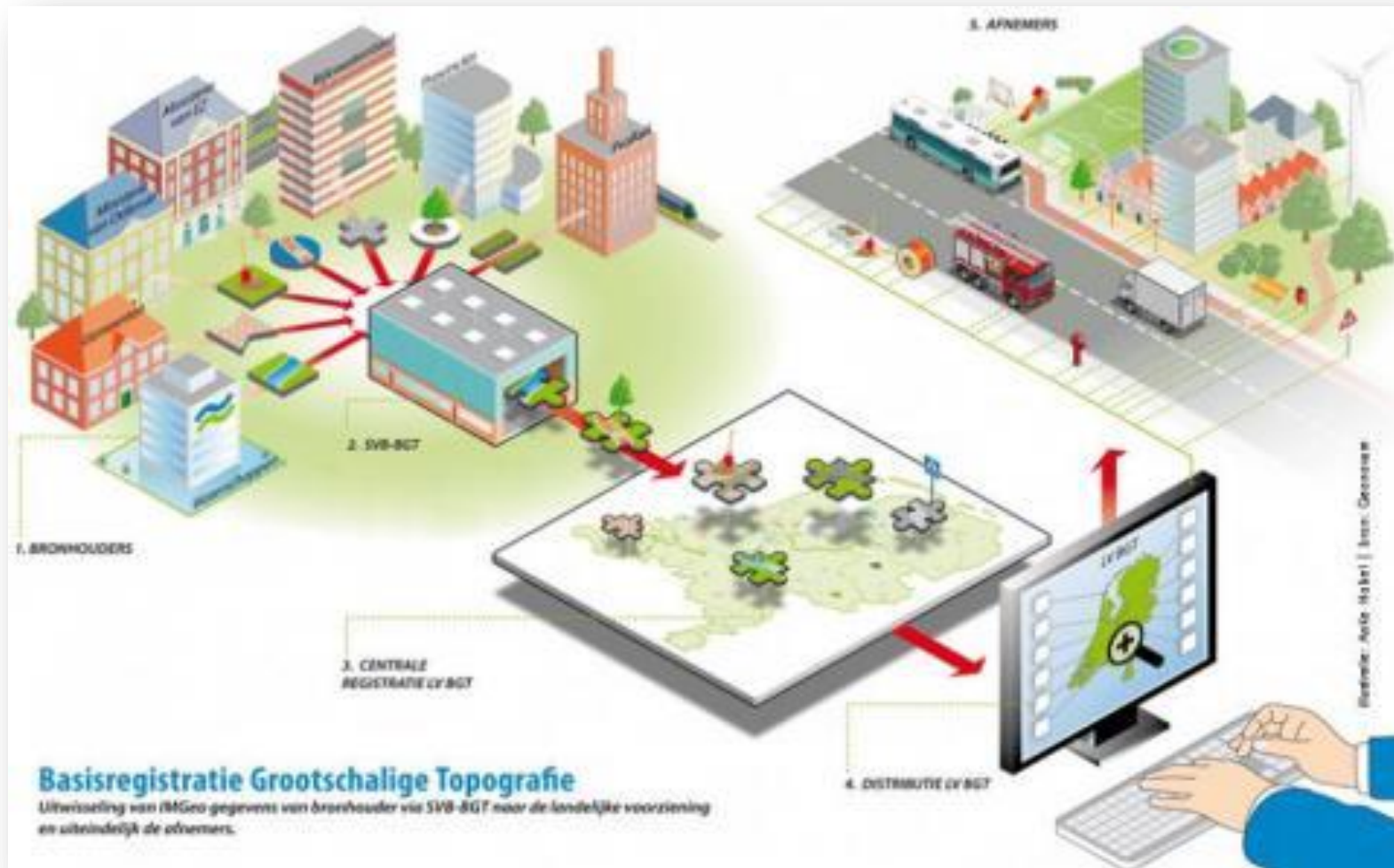
1. INSPIRE organisation and responsibilities

INSPIRE organisation in the Netherlands



1. INSPIRE organisation and responsibilities

Coördination, stimulation and support by **GEONOVUM**



2. INSPIRE organisation and responsibilities

Coordination and supporting activities Executive committee

1. Creating awareness, capacity building, communication: NL (and cross border) events, bustour, presentations, etc..
2. Helpdesk INSPIRE and technical meetings and 'support sessions'.
3. Monitoring and reporting about INSPIRE to the EU.
4. Developing validators for metadata and services and monitoring of metadata quality (national georegistry).
5. Stimulating INSPIRE use.
6. Involvement in EU Maintenance and Implementation Group (MIG).
7. Executing specific projects e.g. Sensor Observation data (and SOS) for Airquality e-reporting and Table Joining Services for statistics themes (E.L.F).

2. The Dutch approach

In 2009 the Dutch House of Representatives accepted the Dutch INSPIRE law on the condition that the execution of the law should be as efficient and lean as possible.



2. The Dutch approach

Because of this we adopted:

- a planned, coordinated and joined approach, in which the Ministry pointed out **22 Dataproviders** who are responsible to deliver the data;
- as much as possible we are using keyregisters and national data facilities that are based on national Legal Acts like our Risk Map.



3. INSPIRE data providers

INSPIRE data providers (organisations) in the Netherlands

National government

1. Ministry of Infrastructure & the Environment
2. Dept. of Infrastructure, Watermanagement & Public Works
3. Cadastre, Land Registry and Mapping Agency
4. Royal Netherlands Meteorological Institute
5. Ministry of Economic Affairs
6. Statistics Netherlands
7. Geological Survey
8. National Institute for Public Health & Environment
9. Cultural Heritage Agency
10. RDW- Agency for mobility & traffic safety
11. Chamber of Commerce
12. Ministry of Defense – Hydrographic Service
13. Ministry of Defense – Land Registry

Regional government

Provinces (12)
Water boards(24)

Local government

Municipalities (393)

3. INSPIRE data providers

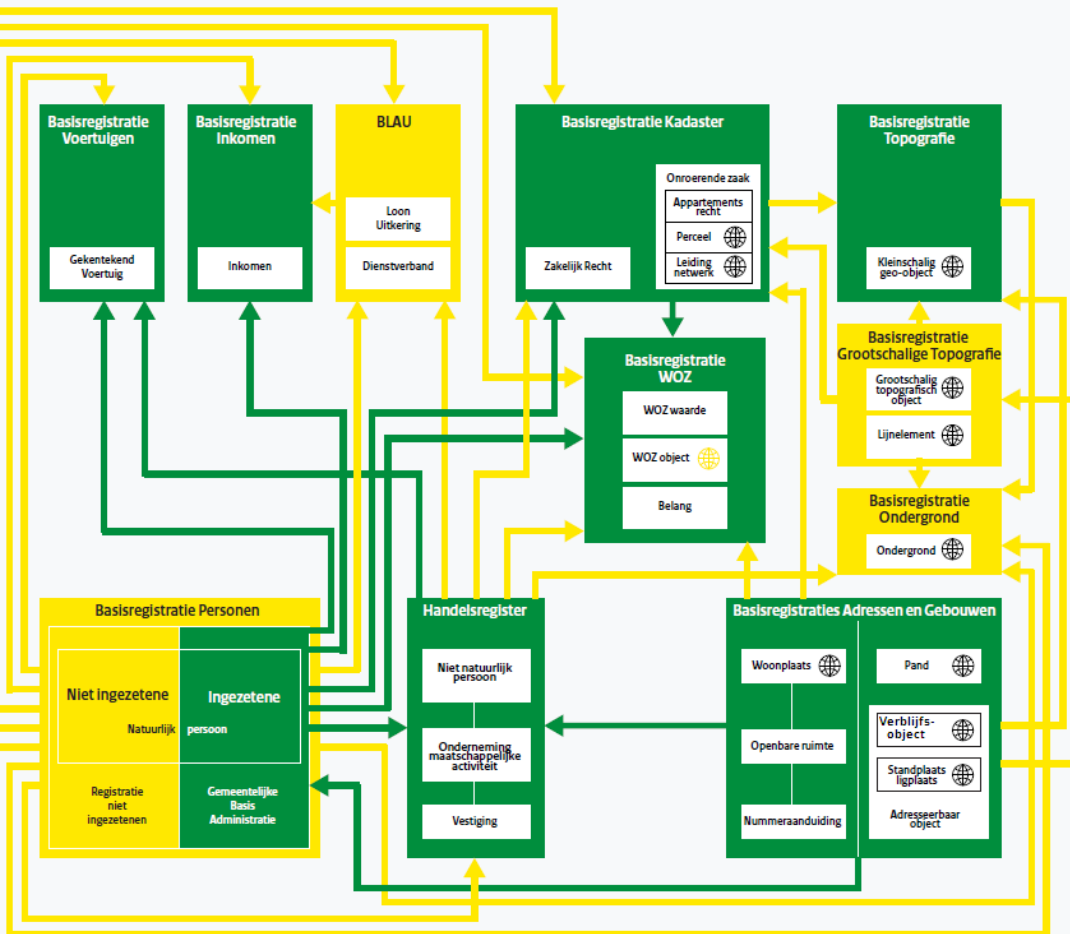
Key registries as national data facilities

SDI developments in the Netherlands are strongly related to the key registries of e-government policy (interrelated system).

Spatial key registries
based on Legal Acts for:

- Cadastre
- Topography
- Large scale Topography
- Addresses and Buildings
- Soil and Geology
- Chamber of commerce
- Real estate value

Non-spatial registries, like population, car license plates, income.



Legenda

■ Basisregistratie niet gereed

■ Basisregistratie gereed

→ Verbinding niet gereed

→ Verbinding gereed



BR bevat geometrie



BR bevat nog geen geometrie

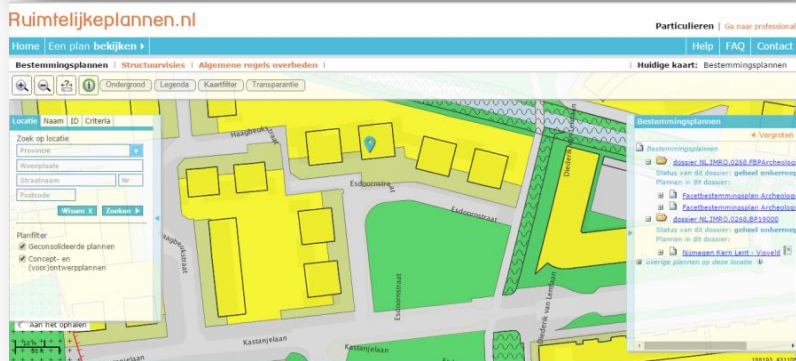
3. INSPIRE data providers

Examples of other national data registries

Legal Act for Spatial Plans
(since 2010)

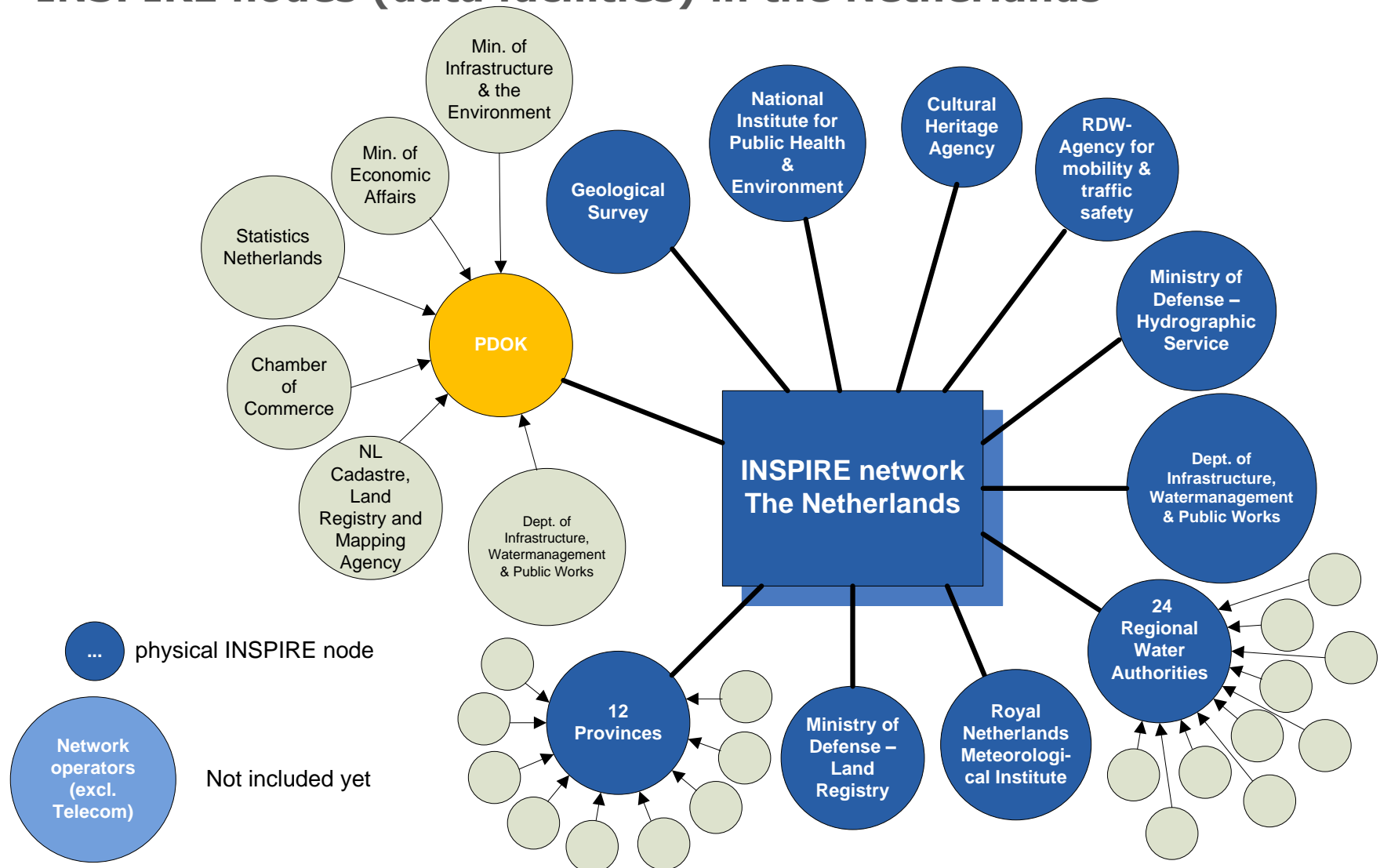


Legal Act for Cables and Pipelines –
WION (since 2008)



4. INSPIRE data infra nodes

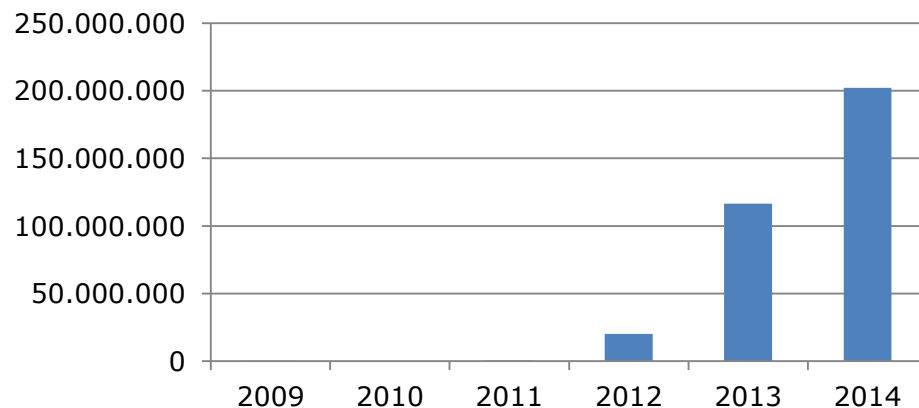
INSPIRE nodes (data facilities) in the Netherlands



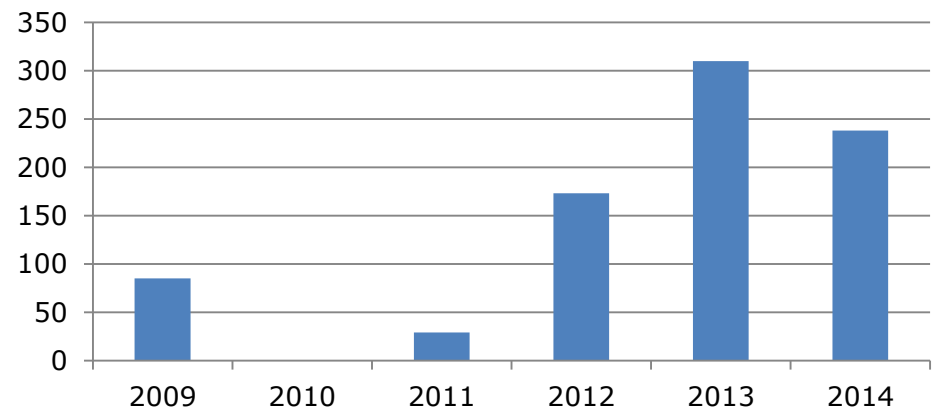
4. INSPIRE data infra nodes

INSPIRE Use

**Total no. of INSPIRE
service requests**



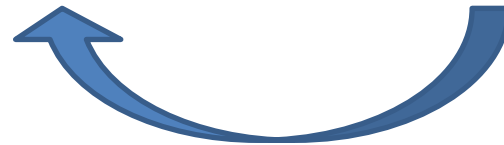
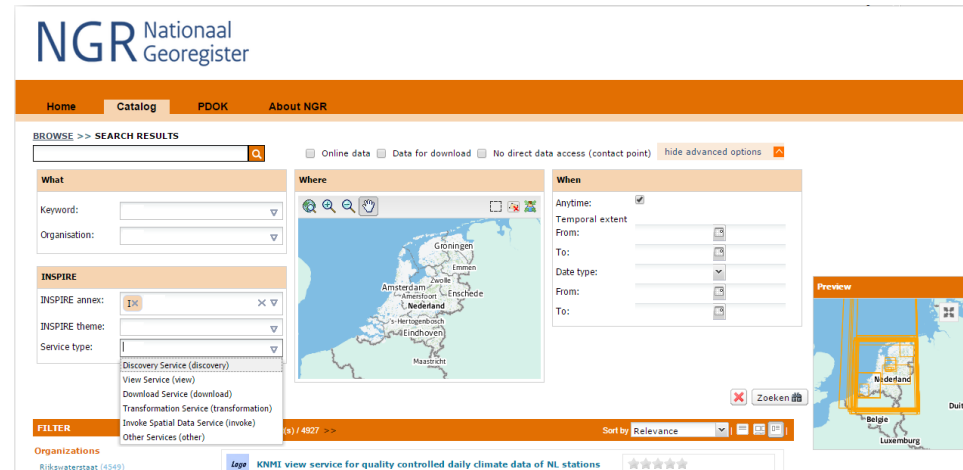
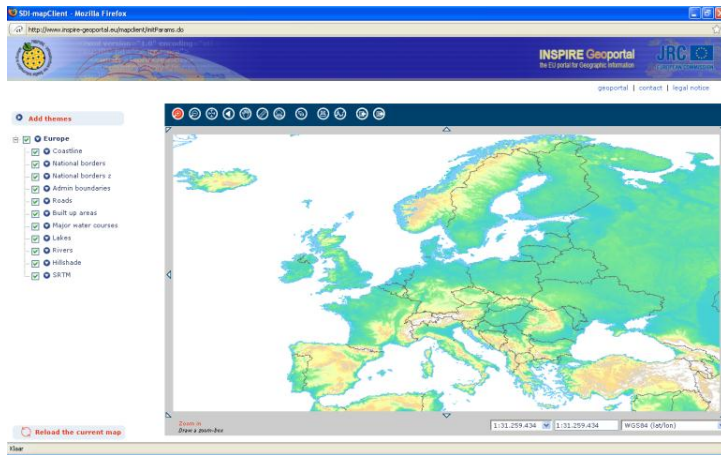
**Total no. of INSPIRE
services in NL**



5. National georegistry & INSPIRE data guide

INSPIRE access point in the Netherlands

- Dutch INSPIRE law: one INSPIRE access point
- is also the Netherlands INSPIRE discovery service
- is connected to the EU geoportal



7800 datasets with 2768x WMS and
2300x WFS and 77x atom
And 350 services descriptions

More then 169 datasets
More then 385 services

5. National georegistry & INSPIRE data guide

Overview INSPIRE datasets for other than geo-professionals

The INSPIRE dataguide (NL language)



INSPIRE Datagids

[Home](#) [Datasets](#) [INSPIRE thema's](#) [Voorbeelden](#) [Over INSPIRE](#)

Uw wegwijzer naar datasets over de leefomgeving op basis van de Europese INSPIRE-richtlijnen

Onderwerpen

- [Bodem en ondergrond \[26\]](#)
- [Bouwen \[10\]](#)
- [Cultureel erfgoed \[7\]](#)
- [Externe veiligheid \[8\]](#)
- [Geluid \[11\]](#)
- [Lucht \[12\]](#)
- [Natuur \[21\]](#)
- [Ruimte \[49\]](#)

INSPIRE best practises & showcases

Voorbeelden

Heeft u ook een voorbeeld?
[Laat het ons weten!](#)



Afstand als criterium in een grensregio?

Afstand wordt met enige regelmaat als beleids criterium gehanteerd. Zo hanteren gemeenten een afstandscriterium voor coffeeshops ten opzichte van scholen. In Nederland is het vergelijken van deze gegevens niet heel eenvoudig. Nog moeilijker is dit voor grensgemeenten. INSPIRE kan hierbij helpen.









<http://www.geonovum.nl/wegwijzer/inspiratie/afstand-als-criterium-een-grensregio>

6. INSPIRE data licensing framework and open data in NL

INSPIRE data licensing framework



“Geoshared licensing”

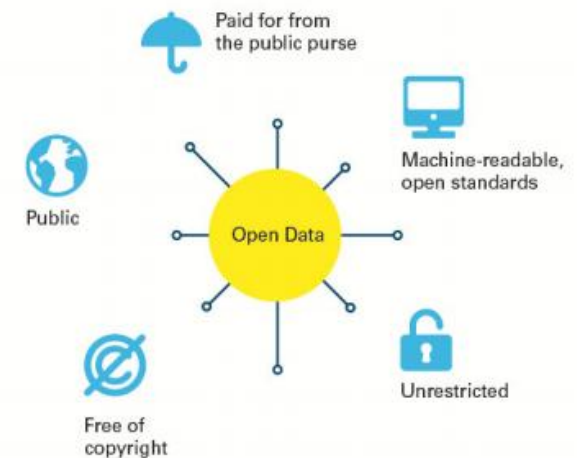
	Work is in the public domain
	Work can be used and reused if name of copyright holder and/or the date of the creation of the Work is mentioned on the Work.
	Derivative works only if. The Work can only be part of a Derivative works if the Work is not selectable from the Derivative Work.
	No redistribution of the Work is allowed.
	Time limitation. The license is valid for a limited period.
	Fee is required. Use of the dataset requires a monetary payment.
	Purpose limitation. The Work can only be used for the purpose(s) specified in the license.
	Additional conditions. Other restrictions than the above apply.

2. Open data developments in the Netherlands

What is open data? The dutch perspective ...

Open public data are data that:

1. are paid for from the **public purse** and generated during or for the provision of a public service
2. are available to the **public**
3. are **free of copyright** and other third-party rights
4. are **machine-readable** and preferably comply with open standards (not PDF but XML, CSV, etc.)
5. **can be re-used without restriction** in the form of cost, compulsory registration, etc.



Source:

http://www.courttofaudit.nl/english/Publications/Audits/Introductions/2014/03/Open_Data_Trend_Report

2. Open data developments in the Netherlands

Dutch policy: all data must be open, unless...

- The main thrust of two documents is that the government endorses the principle of 'publication unless':
 - Strategic Vision on Open Data
 - Open Data Action Plan(27 September 2013)
- Unless means ... unless there are legal grounds for not doing so: Dutch legislation (Government Information (Public Access) Act) and European Legislation (Re-use Directive, INSPIRE and the Aarhus Treaty).
- Within the Dutch government, the Ministries of the Interior and Kingdom Relations (BZK) and Economic Affairs (EZ) are responsible for open data.
- Interior and Kingdom Relations is guarding transparency and open government and Economic Affairs' perspective on open data is economic value creation.

Strategic Vision on Open Data, <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2013/09/01/visie-open-overheid.html>

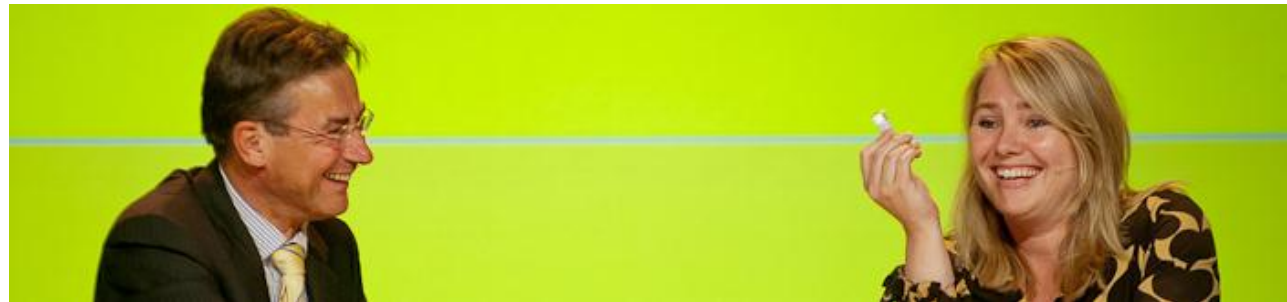
Open Government Action Plan, <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2013/09/01/actieplan-open-overheid.html>

2. Open data developments in the Netherlands

Responsibilities for open geodata

The Ministry of Infrastructure and the Environment is responsible for geo-information. This ministry provides already much open data, e.g. Actual Height Model and all Topographic maps.

In 2015 it is expected that almost all the (geo)data of the ministry is open data.



Ministerie van Infrastructuur en Milieu



Partners in Geo

Shared vision of government, private sector and scientific community on the future of the geo-information sector



Open data

Easy access to fundamental public information and other public location-based information is a necessary precondition for the best possible use or reuse of the data and models financed by the public sector. This vision confirms endorsement of this open data policy. When making data available, the most promising datasets will be given priority.

Besides making data available, government, private companies and the science community will actively promote the reuse of this location-based data. Innovation networks will be set up for a number of themes inspired by the National Satellite Data Portal. The government will create the right conditions, the market will anticipate the (latent) requests and science will play its guiding role.

2. Open data developments in the Netherlands

The Dutch open data portal

Rijksoverheid

Data.overheid.nl: het opendataportaal van de Nederlandse overheid

Home Data Interactie Kennis & Inspiratie Open Overheid Zoek

Home > Data > Zoekresultaten ... > [\[all items\]](#) > Beheer PDOK

Zoekresultaten

De volgende datasets in het open dataregister zijn gevonden:

Zoek

1 t/m 20 van 79 zoekresultaten Sorteer op **Relevantie** / Titel / Auteur / Laatste wijziging

Actueel Hoogtebestand Nederland 1 (AHN1) WCS

Web Coverage Service (WCS) van het Actueel Hoogtebestand Nederland 1 (AHN1) waarin de volgende lagen zijn opgenomen: - AHN1 5 meter maaiveld raster - AHN1 25 meter maaiveldraster - AHN1 100 meter maaiveldraster

Auteur: [Beheer PDOK](#) | Tags: [ahn](#), [hoogte](#), [hoogtegegevens](#), [laseraltimetrie](#), [lidar](#), [maaiveld](#), [puntenwolk](#), [raster](#)

WKPB WMS

WKPB - Publiekrechtelijke Berperking - Wet Bodembescherming: Overzicht van de door de overheid opgelegde beperkingen op een stuk grond of een gebouw.

Auteur: [Beheer PDOK](#) | Tags: [gebiedsbeheer-gebieden-waar-beperkingen-gelden-gereuleerde-gebieden-en-rapportage-eenheden](#), [infomapaccessservice](#)

Fysischgeografischeregio's WMS

Indeling van Nederland in Fysisch-Geografische Regio's. Voor de omgrenzing van de Regio's is een zo consistent mogelijke lijst van beslissregels gehanteerd, vooral gebaseerd op de bodemtypen. Dit bestand is een update van de FGR-versie van 1997.

Auteur

> Beheer PDOK 

Licentie

> Publiek domein (CC0) (43)

> Publiek Domein (36)

Tags

> infomapaccessservice (33)

> infofeatureaccessservice (22)

> hoogte (12)

> natuur (12)

> ahn (10)

> hoogtegegevens (10)

> laseraltimetrie (10)

> lidar (10)

[Toon meer](#)

Betreft grondgebied

> Nederland (79)

6. INSPIRE data licensing framework and open data in NL

The Dutch open data portal harvests from the National Georegistry



Data.overheid.nl: het opendataportaal van de Nederlandse overheid

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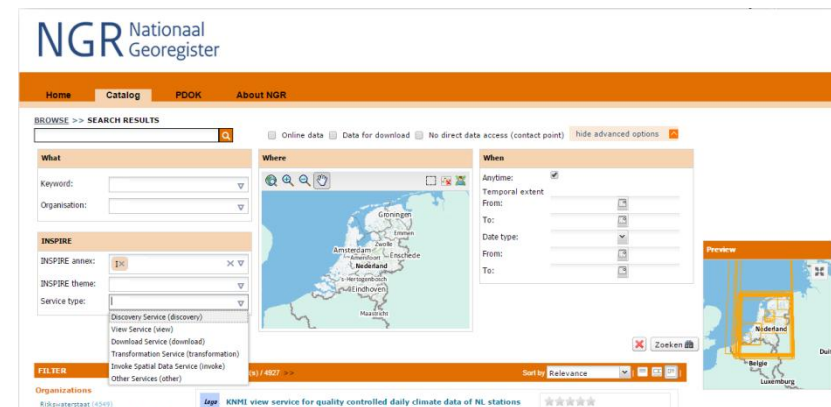
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 > lidar (10)

Toon meer

Betreft grondgebied
 > Nederland (79)



NGR Nationaal Georegister

Home Catalog PDOK About NGR

BROWSE >> SEARCH RESULTS

Online data Data for download No direct data access (contact point) hide advanced options

What
 Keyword:
 Organisation:

Where
 Map of the Netherlands with search results markers.

When
 Anytime: ☒
 Temporal extent: From: To:
 Date type: From: To:

INSPIRE
 INSPIRE annex: 1x
 INSPIRE theme:
 Service type:

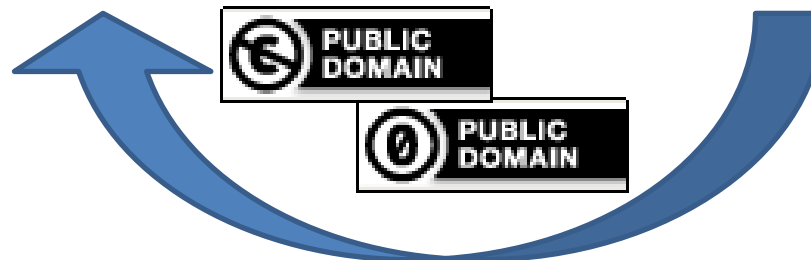
Discovery Service (discovery)
 View Service (view)
 Download Service (download)
 Transformation Service (transformation)
 Invoke Spatial Data Service (invoke)
 Other Services (other)

TOOLBOM
 Organizations: Rijksoverheid (4349)
 KNMI view service for quality controlled daily climate data of NL stations

Zoeken

3201 datasets, of which 2828 from NGR (88%)

9-2-2015



6. INSPIRE data licensing framework and open data in NL

Open data and INSPIRE

In principle ALL INSPIRE data(sets) are open data, except those few data(sets) with restrictions, esp. payment conditions.

Non-open INSPIRE data

- Cadastral map
(except boundaries)
- Key Registry Buildings
and Adresses
(large downloads)
- Cables and pipelines



7. Best Practises

INSPIRE as a chance: Dutch Provinces join forces

CDS-INSPIRE is the Central Data and Services environment of the joint Dutch provinces.

This central environment has been developed in good collaboration between the Dutch provinces, [IDgis BV](#) from the Netherlands and German [lat/lon](#) (deegree3).

The source code can be downloaded [here](#) and is available under [GNU GPL license](#).



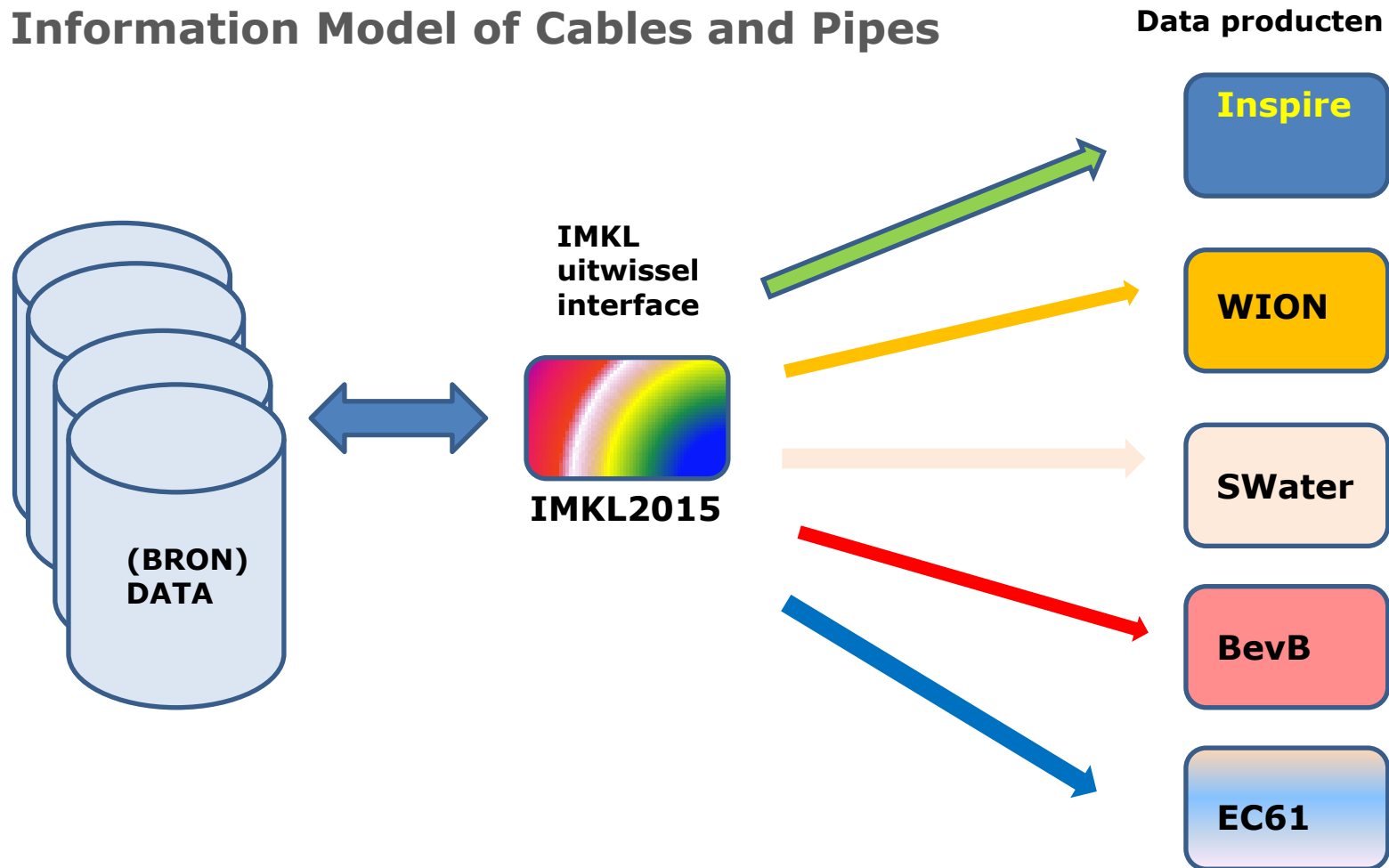
7. Best Practises

Harmonisation of Protected Areas in Annex I



7. Best Practises

Information Model of Cables and Pipes



7. Best Practises

Startup SIMACAN



"INSPIRE-datasets are ideal for us. They meet vital search-ability and availability requirements. And they contain lots of information. We started by using datasets which were closely related to mobility issues, such as the transport restrictions of the RDW and the CO2-information provided by the National Institute for Public Health and the Environment, which is, however, still being developed. INSPIRE contains very large datasets that, until recently, were only used by government authorities. It's great that they are available for everyone now."

7. Best Practises

Innovation through living labs



**Making Sense
for Society**

Living Lab for
the Internet
of Everything



Platformlinkeddata.nl



7. Best practise we are working on

The new Dutch Environmental Planning Act - 2018

A bill which aims to renew the regulation of human activities with an effect on the physical environment.



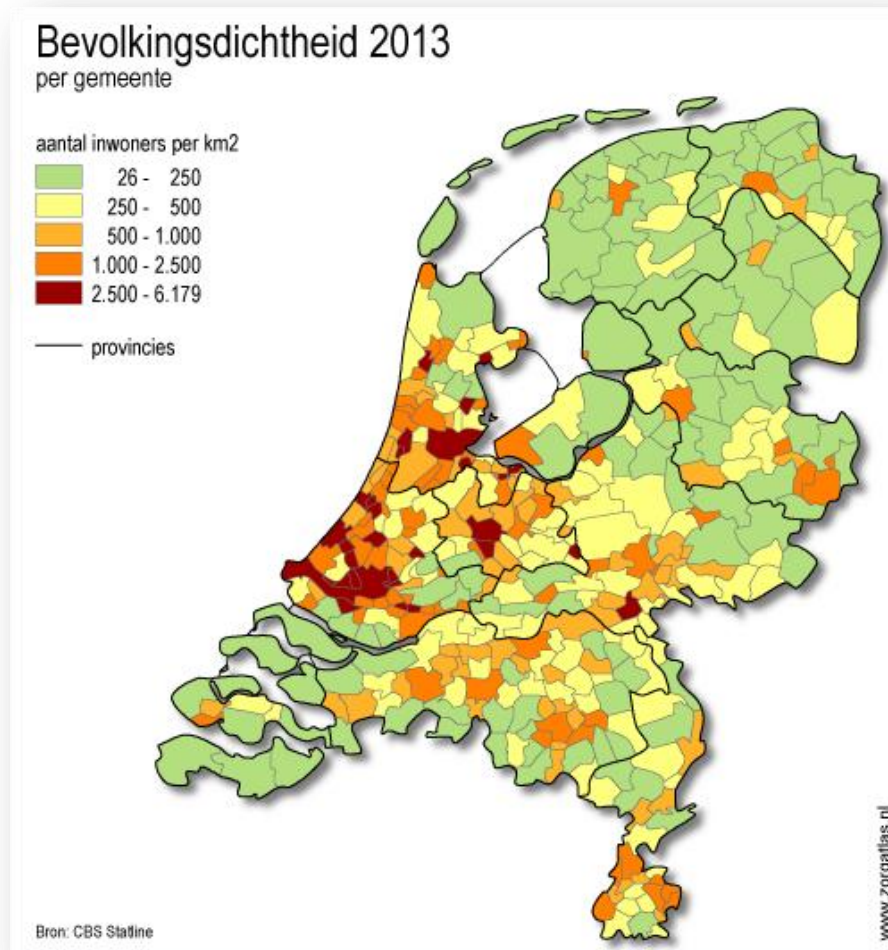
8. Challenges and Conclusions

Challenges

1. Transformation of our data to INSPIRE data models in the next years.
2. Find users and develop smart apps using the INSPIRE infrastructure.
3. Broaden the INSPIRE perspective; the new Dutch Environmental Planning Act – 2018 includes digital data exchange that goes beyond INSPIRE.
4. Expose INSPIRE data also with the standards of the web, esp. REST API's and linked data standards.
5. But also Keep the INSPIRE spirit alive!

8. Challenges and Conclusions

6. The challenge to spare the 393 Municipalities already heavily burdened by obligations of data delivery



8. Challenges and Conclusions

Some conclusions

1. The INSPIRE Directive is driving force behind our national SDI and the national georegistry.
2. INSPIRE has strengthened the cooperation between individual organisations and sme's.
3. The INSPIRE method is used in other developments.
4. From a policy perspective open (geo)data is a fact.

Questions?

Thank you for your attention!