

## Meeting Minutes – Workshop 30/03/2022

### Tourism Workshop

Project	Action 2016-07 Promoting semantic interoperability amongst the EU Member States	Meeting Date/Time	30/03/2022 10:00-12:00 PM (GMT+1)
Meeting Type	Workshop	Meeting Location	Cisco Webex Meetings
Meeting Coordinator	Florian Barthelemy	Issue Date	04/04/2022

Meeting Agenda
<ol style="list-style-type: none"><li>1. Welcome</li><li>2. Introduction</li><li>3. Four data stories<ol style="list-style-type: none"><li>a. Flanders</li><li>b. Finland</li><li>c. France</li><li>d. The Netherlands</li></ol></li><li>4. Discussion</li><li>5. Wrap-up</li></ol>

Attendee Name		Organisation/Country
Alessandro Monti	AM	University of Firenze
Alessio Sidoti	AS	Intellera Consulting
Alex Villeyra	AV	Mabrian Technologies
Alice Orlandini	AO	Regione Emilia Romagna
Ana Moniche	AMo	Tourism of Tomorrow Lab
Andrea Halmos	AH	DG CONNECT

Andy Nyberg	AN	Expedia
Anne Thollard	AT	DG REGIO
Annis Ojala	AOj	Visit Finland DataHub
Arpad Welker	AW	European Commission
Athanasios Karalopoulos	AK	DG GROW
Barbara Weizcäcker	BW	Exhibition Alliance
Charline Alexandre	CA	PwC EU Services
Christophe Demunter	CD	Eurostat
Claudenir Fonseca	CF	Free University of Bozen-Bolzano
Danila Morozov	DM	Cycleadvisor
Dejan Ristic	DR	Visit Ljubljana
Deni Jegeni	DJ	Ontopic
Despoina Sarafeidou	DS	Municipality of Kavala
Dirk De Baere	DDB	Belgium - Flanders
Eleonora Lorenzini	EL	Italy
Emidio Stani	ES	PwC EU Services
Emmanuel Jamin	EJ	Spain
Eveline Vlassenroot	EV	Belgium - Flanders
Fabian Kirstein	FK	Germany
Federica Bordelot	FB	Eurocities
Federica Russo	FR	Italy

Felipe Santi	FS	Sismotur
Florian Barthelemy	FB	PwC EU Services
Florian Böhm	FBo	European Commission
Francesca Cruciani	FC	Italy
Franziska Sunderland	FSu	Tourismus NRW e.V.
Holger Dieterich	HD	Sozialhelden
Ivor Ambrose	IA	ENAT
Jean-François Cases	JFC	EONA-X / Amadeus
Jennifer Iduh	JI	Visit Europe
Jose-Norberto Mazon	JNM	University of Alicante
Julieta Medina	JM	Spain
Justin Fun	JF	Amadeus
Katerina Moutogianni	KM	DG CNECT
Kirsti Ala-Mutka	KA	DG GROW
Lyublena Dimova	LD	Visit Europe
Lorena Hernandez	LH	Joint Research Center
Luis Cardo	LC	Tourism of Tomorrow Lab
Makx Dekkers	MD	Freelance
Martin Rabanser	MR	RMB Consulting
Martynas Jusevicius	MJ	Atomgraph
Matthias Hickl	MH	Germany

Maud Noyon	MN	European Commission
Merijn de Boer	MDB	Touripedia
Miguel Alvarez	MA	DIGIT
Misa Labarile	ML	DG GROW
Neil Taylor	NT	Mastercard
Nicolas Loozen	NL	PwC EU Services
Oleksandra Roche-Newton	ORN	Innsbruck University
Pascale Vinot	PV	DNA Tourism
Pavlina Fragkou	PF	DIGIT
Peter Hopfgartner	PH	Ontopic
Robert Heinemann	RH	Germany
Richard Kocher	RK	Expedia
Rita Okcuoglu	RO	Mastercard
Roberto Musmeci	RM	DG REGIO
Sara Lanzilotta	SL	Exhibition Alliance
Seppe Santens	SS	Belgium - Flanders
Seth Van Hooland	SVH	DIGIT
Stephan Forseilles	SF	Easyfairs
Simon Bley	SB	Eurostat
Susanne Stuebs	SSt	Sweden
Susy Van Baelen	SVB	Belgium - Flanders

Umutcan Simse	US	Austria
Viktorija Molnar	VM	EHHA
Vitis Faure Tilgaard	VFT	DG CONNECT
Ype Poortinga	YP	Touripedia

## Summary of the meeting

Topic	Summary
<b>Welcome</b>	<p>Misa Labarile, from DG GROW, welcomed the participants and shared the workshop practicalities.</p> <p>DG GROW introduced the topic as a key enabler of a future data space for tourism. The role of Member States (MS), illustrated by the case studies which will be presented during this workshop, is key in this context to identify the role of the European Commission in supporting data sharing to the best extent possible.</p>
<b>Introduction</b>	<p>Seth van Hooland explained the agenda of the day. The workshop gathered two different groups of participants: technical people and domain experts on tourism. The discussion focused on the data aggregators' side. Four countries shared their initiatives and best practices during this workshop:</p> <ul style="list-style-type: none"> <li>● Belgium - Flanders</li> <li>● Finland</li> <li>● France</li> <li>● The Netherlands</li> </ul> <p>In the past, several initiatives have already been launched and experience has been acquired in the field of semantics:</p> <ul style="list-style-type: none"> <li>● Virtual Tourism Observatory and existing legal basis for tourism statistics (<a href="#">Regulation (EU) 692/2011</a>)</li> <li>● Existing standards (e.g., <a href="#">Schema.org</a>) and knowledge bases (e.g. <a href="#">Wikidata.org</a>) contain schema's and semantics specifically on tourism concepts</li> </ul>

	<p>Existing initiatives from different tourism actors in Europe should be reused and need to adopt a pragmatic approach for defining semantic, based on concrete use cases with rapid &amp; agile development cycles.</p>
<p><b>Four stories</b></p>	<p><b>data</b></p> <p><b>Flanders</b></p> <p>Eveline Vlassenroot (Digital Flanders) explained Flanders wants to be to share data across all levels by using semantics. She stressed the importance for data to flow between the different information systems.</p> <p>She presented past work (Exercise in Flanders - 2015) achieved in a collaborative manner with regional, provincial and local actors. This collaboration was structured around workshops where problems of interoperability and semantics were central. She mentioned that they have a very broad range of stakeholders from different sectors and diverse size of organisations.</p> <p>The domain model is now 7 years old, and requirements have evolved over time. An update of the model would be needed, and concertation on an EU level would be desirable.</p> <p>Susy Van Baelen mentioned that the Province of Antwerp gathered a lot of data on different objects. The increased importance of data also raises questions related to the sharing, the use and reuse of this data. Since 2012, they have been working with a tourism database: <a href="#">TPAccess</a>. At this moment, they collect data of 7200 products classified in data types.</p> <p>Susy explained that their API offers connections to a broad range of actors. In 2019, the database was renewed, and they wanted to provide data exports as well as make the data available for everyone without a login.</p> <p>A challenge they are facing is that the data in their database stops at the borders and each province has its own way of collecting and sharing data. Users should not notice that they have changed data providers while travelling.</p> <p>Sepepe Santens explained what <a href="#">Westtoer</a> does from the perspective of a data reuser. Westtoer makes yearly trend reports based on tourism data: capacity of beds, employment, overnight stays... To build those reports, historical data from the Flemish and federal governments are used. Westtoer also collects data on their own and looks at the near future by analysing booking data provided by service providers and umbrella organisations for the private sector. The challenge there is to make sure that those organisations are using the same words to talk about the same concept. Westtoer is facing some issues that justify the creation of a common data standard:</p> <ul style="list-style-type: none"> <li>• Different names used for the same concept</li> </ul>

- Differences in the licences of accommodations and how those want to be promoted
- Concepts that change over time, which makes it difficult to interpret the data

There are still some challenges to get a common data standard:

- Existing knowledge gap within the tourism sector and within IT contractors when talking about semantics
- Big differences between small family businesses and big corporate companies
- Business owners won't make the effort to adapt all the time to new technological solutions

### **Finland**

Annakaisa Ojala presented [Visit Finland DataHub](#), which is a national tourism organisation, a digital platform for the Finnish travel industry. Visit Finland Datahub was launched in August 2021 and is a database for Finnish travel companies where they can register and enter data of their companies and products. The data in the database is non bookable and relates to promotional content.

At the moment, they have a user interface for travel companies who insert their content manually. Through their open API, data providers can retrieve and publish data.

Visit Finland DataHub has been launched as they recognized the need for structured travel product content across various digital channels. Previously, there were many small and local databases. Updating that content was needed and Visit Finland DataHub was built as a national database open for all tourism actors in Finland.

DataHub gathers many product types (e.g., accommodations, attractions, restaurants, shops, experience, events, rental service and venue) and provides information on those products in 10 languages.

One of the next steps for Visit Finland DataHub is to develop packages and destination content as they only have single products at the moment.

The challenge Visit Finland DataHub is facing is that there are over 20 different inventory management systems and booking engines in the travel industry in the country with no standard data structure.

### **France**

Pascale Vinot is a project manager working for [DNA Tourism](#), the French federation of tourism offices and local public agencies. DataTourism is the official open data platform for collecting the whole inventory of events and points of interest in France. This project was

initially paid by the French government and is now supported by their federation. This platform is available to everyone who wants to develop digital services and is provided for free.

Before that central database, there were more than 30 official public databases in France. Data was at first collected and produced on the field by 1500 tourist offices, causing interoperability issues as they had no single format and vocabulary. DNA Tourism concluded that existing standards did not cover all the typologies of data produced, so they decided to create a complete ontology for the tourism industry. They based themselves on existing standards (such as Schema.org) at first and completed with new concepts when necessary. To complete the ontology, DNA Tourism created working groups to observe and benchmark practices of local databases.

Pascale then presented the ontology, its attributes and relationships. They also have a dictionary with over 1500 words that can universally describe each point of interest.

The proposition of DNA Tourism is to define the EU standard using their work. The way of working would be the following:

- Complete the schema with the needs of other MS
- Focus on the point of interest inventory as a first step
- Complete the languages available. With the support of DG GROW, the thesaurus has already been translated into 6 languages (EN, DE, ES, IT, NL, PL).
- Promote the thesaurus collectively
- Proposed next steps: work on an EU offer catalogue and connect to wider types of data

### **The Netherlands**

Ype Poortinga, from [Touripedia](#), mentioned that Holland has no centralised open tourism data. Ype stressed several challenges they are facing:

- There are a lot of small events run by volunteers that don't have money for online marketing. They are using lots of closed data platforms. As a tourist, it is difficult to find events in the area.
- The commission-based model of the big booking platforms is not working for small hotels and accommodation providers, due to of the scale of their activities. They also don't have a split system for closed and open datasets.

The approach of Touripedia is to start small and focus on events. They decided to keep the hotel availability out-of-scope for the time being.

Touripedia wants to focus on completeness and timeliness. They will also need to tackle the problem of having local governmental funded organisations setting up their own closed tourism environments.

Their hopes for the centralised EU initiative are the following:

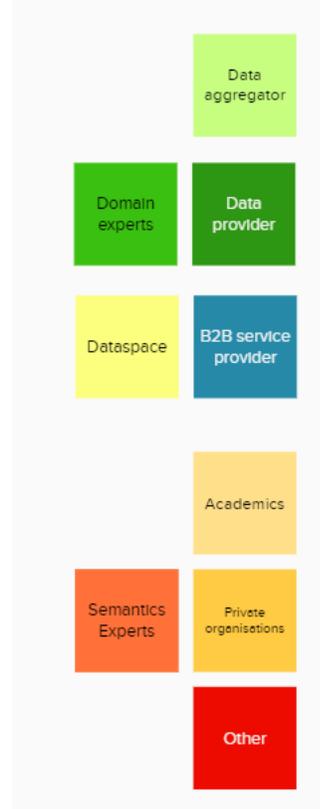
- A semantic data model as well as a guide with best practices and steps for regional implementations
- A moderated library with open-source tools for implementing regional data hubs
- One centralised European data hub to leverage the regional data.

## Discussion

Makx Dekkers introduced the Mural exercises and Florian Barthélemy gave a brief overview of the Mural practicalities.

### Exercise 1:

Makx explained the first exercise which consists in knowing who is who. Participants have chosen the colour of their sticky notes based on their domain of expertise. Here is the legend:



Dieter Fensel

Raphaël Troncy

Alessandro Monti  
Fondazione  
Università di  
Firenze

Eleonora Lorenzini  
Politecnico  
di Milano

Tiago Prince Sales

Claudemir Fonseca

Francesca Cruciani

Federica Russo

Jose-Norberto Mazon

Oleksandra Roche-Newton

Jean-François Cases

Julieta Medina

Florian Barthélemy  
PwC EU  
Services

Luis Cardo

Neil Taylor  
Mastercard

Alessio Sidoti

Adrian Deluca

Rita Okcuoglu

Anna Borduzha

Nicolas Loozen

Lodewijk Noordzij

Peter Hopfgartner

Charline Alexandre  
PwC

Emidio Stani

Rachel Read

Yves Meersmans

Mirko Lalli

Viktorija Molnar

Max Dekkers

Umutcan Simsek

Claudemir Fonseca  
(Researcher @Unibz)

Miguel Alvarez

Susanne Stuebs

Despoina Sarafeldou

Danila Morozov  
(Cycleadvisor)

Holger Dieterich

Athanasios Karalopoulos

Manuela Tavertini

Andrea Halmos

Arpad Welker  
(CNECT EC)

Katerina Moutogianni

Francisco Aranda

Federica Bordelot

Maud Noyon

Andre Podubecky

Misa Labarile

Ricardo Barranco

Javier Orozco

Kirsti Ala-Mutka

Alice Orlandini

Lorena Hernandez  
(JRC)

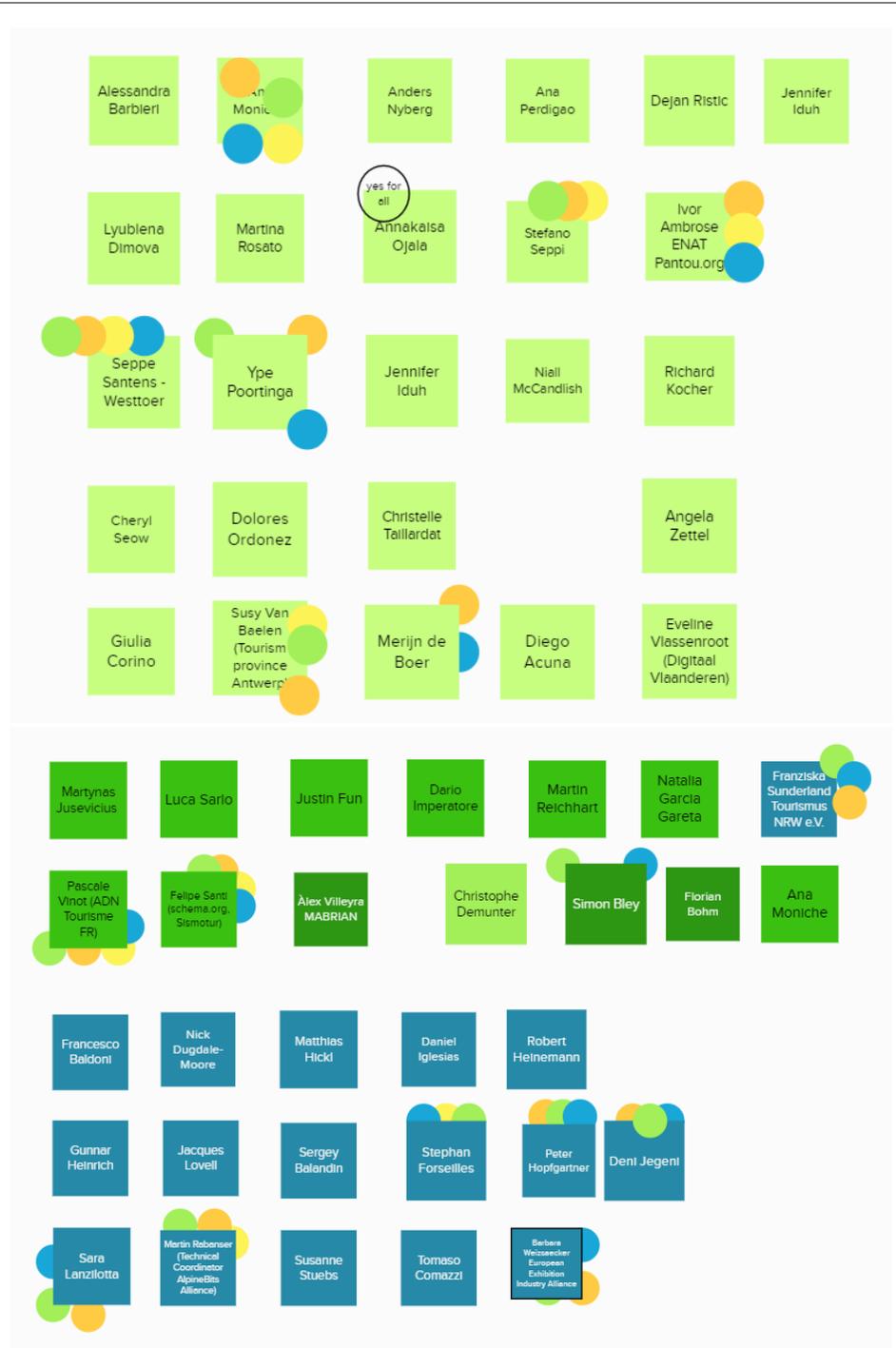
Seth van Hooland

Edoardo Colombo

Anne Thollard

Vittis Faure-Tilgaard (DG CNECT)

Francesco Errani



**Exercise 2:**

Makx introduced the second exercise and invited participants to share their ideas of data terminology issues causing problems when aggregating tourism data (e.g., different measurements of the capacity of a place such as beds, people, etc.). The participants were also invited to indicate the proposed issues that they already faced.

Interoperability of terminology between what tourism stakeholders plan to share between themselves, and what is defined as terminology in the official tourism statistics (e.g. "capacity")

How to make existing UE semantic norms interoperable

Facilities an offer are specific in relation to location, target groups...: which ones are to include in a model?

Aggregate data from different booking platforms / inventory management systems, lots of different data models

Some accommodations are not officially licensed as a hotel (or a camping), but want to be promoted as a hotel (or a camping). Do we include them?

Categorization of tourist sites

Open Standards to easily share data about tourism

Information is presented in different ways and classified in different ways from different sources and levels. think of accessibility information for visitors with disabilities. Which format to keep? Which choices to make?

Problems of access to the databases connected with cycling

Each area may have its own specific classification for an accommodation or a restaurant or even a museum: where to place the cursor to define the common base?

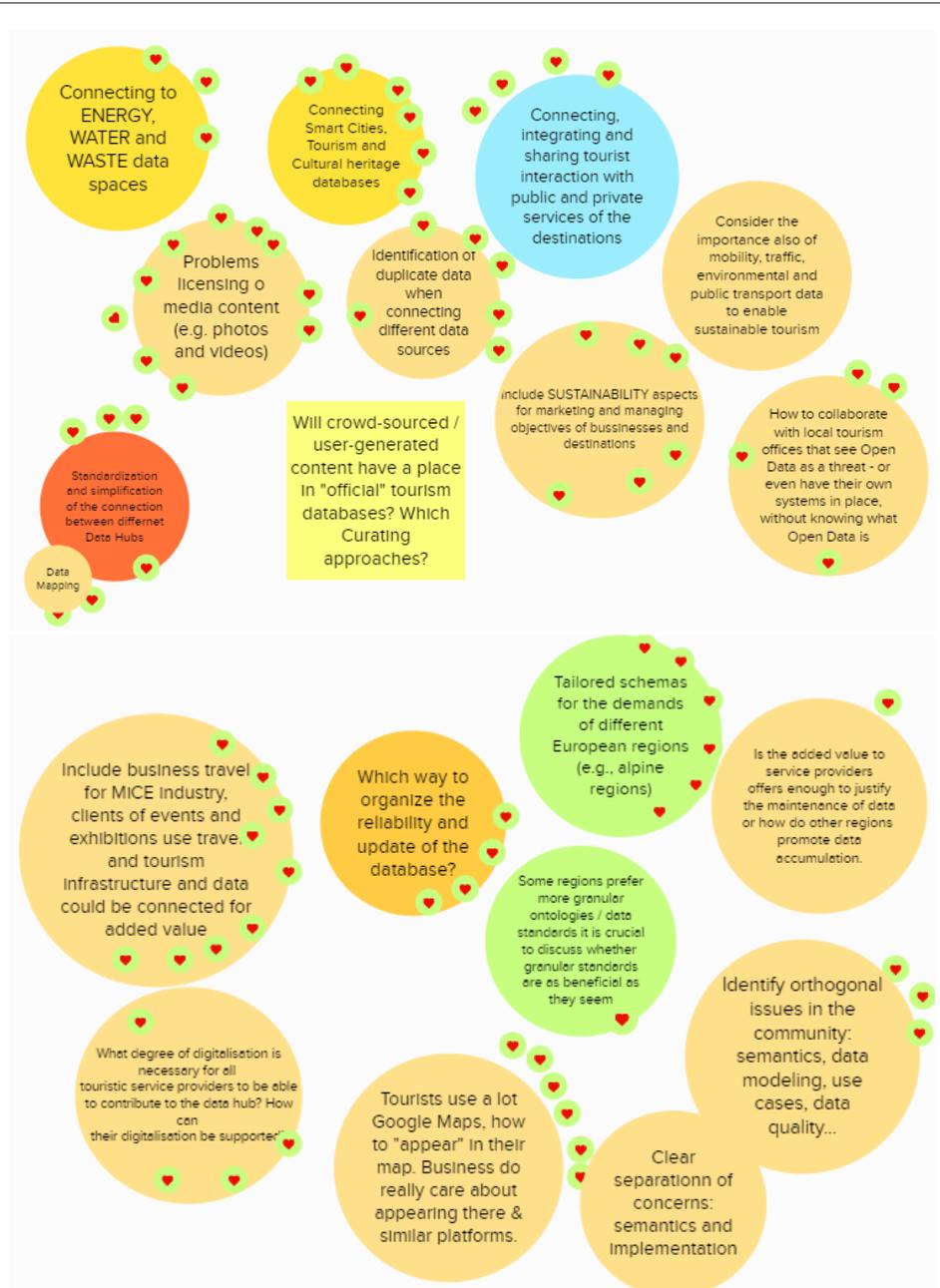
Should brands and labels be included in a semantic model knowing that they are part of the qualification of a POI ?

Reality changes every day. Do we need the ability to go back to every moment in time or do we only look at the current status?

The issues will be different depending on whether there are already structured or unstructured databases in the country

Lack of common terminology for basic concepts used in other sectors (e.g. smart communities)

Need to get payment service providers to categorise tourism providers using similar terms as many services operate off of the merchant classification codes that come via payment terminals (PoS)



From the contributions on Mural above and the interventions of the different participants, the following classification of the issues can be proposed:

- **Business issues** (what information to include and for which use cases). An important use case mentioned by participants concerned the marketing and visibility of events or locations (e.g., how to make sure it appears on Google Maps or in certain platforms).

- **Modelling issues** (e.g., how things are defined). For instance, an existing issue consists in defining the characteristics of an accommodation (general concept) compared to a hotel or camping (more specific concepts). Some accommodations are not officially licensed as a hotel (or a camping) but want to be promoted as a hotel (or a camping).
- **General interoperability issues:** there are many schemas and models existing. How can a standard be defined in a pragmatic way to ensure its reusability?
- **Classification issues:** for instance, with the categorisation of tourist sites.
- **Data quality issues:** how to make continuous updates possible to match the reality changes or how to identify duplicates when connecting different sources.
- **Other semantic issues:** the level of granularity of the information data providers would be ready to share and under what conditions or the level of customization for products and regions and flexibility of the terms defined
- **Sustainability aspects:** taking into consideration the importance of mobility, traffic, environmental and public transport data to enable sustainable tourism.

Barbara Weizsacker stressed that the business travel should be included as well as events they organise for business travellers.

Felipe Santi insisted on the difficulty to tackle all the issues listed by participants. He also mentioned that the French case seems to be the most advanced initiative for modelling and classifying tourism concepts. Therefore, it would be interesting to have it as a basis for the collaborative work led by the European Commission. Additionally, Felipe, who is one of the co-creators of the tourism group in [Schema.org](http://Schema.org), shared his willingness to collaborate and provide some help.

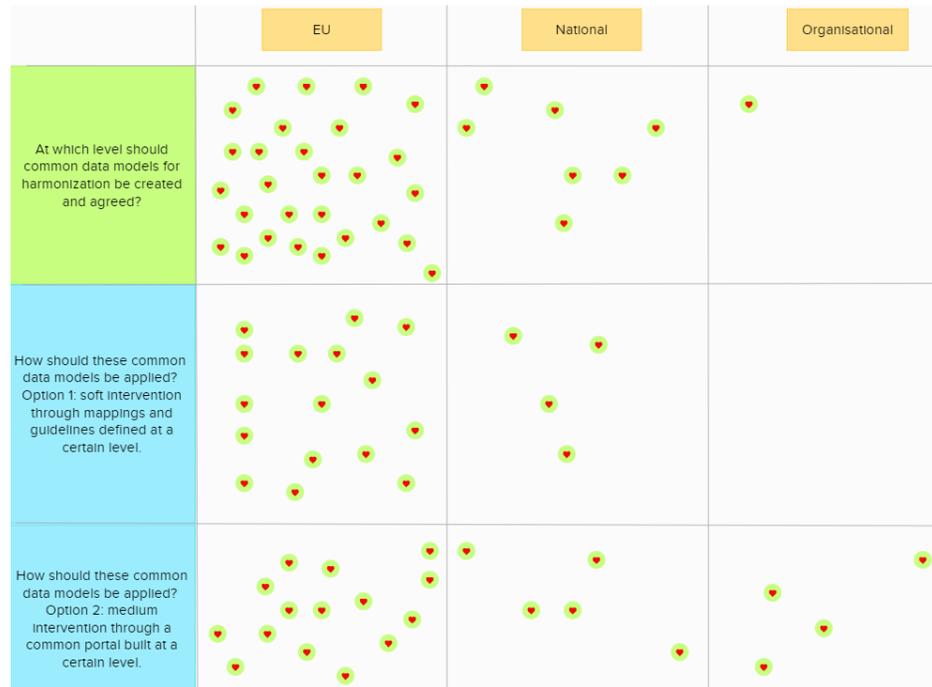
Christophe Demunter (ESTAT) mentioned that Eurostat's work with the statistical authorities in the Member States could be useful as a starting point. He stressed the importance of governance. Any consensus on a thesaurus within a diverse stakeholders' group can take time to negotiate. The end result also needs to be sustainable in the long term.

### **Exercise 3:**

Makx Dekkers presented the third exercise in which two questions were raised to participants:

- At which level should the common data model be harmonised and agreed?
- How should the common data model be applied? Should it be a soft intervention with guidelines or a medium intervention with a central hub?

Participants chose between the European, national and organisational levels as shown below:



From the votes of participants, it came out that there is a willingness for a common data model at the EU level. When it comes to the preferred intervention option, participants seemed equally interested in a soft intervention through mapping and guidelines (16 votes) than in a stronger intervention through the creation of a common portal (15 votes) at EU level.

#### Exercise 4:

The last exercise consisted in a call for action where participants had to choose at which level they wanted to be involved in the next steps:

- Be kept informed
- Provide data for a pilot
- Participate in a pilot
- Provide expertise / input for the common model

The results of this exercise can be found in the screenprints of the first exercise. This will be considered as a basis for future actions.

#### Wrap up

DG GROW concluded by mentioning the next steps regarding the

implementing actions related to data sharing in tourism, as foreseen in the Tourism Pathway for Tourism recently adopted.

From the inputs shared by the speakers in the first part of the workshop and the participants in the second half, the following conclusions can be drawn:

- Common data model(s) at European level would be highly valuable. The exact scope of this model should be defined but it should be pragmatic and start from what exists. The multilingualism, visibility and governance of this model are important aspects on which the European Commission could play a role.
- The creation of guidelines and support on how to implement this model to guarantee the compliance of various actors at different levels is key.
- The creation of a European data hub for tourism data is a possibility.

From these points, the first step for the European Commission is to harmonise existing models and standards for tourism data in order to have an EU-level minimal semantic interoperability layer which could be reused by different actors.