



30
march
2022

Tourism Data Space – DG GROW G1 Workshop on semantics

DIGIT.D2 - Interoperability.



Workshop practicalities



- Click on « connect audio » but please mute your microphones



- Please share your questions & comments via the chat



- The webinar will be recorded



Welcome !
Speaking tourism



Towards a data space



The new Transition Pathway for Tourism identifies 5 actions which are based on data sharing:

- Improving access to data to produce official statistics (Topic 3)
- Common data sharing principles and practices between stakeholders under a Code of Conduct (Topic 9)
- Increasing use of data sharing in providing personalised tourism services and destination management, including creation of new platforms by SMEs (Topic 9)
- Improving the availability of online information on tourism offer (Topic 10)
- **Technical implementation to set up a tourism data space** (Topic 14)



A data space for tourism at EU level: we are in the exploratory phase

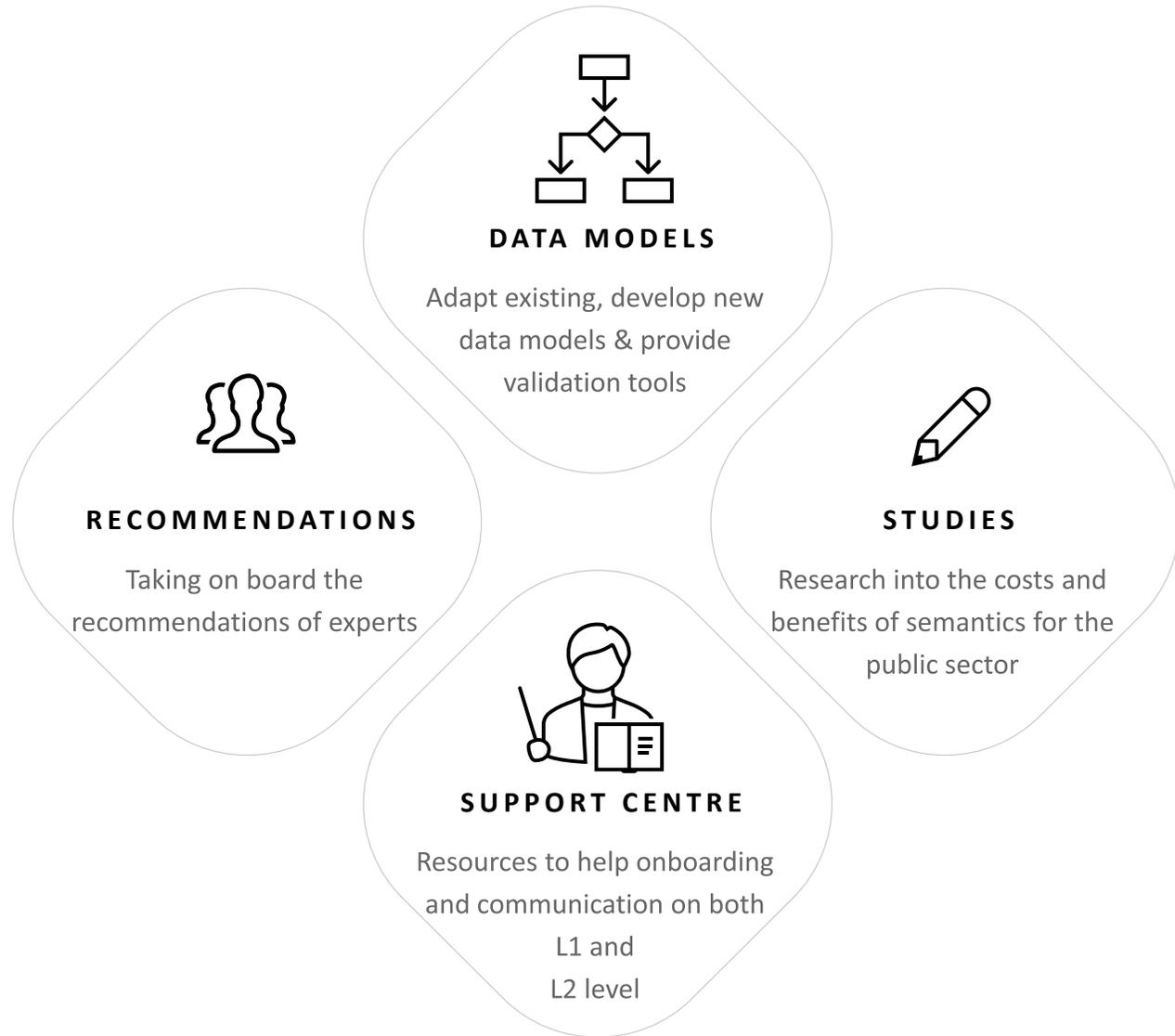


What does it take for a successful data space? And what should the exact role of the European Commission be?

SEMIC Support



The goal is to deliver pragmatic support that helps build an Interoperable Europe



Agenda

01

Scope

Public sector aggregators of tourism data

02

Data stories

Four case-studies from different Member States

03

Discussion

Input from participants

04

Next steps

How can we co-operate on this file?



Scope



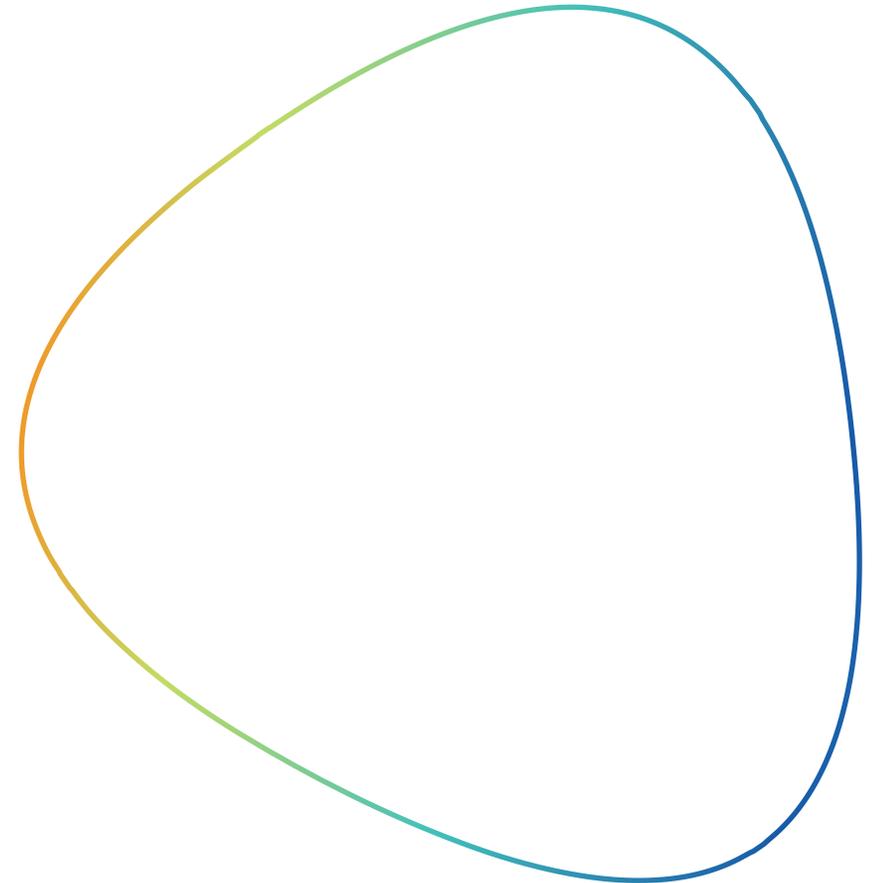
Data stories focused on opportunities & challenges of semantics for the exchange of tourism data :

Flanders – Digitaal Vlaanderen, Provincie Antwerpen & Westtoer

Finland – Business Finland

France – ADN Tourism

The Netherlands – Touripedia





Tourism data space & semantics



Locally defined semantics need to work globally on the Web, e.g. capacity is expressed in number of beds or people ?



Let's build on existing work & experience :

- Virtual Tourism Observatory & existing legal basis for tourism statistics ([Regulation \(EU\) 692/2011](#))
- Leverage existing standards (e.g. [Schema.org](#)) and knowledge bases (e.g. [Wikidata.org](#))



Ensure multilingualism & EU values



Need to be pragmatic & focus on concrete use cases for the cross-border exchange of data



Cross-DG collaboration: GROW, CNECT, DIGIT, ESTAT, OP & JRC



Four data stories





Flanders - Digitaal Vlaanderen, Provincie Antwerpen & Westtoer



INFORMATION SILO's

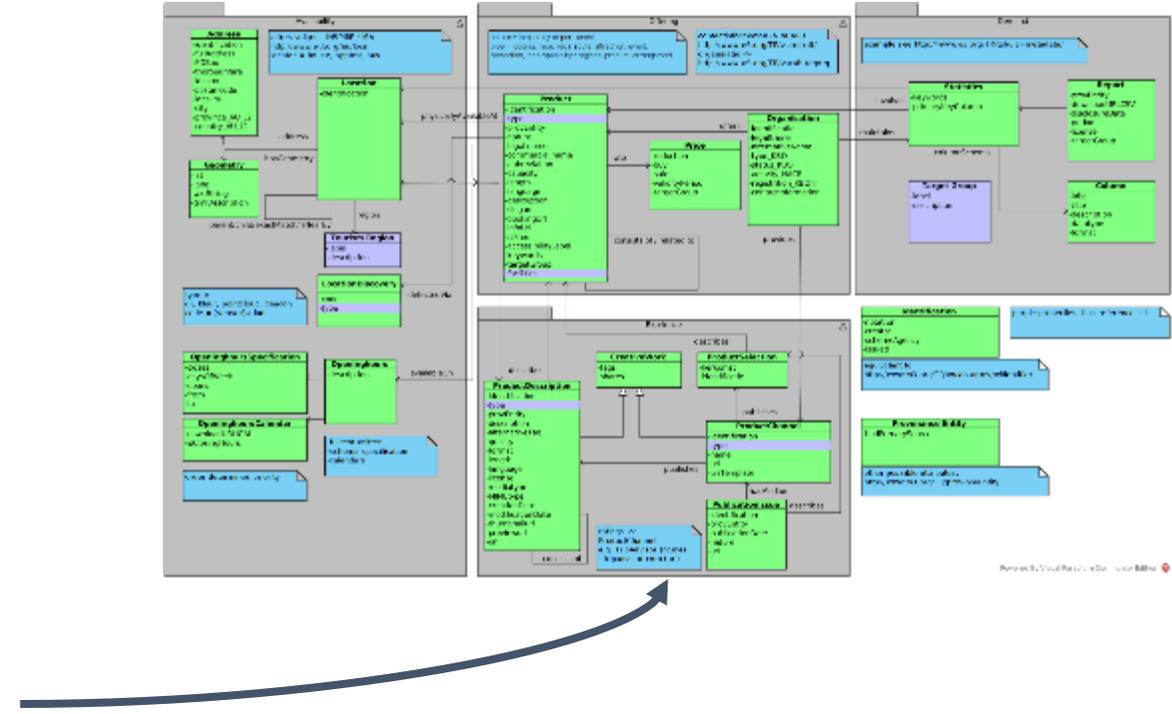
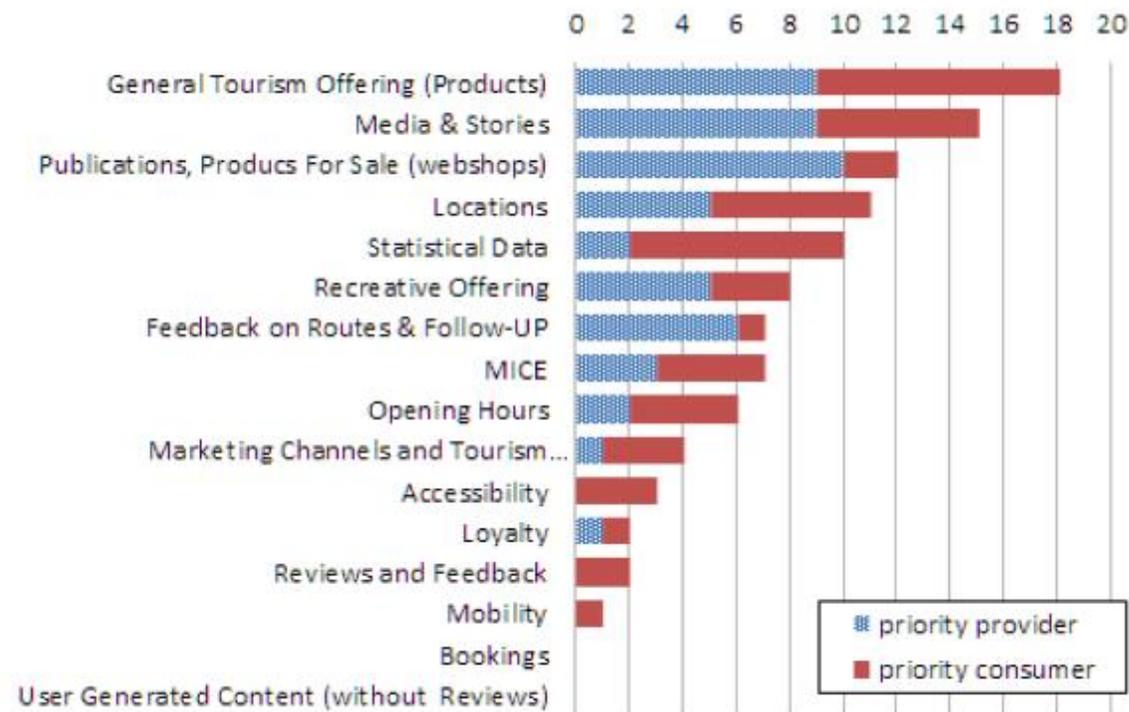
Exercise in Flanders (2015)



Expertisecentrum Digitaal Erfgoed



Exercise in Flanders (2015)



De Vocht, L., Verborgh, R., Mannens, E., Van de Walle, R., Van den Bosch, W., Buyle, R., & Koninckx, B. (2016, March). Providing interchangeable open data to accelerate development of sustainable regional mobile tourist guides. In Proceedings of the 9th International Conference on Theory and Practice of Electronic Governance (pp. 195-198).

<http://dx.doi.org/10.13140/RG.2.1.1947.1122/1>



Tourism Province of Antwerp
as a data supplier

Strategic goal

Promoting and making the province more attractive as a travel destination for visitors to Flanders and its surrounding areas

-> Providing accurate, promotional up-to-date tourism data, to be used as basic for content for marketing, promotion and product development.

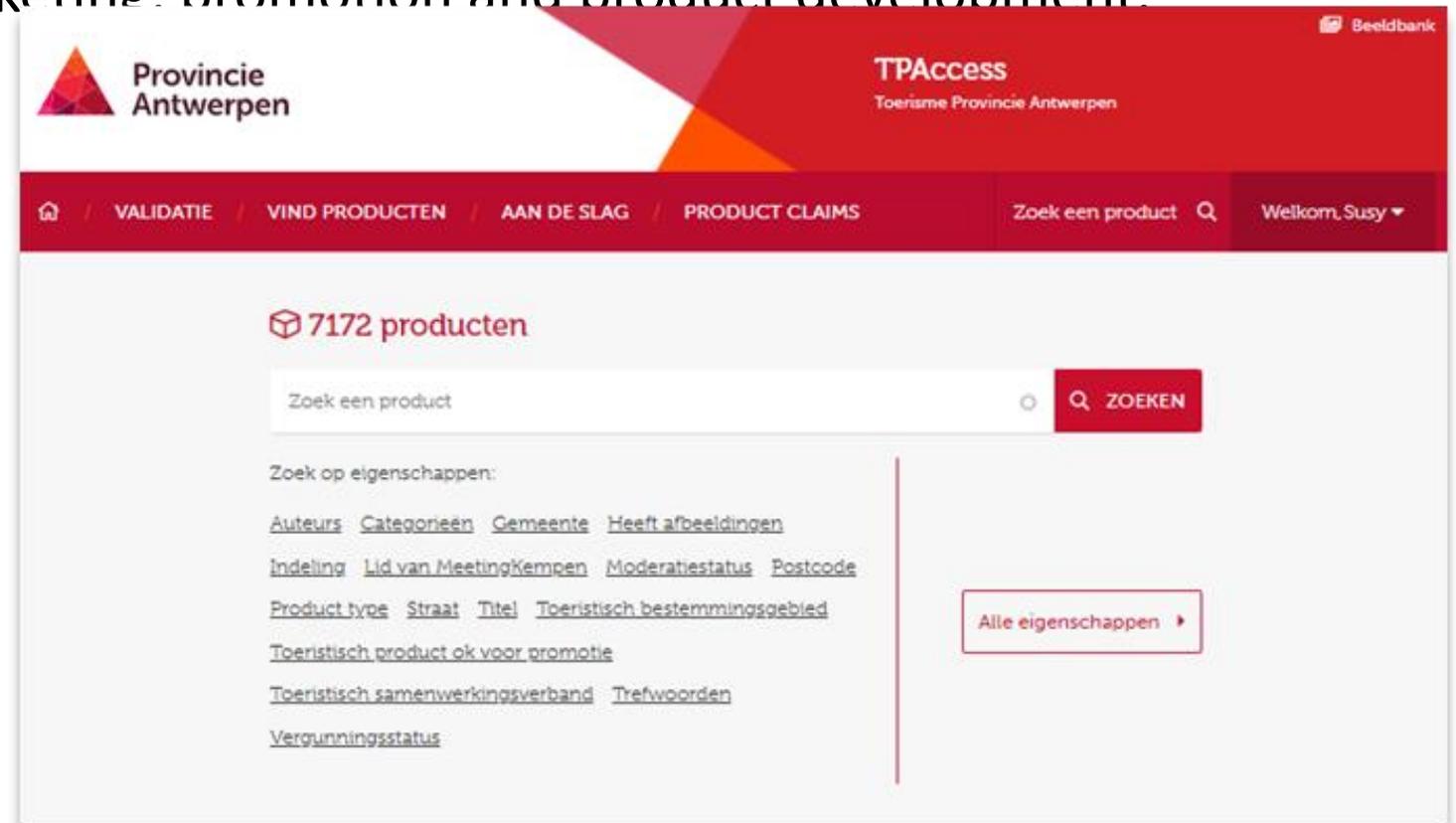
TPAccess

7.200 products

- 3.900 accomodations
- 1.630 POI's

Types of data

- Accommodations (hotel, camping,...)
- POI's (attractions, sightseeing,...)
- Tourist information offices



The screenshot displays the TPAccess website interface. At the top, there is a red header with the Provincie Antwerpen logo on the left and the text 'TPAccess Toerisme Provincie Antwerpen' on the right. Below the header is a navigation bar with links for 'VALIDATIE', 'VIND PRODUCTEN', 'AAN DE SLAG', and 'PRODUCT CLAIMS'. A search bar is located on the right side of the navigation bar, containing the text 'Zoek een product' and a search icon. To the right of the search bar, there is a user profile indicator 'Welkom, Susy'. Below the navigation bar, the main content area shows '7172 producten' with a search bar and a 'ZOEKEN' button. A list of search filters is provided, including 'Auteurs', 'Categorieën', 'Gemeente', 'Heeft afbeeldingen', 'Indeling', 'Lid van MeetingKempen', 'Moderatiestatus', 'Postcode', 'Product type', 'Straat', 'Titel', 'Toeristisch bestemmingsgebied', 'Toeristisch product ok voor promotie', 'Toeristisch samenwerkingsverband', 'Trefwoorden', and 'Vergunningsstatus'. A button labeled 'Alle eigenschappen' is visible on the right side of the filter list.

API Connections - Export

Linking with websites and digital applications

Data sharing

Automatic data updating

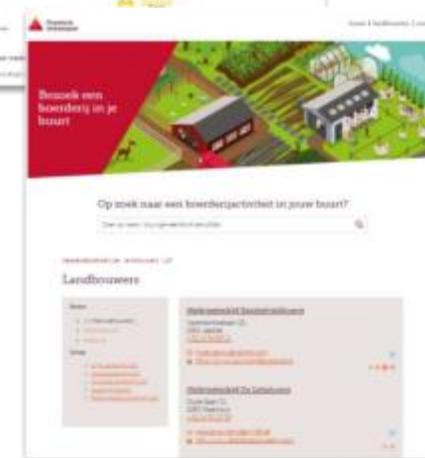
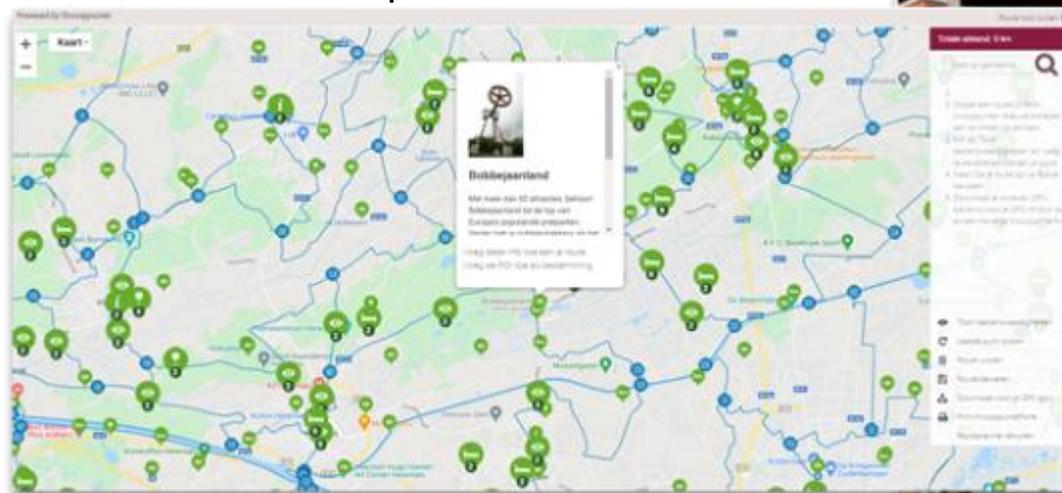
Examples

Toerismezuidrand.be

Bezoekdeboerderij.be

Lekkersmetstreken.be

Routeplanner Lannoo



API Connections - Export

Open data export

- Facilitated during the construction of TPAccess
- Minimal performed due to lack of data model (part of accommodation)
- No clear rules how to make open data exports available

```

{
  "@context": [
    "http://data.vlaanderen.be/context/adres.jsonld",
    "http://data.vlaanderen.be/context/generiek.jsonld"
  ],
  "@id": "https://www.tpassess.be/id/product/133",
  "indeling": "attractie",
  "hoofdcategorie": "attractiepark",
  "beschrijving": "Met meer dan 50 attracties, waaronder 6 adembe",
  "land": "BE",
  "straatnaam": "Olensteenweg",
  "huisnummer": "45",
  "postcode": "2460",
  "gemeentenaam": "Lichtaart",
  "gemeente": "Kasterlee",
  "toeristisch_bestemmingsgebied": "Antwerpse Kempen",
  "telefoon": "+32 14 55 78 11",
  "website": "http://www.bobbejaanland.be",
  "afstand_tot_snelweg": "10000",
  "ligging": [
    "Eigen parking voorzien"
  ],
  "toegankelijkheidslabel_provincie_antwerpen": false,
  "heeft_afbeeldingen": true,
  "topattractie": true
}

```

Subject	Predicaate	Object
https://www.tpassess.be/id/product/133	http://data.vlaanderen.be/ns/adres#Adresvoorstelling.huisnummer	45
https://www.tpassess.be/id/product/133	http://data.vlaanderen.be/ns/adres#gemeentenaam	Lichtaart
https://www.tpassess.be/id/product/133	http://data.vlaanderen.be/ns/adres#land	BE
https://www.tpassess.be/id/product/133	http://purl.org/dc/terms/description	Met meer dan 50 attracties, waaronder 6 adembenemende achtbanen, 4 wildwaterbanen en een uniek indianenmuseum, behoort Bobbejaanland tot de top van Europa's populairste pretparken. Verder heb je publiekstrekkers als het indoorspeelparadijs Kinderland en de diverse livenesshows. Het grote aantal attracties houdt de wachttijden en bijbehorende frustraties beperkt. De vele overdoside attracties zorgen ervoor dat je bezoek aan Bobbejaanland nooit in het water valt.
https://www.tpassess.be/id/product/133	http://schema.org/telephone	+32 14 55 78 11
https://www.tpassess.be/id/product/133	http://www.w3.org/ns/foaf#postCode	2460
https://www.tpassess.be/id/product/133	http://www.w3.org/ns/foaf#thoroughfare	Olensteenweg
https://www.tpassess.be/id/product/133	http://xmlns.com/foaf/0.1/page	http://www.bobbejaanland.be

Partnerships

Collected data stops usually at the borders of a city, a province, a country...

Tourists don't...

Tourists should be able to travel across borders, without noticing that they are getting into another provider's data.

Flanders

How to make open data sets for Flanders available?

-> Each province uses its own datasets, in its own data systems

-> Each system uses its own vocabulary, its own semantic



Vlaamse provincies

Partnership touristic region 'Tourisme Scheldeland'

- part in province of Antwerp
- part in province of East-Flanders

-> Each province uses its own datasets, in its own data systems

-> Working together to develop marketing campaigns, or build websites exposes a number of problems





Westtoer as a data consumer

Kerncijfers Kust 2020



2,2 miljard euro bestedingen
= 22 900 VTE werkgelegenheid
(direct + indirect)

3,0 miljard euro bestedingen
= 31 679 VTE WGH

	2020	2019	
 bedden	635 153	629 787	+1%
 aankomsten	4,0 miljoen	5,5 miljoen	-27%
 overnachtingen	23,2 miljoen	27,7 miljoen	-16%
 dagtoeristen	10,0 miljoen	17,2 miljoen	-42%
 Comm. logies	1,6 miljoen	2,7 miljoen	-39%
 Comm. logies	8,2 miljoen	11,7 miljoen	-30%

hindsight | foresight



supply

demand



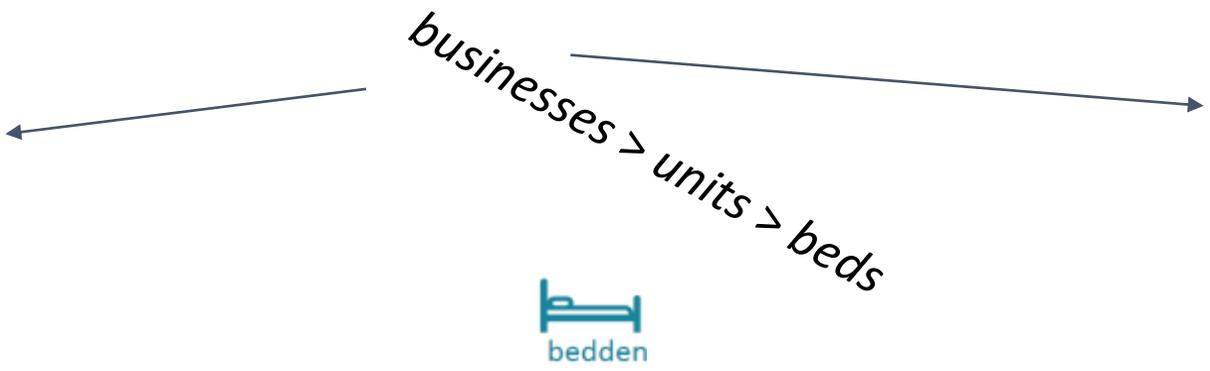


to be or not to be a hotel?



holiday home or secondary residence?

nights / sleeper nights / occupied beds / ...



to be or not to be a campsite?

arrivals / guests / ...



occupied units → occupancy rate

occupied nights





Challenges

- Consensus building with a broad stakeholder group (including private sector)
- Increasing stakeholder knowledge (both data providers and data consumers)
→ need for capacity building
- Tailoring to a wide variety of stakeholders and use cases
- Stability versus agility

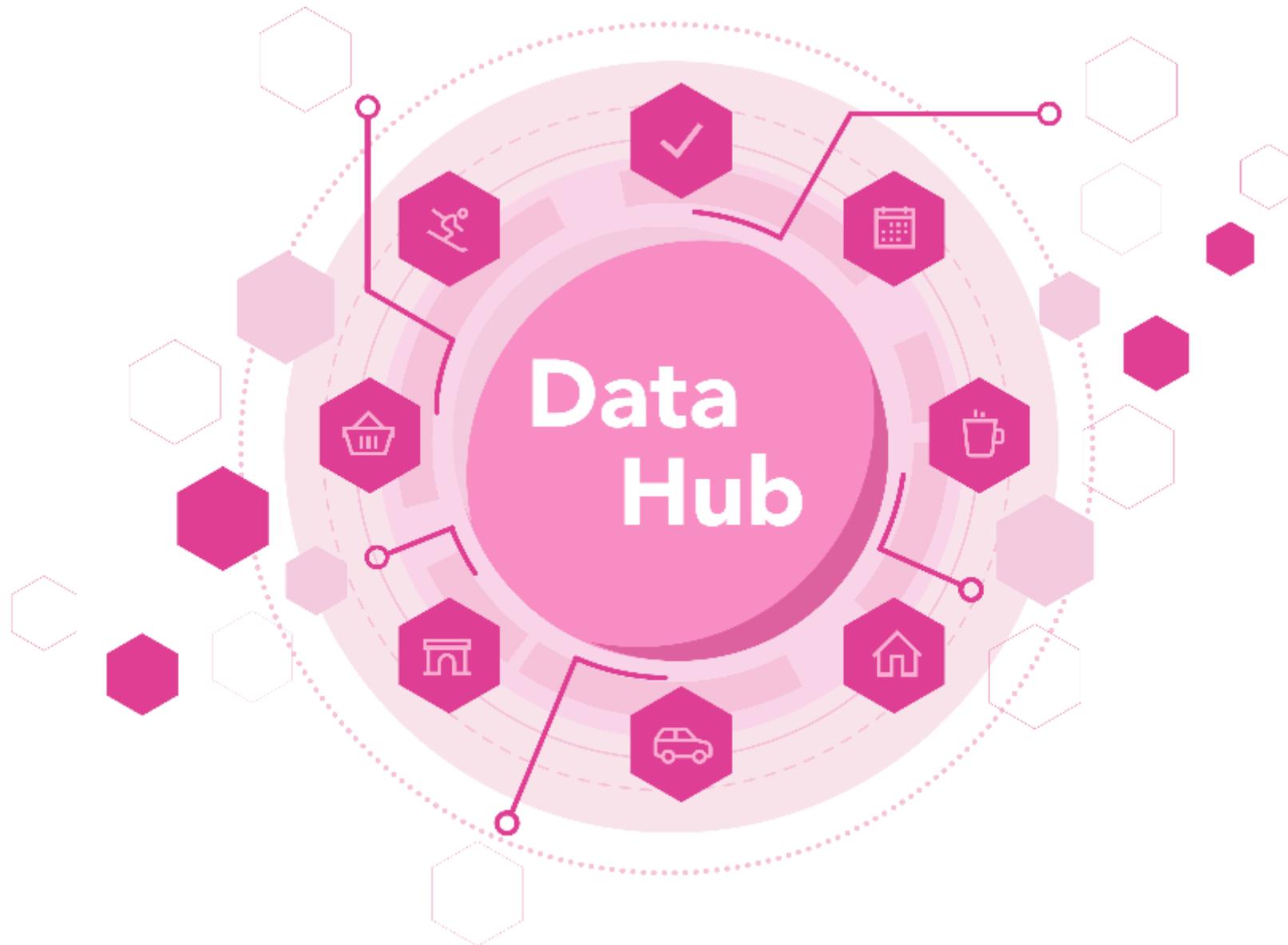


Conclusion

- Need for recap of requirements exercise
- Initiation of a trajectory on standardisation for tourism data on all interoperability levels (semantical, legal)
- Share and reuse best practices



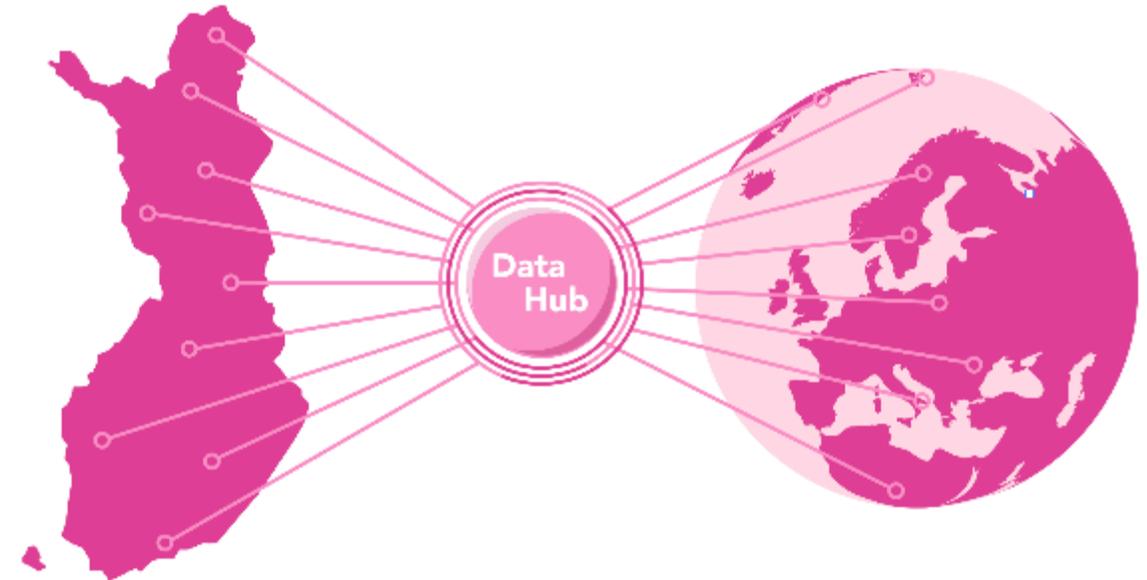
Finland – Business Finland



Visit Finland DataHub

What is Visit Finland DataHub?

- **Database** – finnish travel companies can register and insert data of their company and travel services and products
(*data = non bookable data = marketing content)
- **Interface (API)** – different digital publishers can retrieve and publish travel data



How does DataHub work?

Travel Companies



Data Publishers

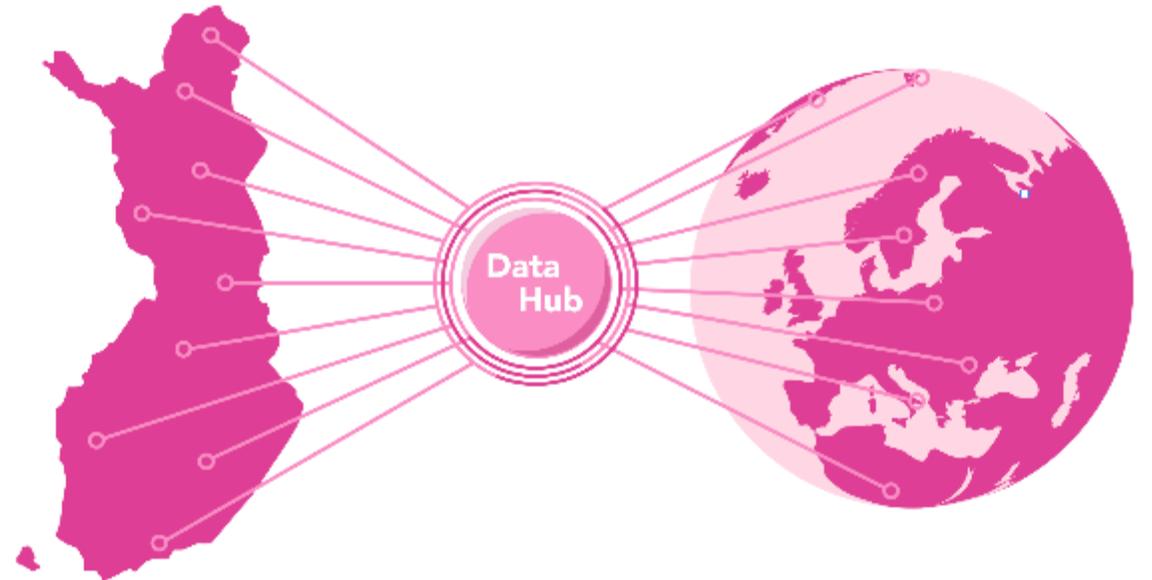


- Visit Finland digital channels
- Destination sites
- Travel applications
- Travel Marketplaces
- etc



Why Visit Finland DataHub?

- Travel product content is needed in a lot of different digital channels – multichannel visibility is a key to findability and building demand
- Travel product content was previously stored in lots of local databases
- Data needs to be easily updated, ie pictures, contacts etc, travel companies can manage own content



DataHub product types

Select product type



Accommodation

Short-term bookable accommodation



Attraction

Natural, cultural, or entertaining tourist destination or sight



Experience

Activity, excursion or packaged tour



Event

Event attracting tourists



Rental service

Short-term bookable equipment or vehicles



Restaurant

Establishment for eating or drinking



Shop

Establishment selling goods or services



Venue

Meeting and event venues



Language versions: [German](#) / [English](#) / [Spanish](#) / [Finnish](#) / [French](#) / [Italian](#) / [Japanese](#) / [Russian](#) / [Swedish](#) / [Chinese](#)

Product name

Arctic Hilltop Boutique Hotel Iso-Syöte

Product description

The Arctic Hilltop Boutique Hotel Iso-Syöte is standing grandly on a hilltop in one of the snowiest areas of Finland next to a peaceful national park. In the relaxing spa, all the senses are calmed down and the high-quality panoramic Restaurant Hilltop offers nourishment both for the soul and the body. Hotel Iso-Syöte also offers joyful experiences of a true winter wonderland, such as skiing, snowshoeing, downhill skiing as well as snowmobile, reindeer and husky safaris.

The boutique hotel rooms and Aurora View Suites offer stylish and customised options. Comfort and design are found in the elegant experience suites: the Bear Cave Suite, the Eagle View Suite and the Phoenix Suite.

The Fell Top Cottages and Kelo cottages offer ambience, surrounded by unspoiled nature as far as the eye can see.

External Links

[Product webpage](#) [Product webshop](#)

Product information

Sustainability certified

-

Accessible

-

Product type

Accommodation

Target group

Individual, Group, B2C, B2B (tour operator)

Categories

Hotels & hostels Luxury accommodation

Specialty accommodation

Season

January	August
February	September
March	October
April	November
June	December
July	

Opening hours

Monday	08:00–22:00
Tuesday	08:00–22:00
Wednesday	08:00–22:00
Thursday	08:00–22:00
Friday	08:00–22:00
Saturday	08:00–22:00
Sunday	08:00–22:00

Contacts and location

Company Name

Arctic Hilltop Boutique Hotel Iso-Syöte

Email

myyntipalvelu@isosyote.fi

Coordinates

65.624505, 27.609032

[See location on Google Maps](#)

Phone number

+358201476400

Location

Isosyötteentie 246, 93280 Syöte

Product photos



Product name

Arctic Forest Sauna and Hot Tub with Northern Lights

Product description

Head to a very traditional and special place located in the arctic forest, surrounded by magic landscapes and ice lakes. Discover the traditional sauna and an open-air hot tub. There is also an Arctic lake where you can try ice swimming.

Sauna is such an important part of Finnish culture that is irreplaceable by other things. It has been a place for physical and spiritual cleansing for centuries. Dipping in the icy lakes and rolling in the snow are said to be good for your blood circulation.

You can lie in the hot tub and look at the magical Northern Lights. After the sauna experience, go to the frozen lake to hunt for the Northern Lights with hot drinks and gingerbread.

External Links

[Product webpage](#) [Product webshop](#)

Product information

Sustainability certified

-

Accessible

No

Product type

Experience

Target group

Individual, Group, B2C, B2B (tour operator)

Pricing (incl. VAT)

Price from 99,00 € to 139,00 € - pricing unit missing

Duration

3 hours

Contacts and location

Company Name

Nordic Unique Travels Oy

Email

info@nordictravels.eu

Categories

Local lifestyle Forests Northern lights

Natural site Ice swimming

Sauna experience

Season

January	September
February	October
March	November
April	December
May	

Opening hours

Monday	18:00–21:00
Tuesday	Closed
Wednesday	18:00–21:00
Thursday	Closed
Friday	18:00–21:00
Saturday	18:00–21:00
Sunday	Closed

Phone number

+358 401453300

Location

Maakuntakatu 29-31, 96200 Rovaniemi

Product photos



DataHub
Visit Finland

7.6.2021



Beautiful Canal Route

Stromma Finland

Helsinki

Elämys

7.6.2021



Helsinki Pizza Cruise

Stromma Finland

Helsinki

Elämys

12.8.2021



Helsinki City Highlights

Stromma Finland

Helsinki

Elämys



Beautiful Canal Route

SPRING / SUMMER / AUTUMN

On this popular boat sightseeing tour you will get to see the beautiful shorelines of Helsinki. We pass many famous sights, including the historic Suomenlinna Fortress, Helsinki Zoo on Korkeasaari Island, the fleet of icebreakers and Degerö Canal. Along the way you will hear fascinating stories about the archipelago. Recorded commentary via loudspeakers in Finnish, English, German and Swedish. Written information is available also in Russian, French, Italian, Spanish, Portuguese, Estonian, Japanese and Chinese.

VISIT WEBSITE

GO TO SHOP

CATEGORIES

Culinary Highlights, Activities, Boating, Sailing, Cruising, Attractions, Sightseeing

SERVICE IS

Accessible Sustainable

CONTACT

Market Square / Kauppatori
Helsinki
+358922881600



DataHub
Visit Finland

7.6.2021



Beautiful Canal Route

Stromma Finland

Helsinki

Elämys

7.6.2021



Helsinki Pizza Cruise

Stromma Finland

Helsinki

Elämys

12.8.2021



Helsinki City Highlights

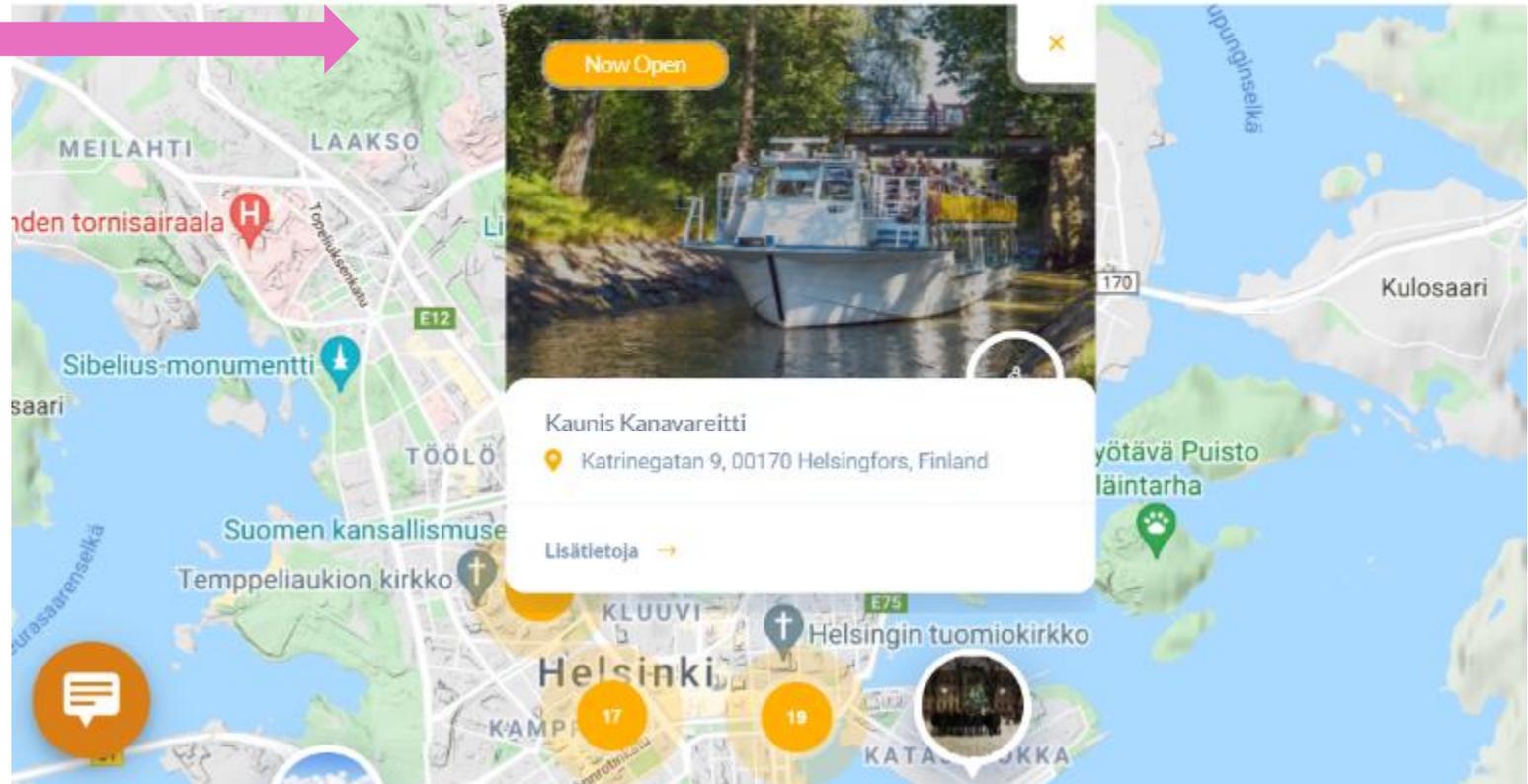
Stromma Finland

Helsinki

Elämys



Home ▶ Etsi Palveluita kartalta





DataHub
Visit Finland

7.6.2021



Beautiful Canal Route

Stromma Finland

Helsinki

Elämys

7.6.2021



Helsinki Pizza Cruise

Stromma Finland

Helsinki

Elämys

12.8.2021



Helsinki City Highlights

Stromma Finland

Helsinki

Elämys



Photo Stromma Finland Oy Ab

[HOME](#) - [SEE & DO](#) - [ACTIVITIES](#) - [BEAUTIFUL CANAL ROUTE](#)

Beautiful Canal Route

Market Square / Kauppatori, 00170 Helsinki

Organiser: Stromma Finland

Duration: 90 minutes

Price: 25 €

Save to My Helsinki

BOOK

WEBSITE

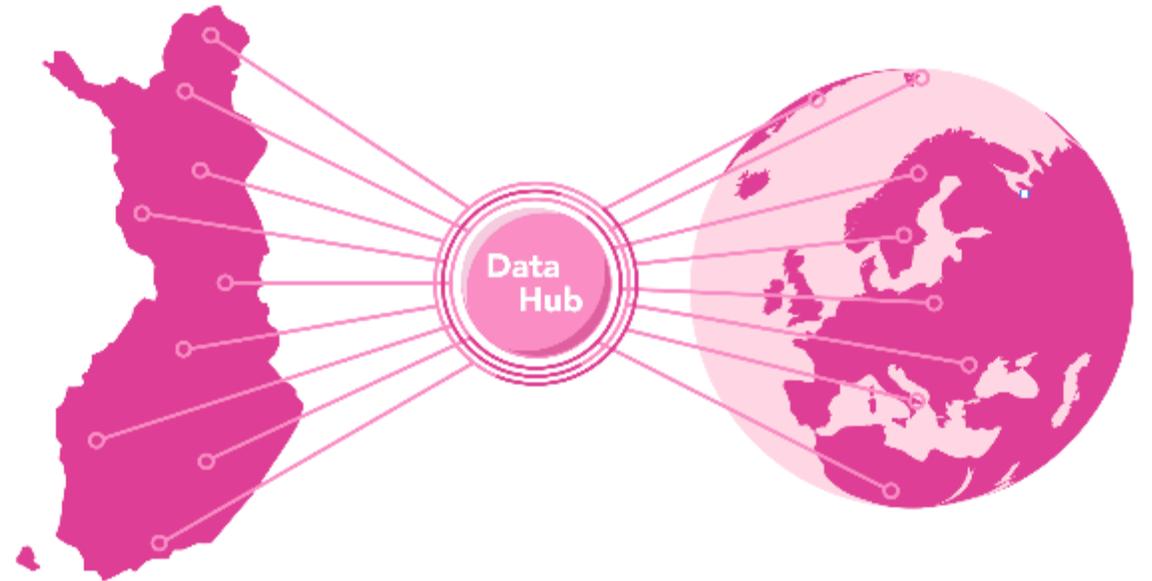
May - September

On this popular boat sightseeing tour you will get to see the beautiful shorelines of Helsinki. We pass many famous sights, including the historic Suomenlinna Fortress, Helsinki Zoo on Korkeasaari Island, the fleet of icebreakers and Degerö Canal. Along the way you will hear fascinating stories about the archipelago. Recorded commentary

Next with **Visit Finland DataHub?**

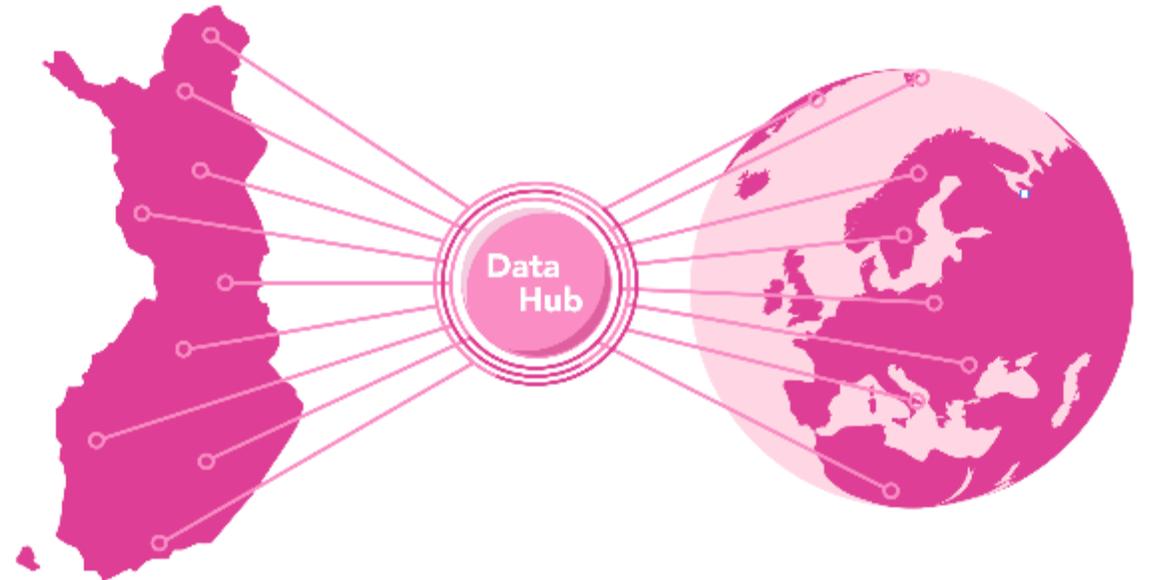
Visit Finland DataHub is a database for all travel and tourism content in Finland

- 1** Products
- 2** Packages
- 3** Destination content



Lets work together to harmonise the travel data !

- Next we will build an API-in
- Challenge is that there is over 20 different inventory management systems, booking engines etc in use – no standard data structures
- Lot's of international channels retrieving the content / data



Lets harmonise the travel product data tables in EU level



Annakaisa Ojala - Visit Finland, Business Finland

Annakaisa.ojala@businessfinland.fi

+ 358 40 359 3207



DataHub
Visit Finland



France – ADN Tourism





Workshop on the importance of semantics for the Tourism data space

March 30th

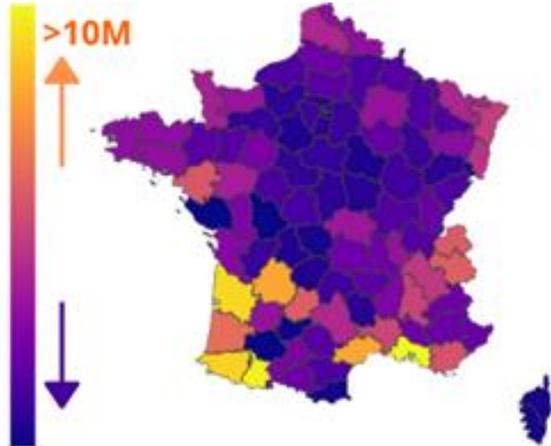
Case from France

Pascale Vinot (ADN Tourisme)

What is DATAtourisme ?



- Official Open Data Platform for collecting the whole inventory of Events and Point of Interest
- Made of several parts :
 - the ontology (data format)
 - the platform (agregate + standardize + openly disseminate)
 - some additional services : automated translation, quality control monitor, linked data services
- First supported and paid by FR gov (2015-2021), the device is now driven and supported by ADN Tourisme (FR federation for official tourist offices)



405,479
Events & POI
in open data

> 26,000
towns covered

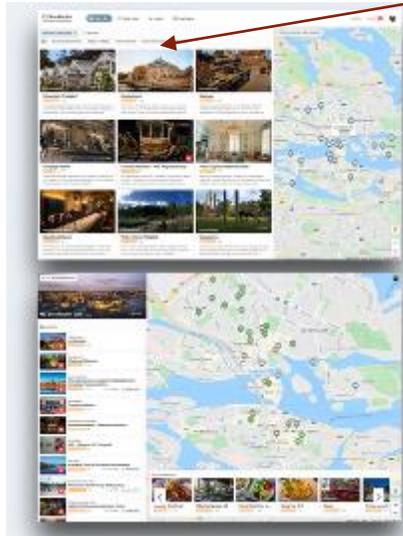
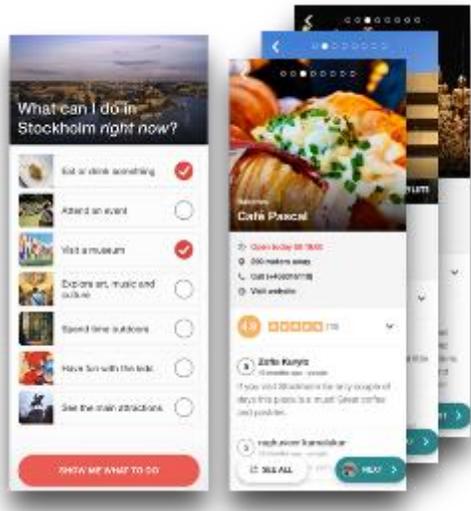
⇒ **312,192**
places
⇒ **66,715**

1,500
regular
broadcaster
s(startups
and
companies)

15,000,000
POI
downloads
by month
(developers)

The use of this platform is available to anyone (public or private) who wants to develop digital services (free)

- Daily press website or webapp : what could I do today ?
- DMO devices : prepare my stay, my route
- Virtual advisor thanks to IA, completing the services of our agents on strategic locations ...

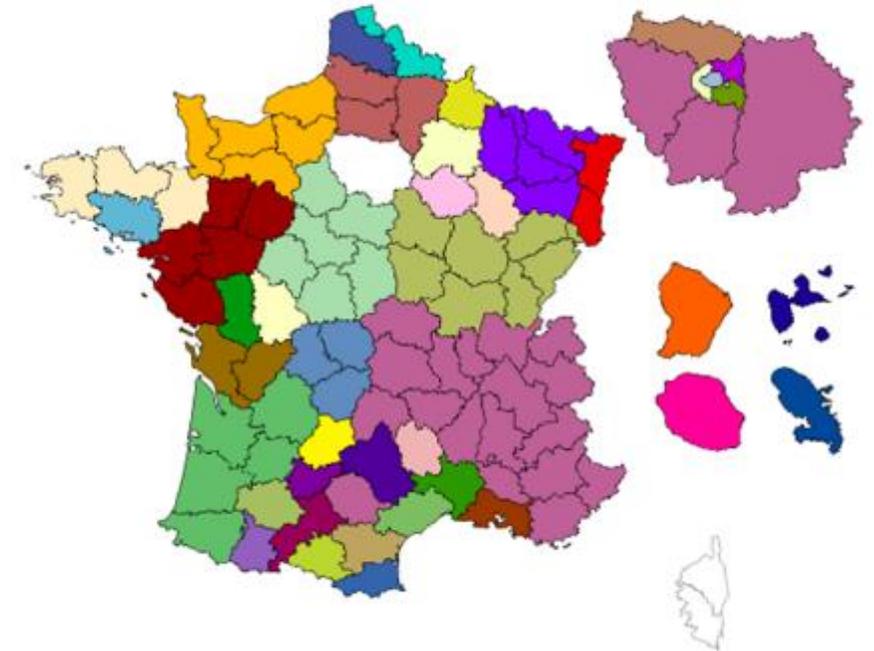


Focus on the importance of the semantic brick of this project

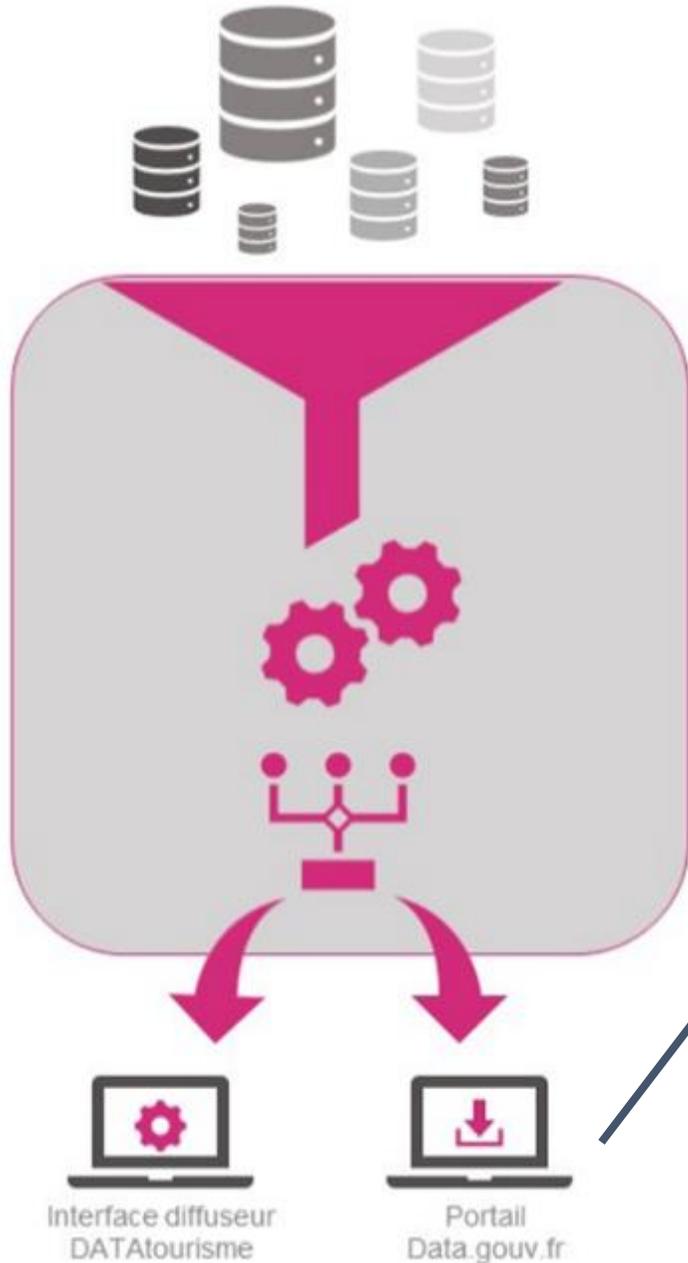
- Context : **no single database in FR** : more than 30 official public data bases depending on the area
- Data is **collected and produced on the field** by 1.500 of tourist offices
- **Interoperability issue** : no single format. Standardization was needed.

>> as we saw that the existing standards did not cover all the typologies of data produced by tourist offices, we decided to **create a complete ontology for tourism** : based on existing standards (schema.org) and completed with new concepts when necessary
- Thanks to this ontology, the national platform is able to **agregate** the data from 33 local bases and **to unifie the format** (ontology), to enable interoperability

Official local French data bases (2019)



How does the semantic brick allows the unique desk and helps reuses ?



- Each public tourist office **sends its data feeds** into the national platform thanks to webservice
 - >> automatic format **standardization**
 - >> automatic data **enrichment** : translation and pictures added

Then developers are provided a **free BtoB desk** : they can set up feeds and download the data for creating digital solutions

The screenshot shows a web interface for configuring a data feed. The title is 'Feed: Visit'. There are tabs for 'Settings', 'SPARQL query', 'Download', and 'History'. The 'Settings' tab is active. The interface includes the following fields:

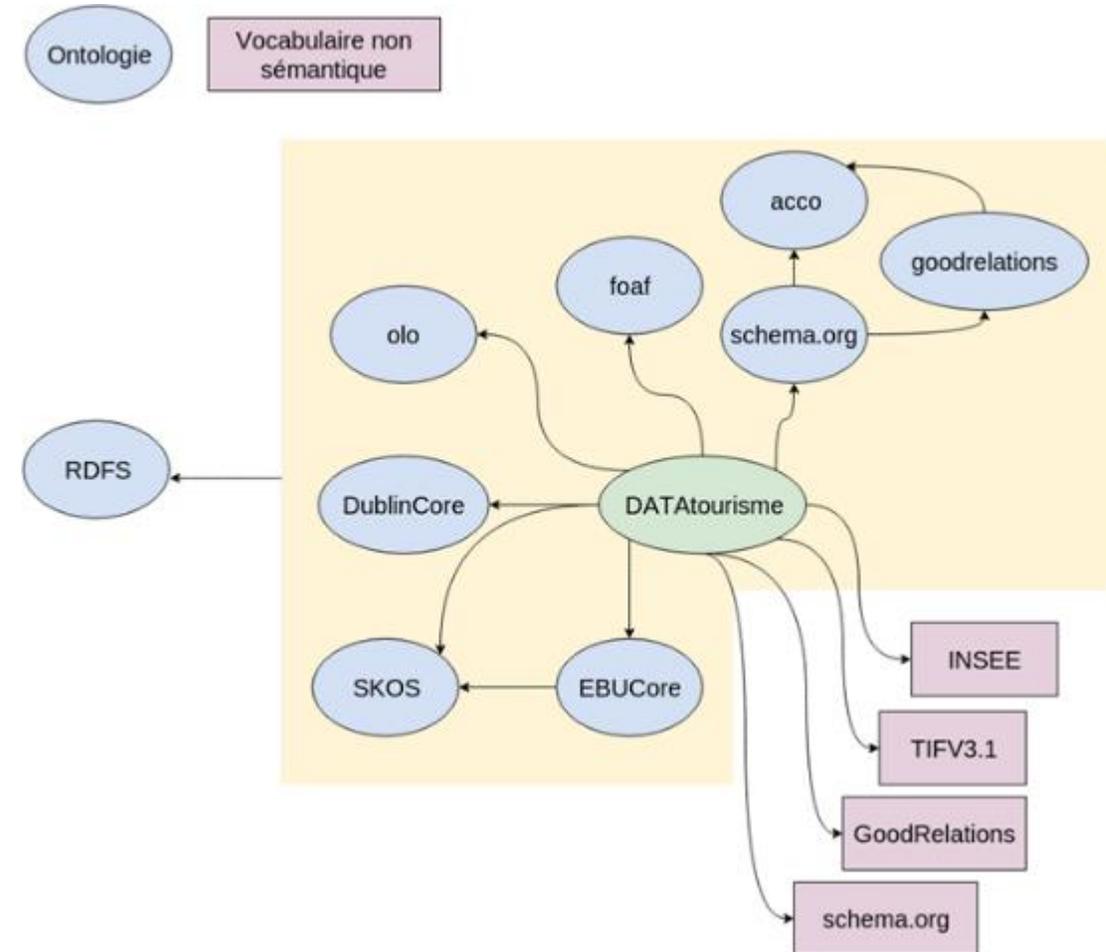
- Name**: Visit
- Description**: Visit JSON
- Format**: Fichiers JSON (with a dropdown arrow and an information icon)
- Webservice**: `https://diffuseur.datatourisme.gouv.fr/webservice/e74859d36210fe42d24e07c81ec41d26/{app_key}`

Below the webservice field, there is a lightbulb icon and a note: "To consume the feed from one of your applications, you must use the address above to replace the {app_key} setting with the API key for the app, which you'll find in the **Applications section**".

Our approach : first build on schema.org and other standards

The FR ontology is being modeled in order to **interconnect** with standard or recognized semantic ontologies :

- **we had to create our own ontology** because schema.org did not cover all types of POI we produce
- but we paid attention not **to create twice** any existing concept, property, or relationship
- we tried to **ensure the best level of interoperability** with other semantic systems
- therefore we especially **strongly linked DATAtourisme to schema.org** (through the modelling of the POI, their location and pricing)



Our approach : when necessary, complete the schema with additional branches and vocabulary



About 18 work months !

- set up a **bottom-up** organisation / collaborative project
- create **working groupes** involving all stakeholders : producers and reusers, public and private
- observe and **benchmark** practices in each local data base + in each existing schemas
- need to agree on a single vocabulary : if no consensus, discuss and decide collectively which classes and words should be **considered as official**
- helped by **experts of ontology creation** : they guided us and transformed our needs into a **technical deliverable** : the DATAtourisme ontology
- **update** the ontology several times a year

Next steps : enriching the ontology and extend its scope

- a “Point of interest” is a **universal concept** used by all of us - worldwide
- the concepts and vocabulary selected for the FR ontology are **ready to be shared**
- each brick of our project is “**Open Source**”
- **interoperability** will be more efficient if a single standard is shared between EU states
 - having a unique **european standard** is the **required first step** for sharing our data and maybe create one day a unique desk for tourism offer data

⇒ **we propose to define the EU standard using our work**, in order to take advantage of the 4 years of work already done (scope of offer inventory)

1- **Complete the schema** with new needs from EU

2- Still focus on **POI inventory** (cold data) as a 1st step

3- **Languages** : EN-DE-ES-IT-NE-PO available thanks to DG GROW. Could be completed.

4 - **Promote** it collectively to any data producer

5 - **Next steps** :

- EU offer catalogue
- Hub : connect to wider types of data

Pascale VINOT

pascale.vinot@adn-tourisme.fr

Linkedin : @pascalevinot

>> our idea is to share our expertise and agree on a semantic common base that will be considered as a reference for describing any Point of Interest - anywhere - by anyone - and reach a maximum EU interoperability !

What is DATAtourisme ?

- Video 1 : <https://www.youtube.com/watch?v=H0qdFv87Ilg>
- Video 2 : <https://www.youtube.com/watch?v=15CfVLt246E>
- Video 3 : https://www.youtube.com/watch?v=qmMgwpr_2_0

Official website : <https://www.datatourisme.fr>

Complete technical details, schemas and files : <https://gitlab.adullact.net/adn-tourisme/datatourisme>

Examples of websites fed by DATAtourisme :

- <https://www.france.fr/fr/campagne/cetetejevisitelafrance-cartographie>
- <https://www.eterritoire.fr/evenements>
- <https://www.alltrails.com/trail/france/haut-rhin/parcours-vtt-des-trois-lacs>
- <https://www.francevelotourisme.com/pratique/loueurs-reparateurs-de-velo>
- <https://kidiwe.fr/>



TO LEARN MORE :

Classification : 721 (universal) classes and sub classes

Entertainment and events :

- **cultural events** : exhibition, conference, artist signing, concert, reading ...
- **sports events** : competition, demonstration, ...
- **social events** : local animation, traditional celebration, carnival, ...
- **sale events** : fair, market, open day...
- **business events** : congress, training workshop...

Tours :

- Cycling Tour
- Fluvial Tour
- Horse Tour
- Road Tour
- Walking Tour

Products :

- Visit product
- Practice product : course, traineeship, testing ...
- Rental product : equipment ...
- Accommodation product : room, camping pitch...

TO LEARN MORE :

Classification : 721 (universal) classes and sub classes

Place of interest :

- **natural heritage** : lake, cave, natural park, beach ...
- **service provider** : taxi company ...
- **sports and leisure place** : cinema, sport hall, ice skating rink ...
- **store** : supermarket, craftsman shop...
- **tasting provider** : wine cellar, farmer ...
- **tourist information center** : tourist office, travel agency...
- **transport** : airport, train station, parking...
- **accomodation** : hotel, camping, guest house ...
- **business place** : convention center ...
- **convenient service** : ATM, public lavatories, electric charging point ...
- **food establishment** : restaurant, bakery, bar ...
- **medical place** : healthcare place, pharmacy...
- **cultural sites** :
 - archeological site : ruins...
 - religious sites : church, temple ...
 - remembrance sites : military cemetry...
 - remarkable buildings : bridge, castle...
 - technical heritage : lighthouse, mill...
 - city heritage : distinct ...
 - defence site : fortified castle, dungeon...
 - interpretation center
 - museum
 - library
 - park and garden

TO LEARN MORE :

Vocabulary : 1507 entries (universal and specific to FR)

Main categories of vocabulary :

Architectural Style - People Audience - Cuisine
Category - Food Product - Room Layout - Type Of
Bed - Geographic Reach - Tour Type - Scale Rating -
Label Rating - Label Review System - Scale Review -
System - Common Amenity - Camping And
Caravanning Amenity - Room Amenity - Catering
Amenity - Cultural Heritage Amenity - Natural
Heritage Amenity - Accommodation Amenity -
Informative Amenity - Cultural Theme - Park And
Garden Theme - Sports Theme - Health Theme -
Route Theme - Spatial Environment Theme -
Entertainment And Event Theme - Pricing Policy -
Cycle Route Theme - Catering Pricing Offer - Pricing
Mode - Activity Pricing Offer - Rental Pricing Offer -
General Pricing Offer - Accommodation Pricing
Offer - Pricing Season

some examples (random) :

Tropical Aerodrome services Conservatory
Biologics Geology Fencing
Shared storage Crepery yachting
Kosher Sandwich South
artsroom garden High Protected
Surf Sand Indian Cuisine Foreign War
biking Kite Pie Fax Modern Grill Exotic
Airline Tapas music Locked tech Martial
Remarkable Salad terminal
Maritime rotisserie Handball
Gymnastics Trial Additional project Motorbike



The Netherlands – Touripedia



Touripedia

[Workshop on the importance of semantics for the Tourism data space](#)

March 30th

The case from the Netherlands:

A typical country starting off with Open Tourism Data

Ype Poortinga & Merijn de Boer

Who we are

Three professionals - but
civilians - as well, who
temporarily have set
aside their personal
ambitions for realising
an open tourism
environment in the
Netherlands



Bouke Nielsen

communication

retired economy journalist

fulfilling intellectual
challenges with support to
social-cultural startups



**Merijn de
Boer**

innovation

director IT-Gaming
platform

organises exhibitions art-
in-games

gaming hackathons

became a dad last jan.



Ype Poortinga

realisation

solled Java-developer
Wisdom

IT hackathons

fulfilling intellectual
challenges with
social-cultural IT-startups

Fact #1: 2022 Holland has no centralised Open Tourism Data at all ... yet ... but ...

Touripedia: selected out of 900+ ideas to improve Tourism

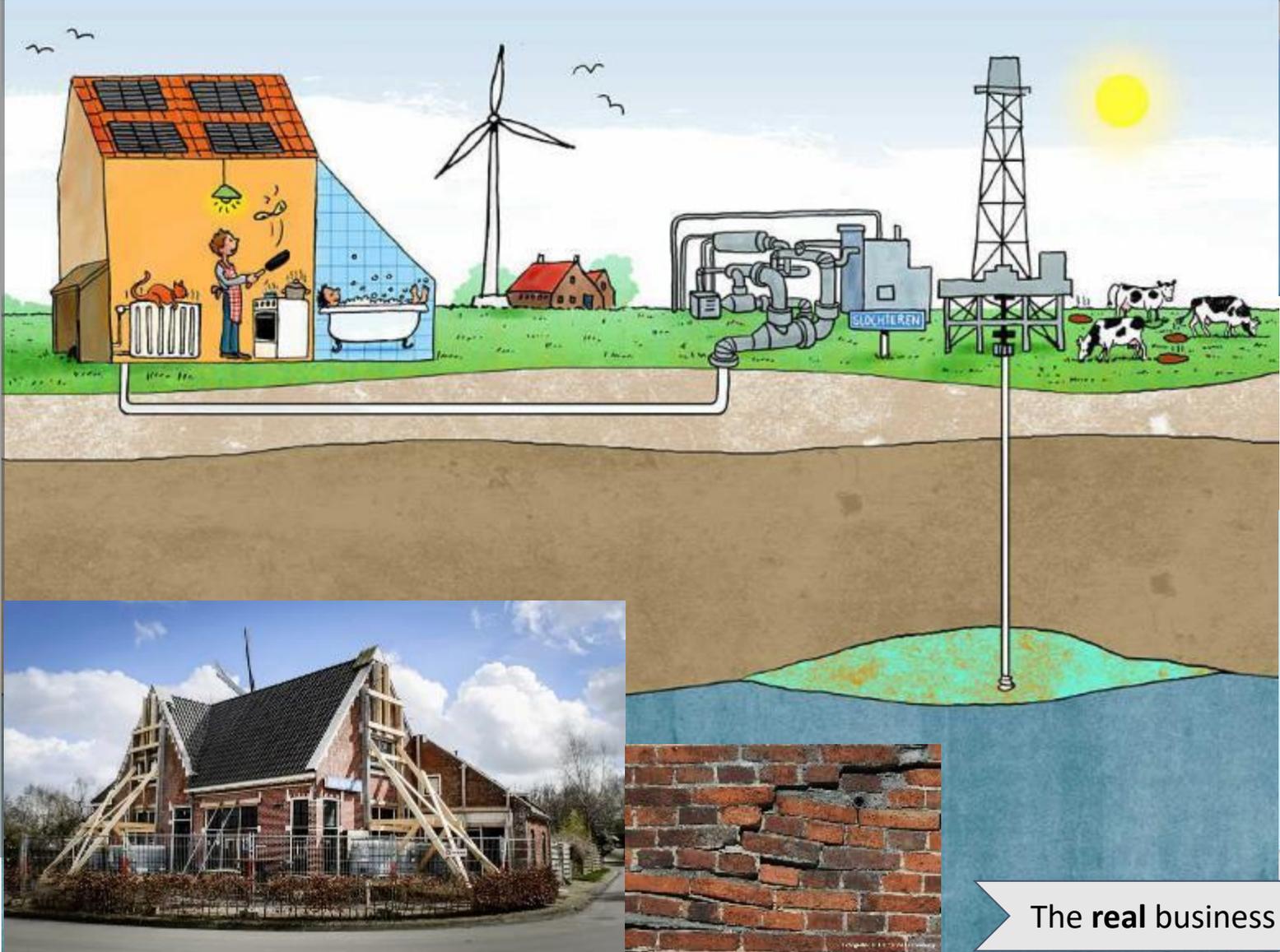
50 years of gas exploitation

Earthquakes since 2012

Houses have to be repaired

€ 100.000.000,- as compensation for community

Governmental contest > 900+ ideas



Province of Groningen



The **real** business case & approach

Problem area#1: very interesting cultural historical area with lots of **digital invisible** cultural events

250 churches (11th-13th century) with unique organs and concerts



volunteers area

no money for
online marketing

lots of closed data
platforms

lack of
completeness,
actuality

lots of frustrated
(local-) tourists



Problem area#2: bigtech milks-out the hotel management => less money for tourist services

Marketing options of the Hotel-owner

Big-tech

12%-16% provision / advertisements

only provision interesting lodging

Google Travel

Closed Datasets => money rules

'Battle' 'BigTech' versus 'the governments'

lots of hotel-software / infrastructure operational

!!! easy to get available lodging & prices

'the-way-up' pricing based on (regional) occupation

(mostly) Government

flat-

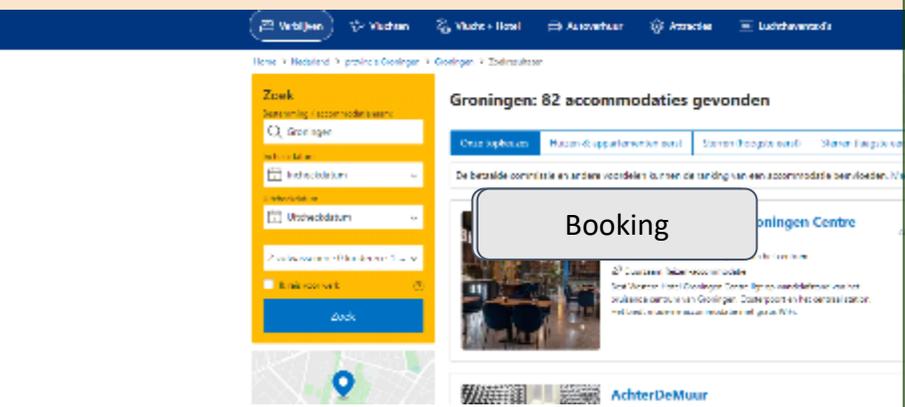
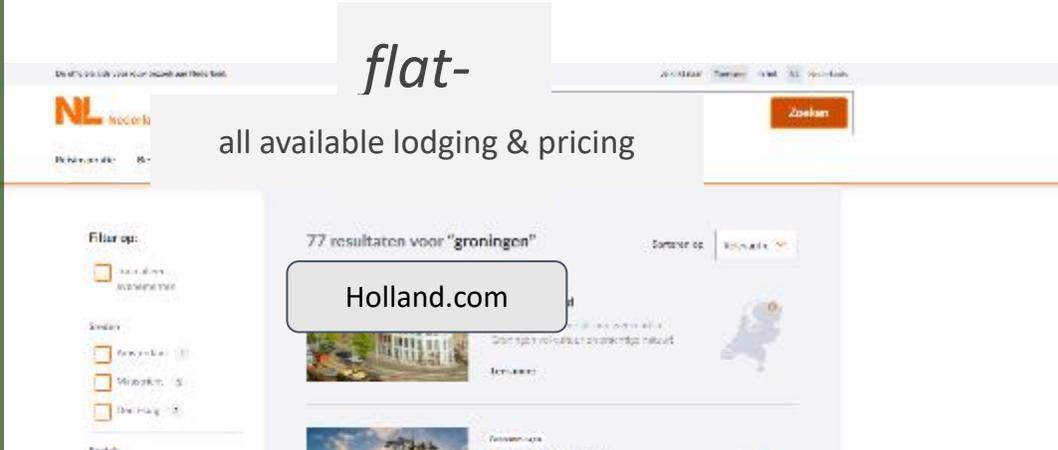
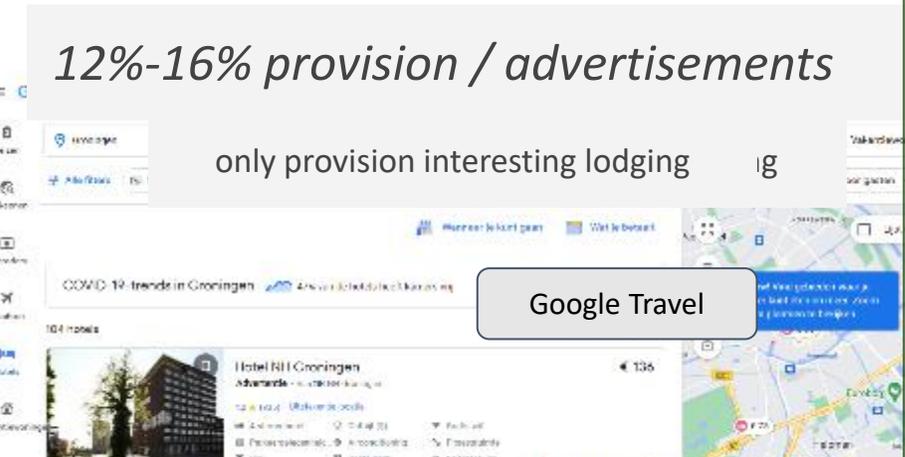
all available lodging & pricing

Holland.com

"Open" Datasets => equality - completeness

Booking

Visit Groningen



Approach of the Dutch

- small steps & starting with low hanging fruits: events
- focus on completeness and actuality => expanding autonomous small regions
- tackle the problem of having local governmental funded organisations now setting up their own **closed** tourism environments
- practical: copy/paste the **French** approach / semantics / open source scripts / ...
- expected outcome of centralised EU-Tourism initiatives
 - semantic EU-Tourism datamodel;
 - *cookbook* with best-practice guidelines and recipes with step plans for regional implementations;
 - moderated library with open source scripts for implementing regional data-hubs;
 - one central hosted open european touristic datahub environment filled with data from the regional hubs

the real **business case** for having an **EU-approach** for **open tourism data**

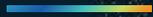
- 1) multinational marketing organisations (like Expedia) will **only connect** to an open data on EU-level
- 2) with open tourism EU-data startups can **compete equally** on quality of services/prices towards the tourist



Discussion



Wrap-up and next steps



A network visualization on a dark blue background. A central hub of orange and yellow lines radiates outwards, connecting to a vast network of smaller nodes and lines. The lines transition in color from orange and yellow near the center to green and blue as they extend towards the periphery. The overall shape is roughly star-like or fan-like, with many lines extending outwards in various directions.

Thank
you



interoperable europe

innovation ∞ govtech ∞ community

Stay in touch



[\(@InteroperableEU\) / Twitter](#)



[Interoperable Europe - YouTube](#)



[Interoperable Europe | LinkedIn](#)



DIGIT-INTEROPERABILITY@ec.europa.eu



<https://joinup.ec.europa.eu/collection/interoperable-europe/interoperable-europe>