Linked Open Data for cross-border environmental information exchange

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InspireServices - Geodan

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warmte   thuis   bank   geodan   Kennis   linked   GMAIL   Inspire   Felix   VTH   BGT   Kaswoning   Geo2.0   Diversen   Vakantie 2010   Andere bladwijzers

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Unburdening

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EuroGeoNames	**Why Geodan and Royal Haskoning?**	**Contact Inspireservices**
Inspireservices has been asked to give practical advice on the INSPIRE data specifications for	Royal Haskoning is a domain expert in nearly all INSPIRE themes. Geodan has more than	To find out more about the Inspireservices package or request a no-obligation proposal

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Today

> Linked Open Data

> Case: Dutch information for European Environmental Agency

> How linked open data can help to improve your information architecture

PBL Netherlands Environmental Assessment Agency

European Environment Agency

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about PBL

PBL Netherlands Environmental Assessment Agency

> Strategic policy analysis

> Solicited or unsolicited

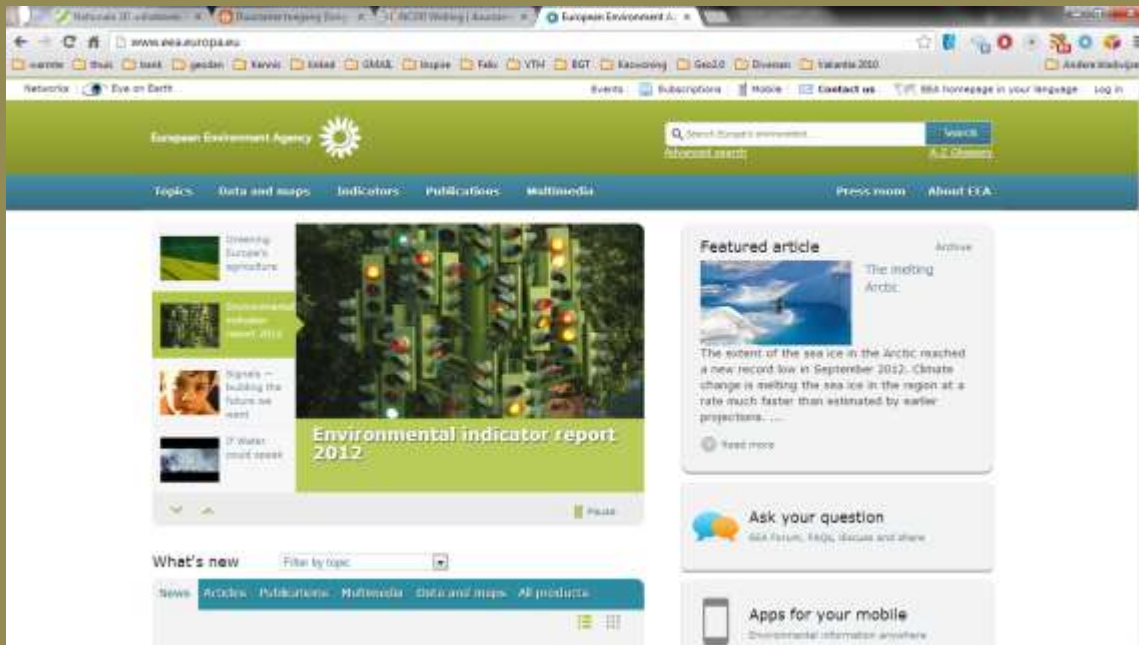> Effects of current and future policies

> Environment doesn't stop at borders

about EEA

European Environment Agency

> EU level policy making

> sound, independent information on the environment

> a major information source for those involved in developing, adopting, implementing and evaluating environmental policy, and also the general public

State of the Environment

> Analytical tool for European policy makers

> 2010 - 2015 - ….

> Early adapter of LINKED data –> vocabularies

> Prepare for 2015

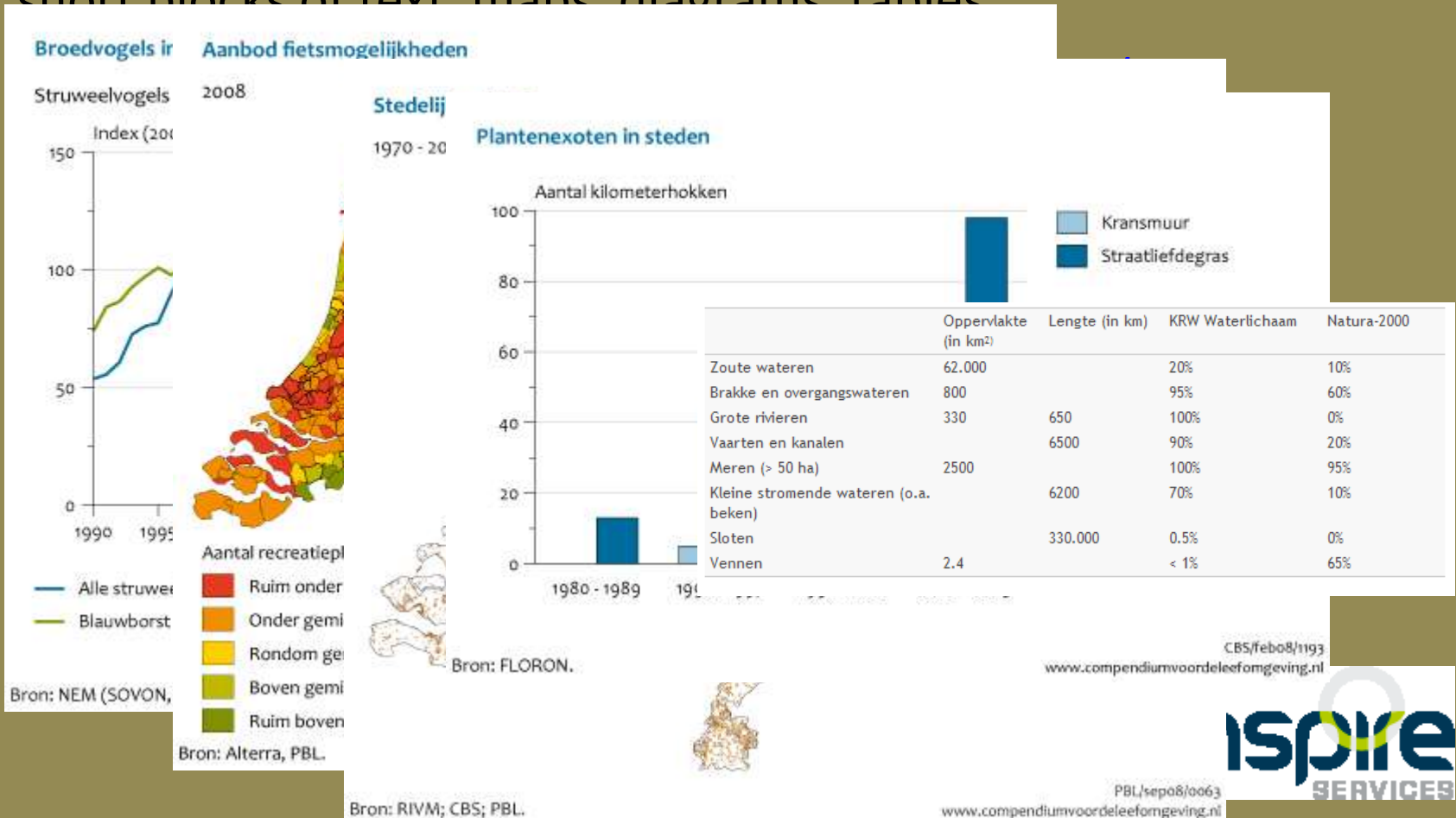# Project Sense-2 – linking agency's

> SENSE-2
>> Web technology
>> Ontology
>> Linked data

> InspireServices was asked by PBL to assist
> Common ground → Inspire
> Transforming to RDF

SOER data
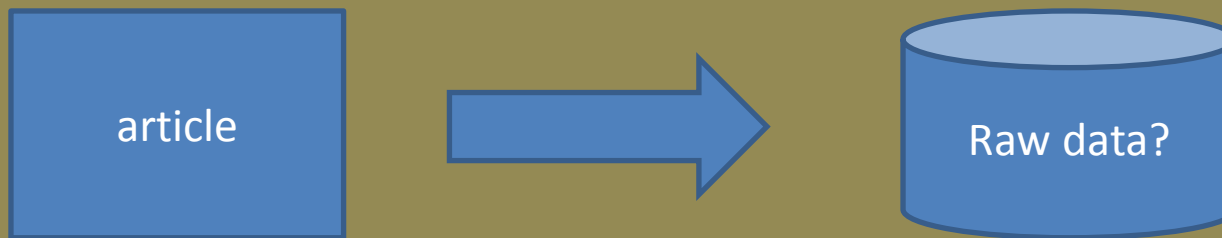
> ~ 800 indicators

> short blocks of text, maps, diagrams, tables

>

>

Creating linked open data

article → Raw data?

> Organised and structured data

>> Automated procedure

> Improvements to be made

>> Strict separation of content and presentation

>> using internationally accepted code lists and thesauri

What does it look like

- http://data.pbl.nl/organisation/pbl
- http://data.pbl.nl/indicator/0001-01-lba/0001-01-LBA.rdf
- Excell

What's next

> Consume data

> > From neighbouring countries

> > From EEA!! – comparing national indicators with neighbours

> provide data for national data portals:

> > Atlas for our living environment

Conclusions

> Exchange of data → linked data

> Opportunity to improve structure and organization within the agency

>> Use accepted code lists, thesauri

> Make data readily available

> WIN-WIN situation

> InspireServices can help your organization to profit from linked (open) data and save money

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PBL recommendations

- Graag gebruik maken van algemene codelijsten (zoals GEMET) voor thema's, grootheden en sleutelwoorden
- Graag ISO-8601 gebruiken voor datums en tijdstippen (b.v. 2012-12-05T17:30 of 2012-12-05)
- Voor opmaak van tekst worden HTML-tags (b.v. <sub>) en eigen tags (b.v. <opsomming>) door elkaar heen gebruikt. Dat maakt transformatie lastig. Is het mogelijk alleen HTML-tags te gebruiken?
- Het element <verwijzing>. Moet dat een losse referentie worden de indicator? Of moet het op dezelfde plek in de tekst blijven staan, in welk geval het een HTML-hyperlink <href> wordt.
- Gebruikt het PBL of het CLO indicatorspecificaties (http://rdfdata.eionet.europa.eu/page/sense/ontology/IndicatorSpecification)? Zo ja, hoe zijn die te vinden? Hoe dan ook kunnen we wel wat uitleg gebruiken over wat een indicatorspecificatie precies is.
- In een URI als http://data.pbl.nl/indicator/clo/i-nl-0165-21/i-nl-0165-21.rdf: is het nodig om clo of lba op te nemen? Zo ja, kunnen we dat pad dan afleiden uit de oorspronkelijke XML?
- Kan of moet de beschijving van de organisatie (pbl.ttl) nog worden uitgebreid?
- Algemene tip: beschrijf eerst de meest algemene elementen in RDF: organisatie, codelijsten, eigen begrippen,..
- Wat is het verband tussen de indicatorsoorten van het PBL en de CLI-codes van het EEA?
- Hoe kan in de toekomst het de temporele specificatie (dct:temporal) automatisch worden gevuld?
- Hoe kunnen in de toekomst de van toepassing zijnd thematische codes bij de indicator worden gevonden? Bijvoorbeeld:
- <dct:subject rdf:resource="http://www.eea.europa.eu/themes/air"/> <!-- Air pollution -->
- <dct:subject rdf:resource="http://www.eionet.europa.eu/gemet/concept/13577"/> <!-- NOx -->
- foaf:isPrimaryTopicOf: het EEA wil dit graag ingevuld zien. Hoe kunnen we dat doen?

EEA recommendations

- EEA assessments like http://www.eea.europa.eu/data-and-maps/indicators/emissions-of-acidifying-substances-version-2/assessment-1 do not make use of the vocabulary that is used by national assessment indicators (http://rdfdata.eionet.europa.eu/sense/ontology). But they are both assessments. Wouldn't it be better to use the same vocabularies for all assessments? PBL would like to use assessments from both the EEA and other countries and process them for use on PBL websites. For that purpose, it would be advantageous if all assessments are structured the same way.
- How can one tell the difference between a national and a European assessment?
- Clearer explanations (rdfs: comments) would be helpful in the SENSE ontology. For example, the term 'indicator' is explained nowhere. It could be that somebody who is not a domain specialist wants to make sense of the data.
- Organisation URIs provided by the EEA (http://www.eionet.europa.eu/organisations/nl_pbl) does not seem to be Linked Data (no RDF/XML available)
- Indicators from the PBL have an author and an editor. Which term would be most appropriate to designate the editor?
- How should we deal with pictures (graphs or diagrams, usually JPEG)? We can publish the files, but how should we refer to them in the indicator assessment? One example uses http://www.eea.europa.eu/portal_types/EEAFigure# as a vocabulary for pictures. Is this recommended? The sense ontology has a property hasFigure, but it seems a loose end because Figure itself is not defined.
- PBL publishes MS Excel files with source data. How can these be referenced in the RDF feed?
- The PBL publishes references (links) to web documents providing background information. What would be the best way to handle those? We have used rdfs:seeAlso for now...
- About dcterms:temporal. The examples do not use dcterms:PeriodOfTime although this is the range of dcterms:temporal. On https://svn.eionet.europa.eu/projects/LinkedData/wiki/SENSE2/ClassDiagram it says "Current best practice is to the year(s) with one year per property". Are there references for this current best practice? Here is a description of a best practice which does use a real period:
- http://standards.jesandco.org/wiki/Temporal

- If it is not possible to use dcterms:temporal properly, why not use something else like dcterms:date to describe a list of years?