



11

May
2022

10:00 - 12:00 CET

Webinar on the SDG Search Service Data Model and the YourEurope Portal

The Catalogue of Services Action

interoperable
europe

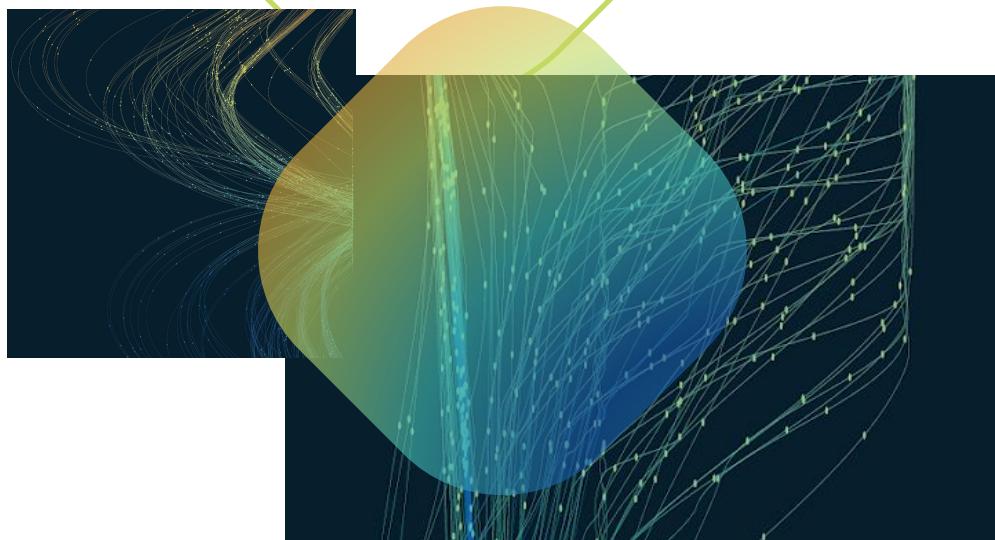


Introduction

Speaker: Miguel Alvarez-Rodriguez



Webinar Practicalities



Click on <<Connect audio>> but please mute your microphones



You can share your questions and comments via the chat



The webinar will be recorded

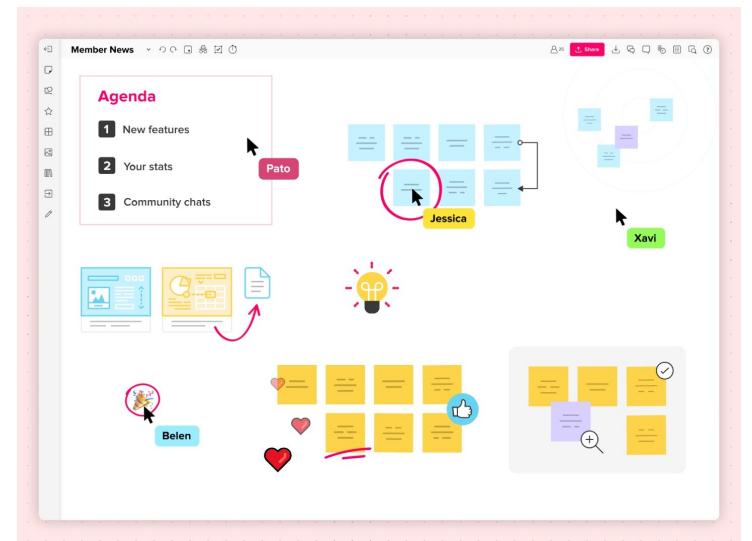
Agenda

-  **Reflection on the SDG pilot and enrichment of the search results** 30'
-  **The next steps for the SDG Search Service Metadata model and the YourEurope portal** 40'
-  **Discussion on the guided search approach on the YourEurope portal** 15'
-  **Wrap-up and next steps** 5'

Objectives of this webinar

-  Analysis of the usage of the SDG Search Service Metadata model
-  Analysis of the future requirements of the SDG Search Service Metadata model
-  Evaluation and brainstorming on the provision and findability of web pages on the YourEurope portal

Following a co-creative and interactive approach

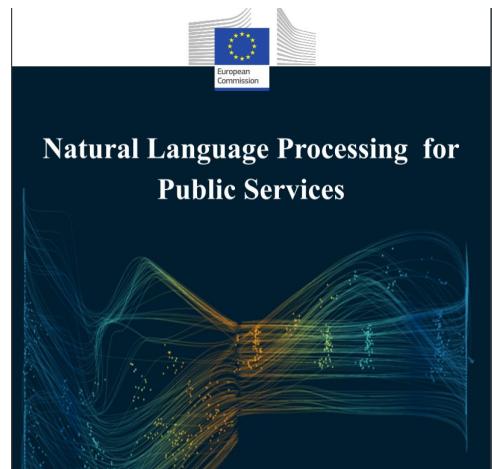
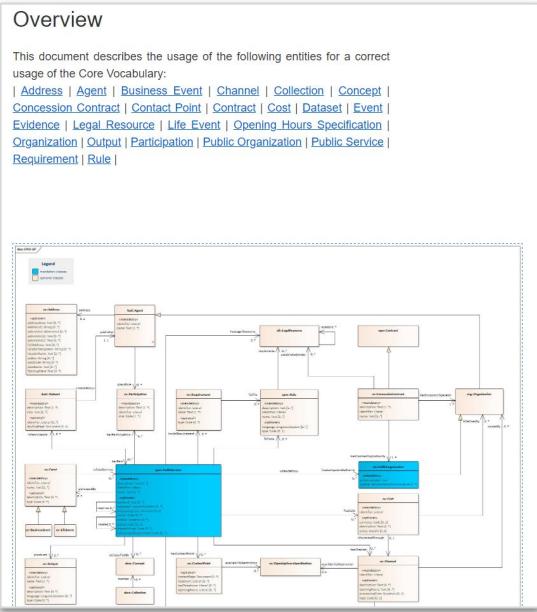


Now live!

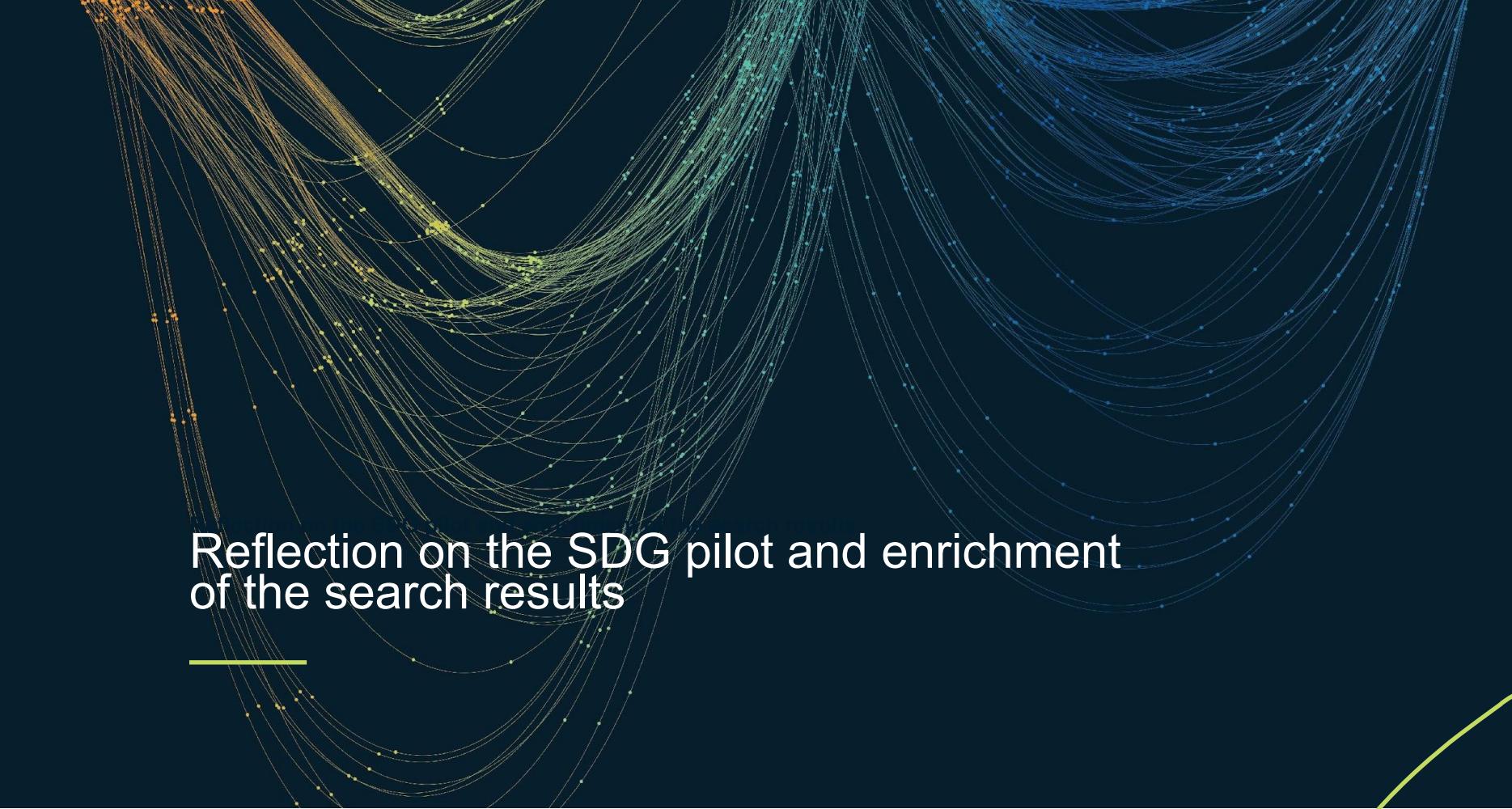
Now available: [CPSV-AP 3.0.0](#) (major) release

Publication of a study on [Natural Language Processing in the public sector + Practical Proof-of-concept](#)

Now available: online and interactive course on CPSV-AP on [EU Academy](#)



CORE
PUBLIC
SERVICE
VOCABULARY
Application Profile



Reflection on the SDG pilot and enrichment
of the search results



Background of the SDG Search Service model



Foundation

The model is based on the [current metadata](#) available in the Repository of Links and reuses elements of CPSV-AP



Information capture

The model captures core information from articles 9, 10 and 11 of the [SDGR](#)



The need

The model was created to:

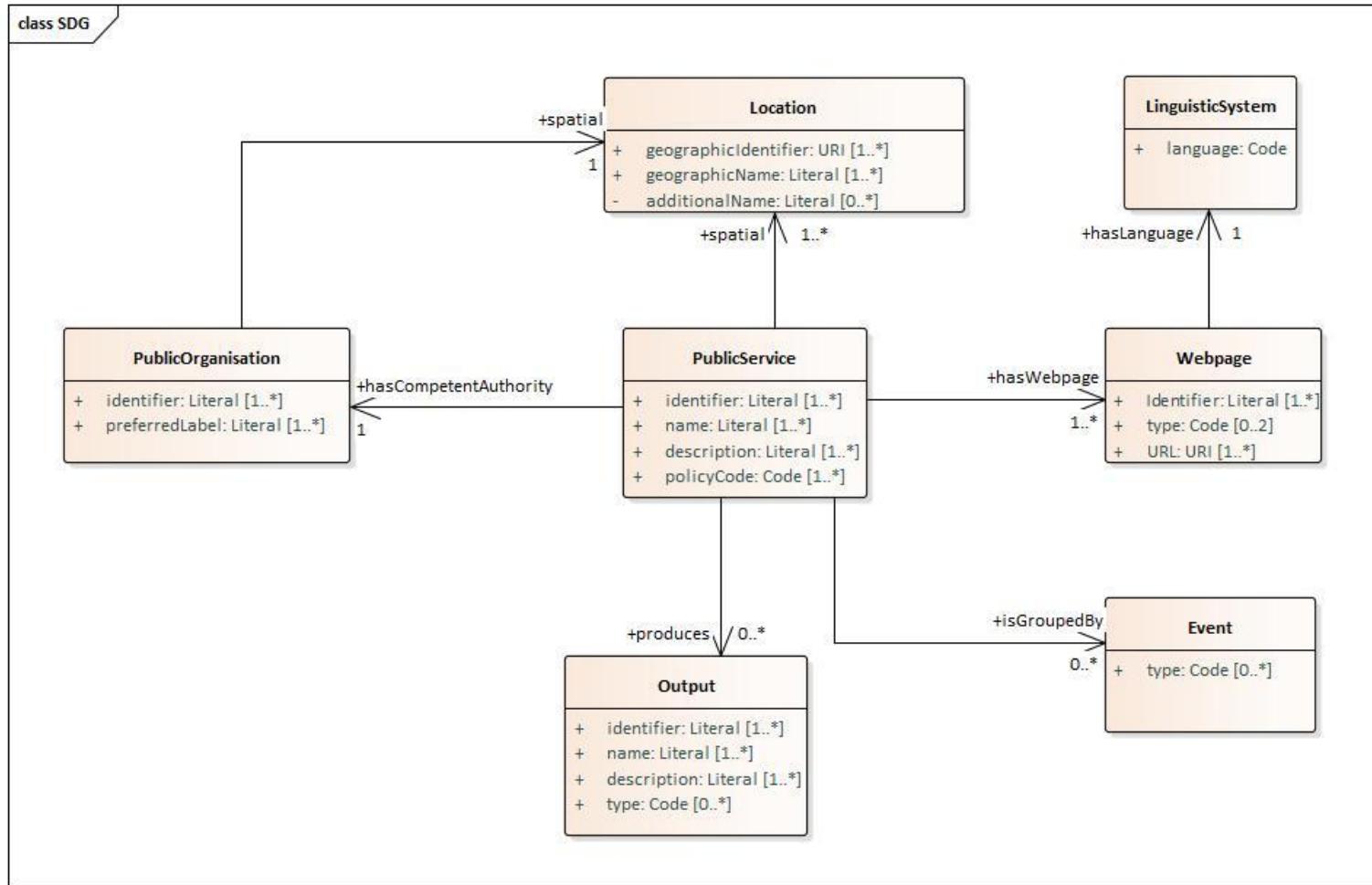
- improve the quality of search results on the YourEurope portal
- streamline the provision and maintenance of links



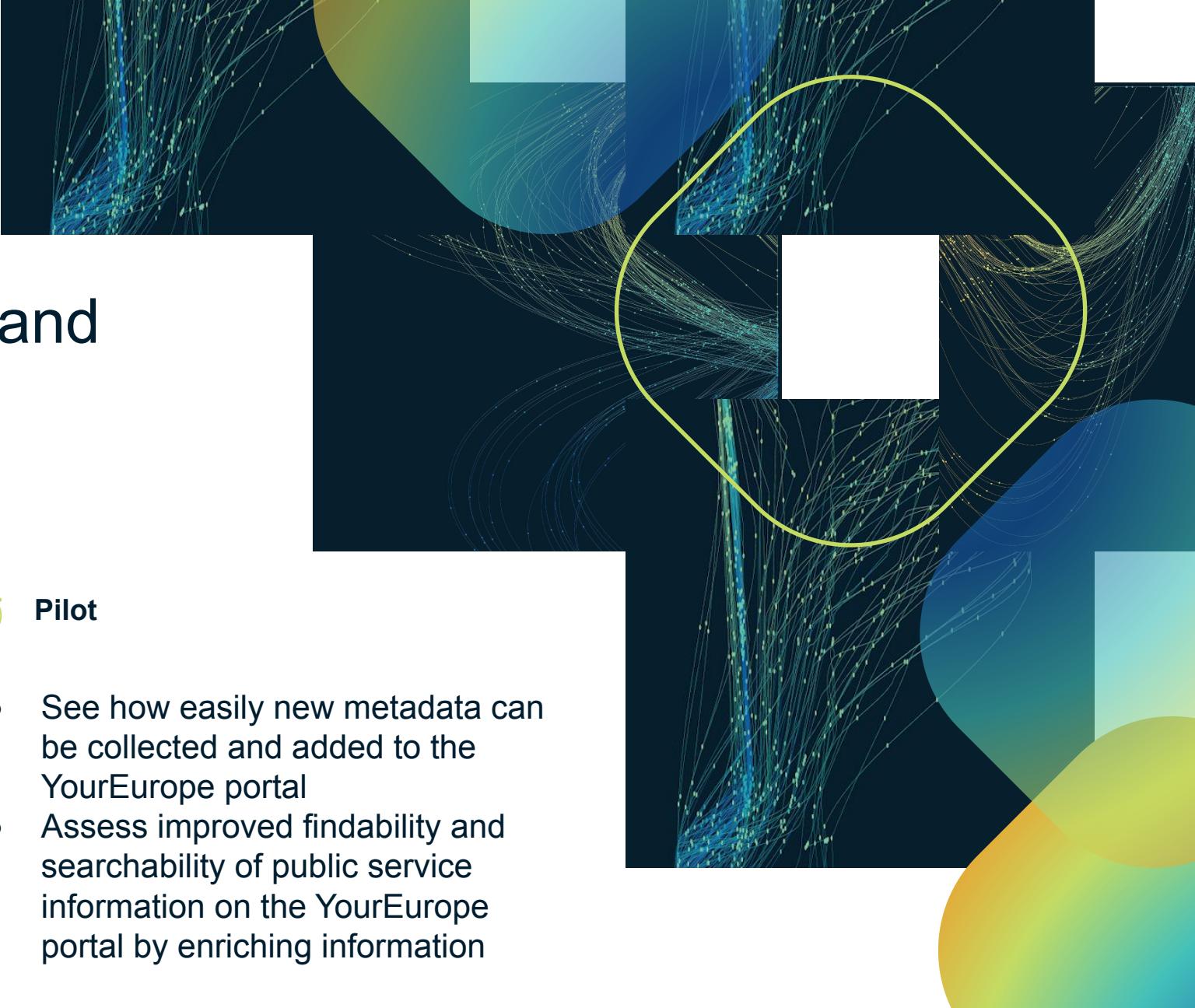
Process

The model was created through the facilitation of [4 webinars](#) with 10+ Member States

SDG Search Service model v1.00



<https://catalogue-of-services-isa.github.io/SDG-search-service-model/releases/v1.00/>



Objectives of the model and the pilot



SDG Search Service model

- Facilitate information exchange according to the SDG
- Improve interoperability across the EU



Pilot

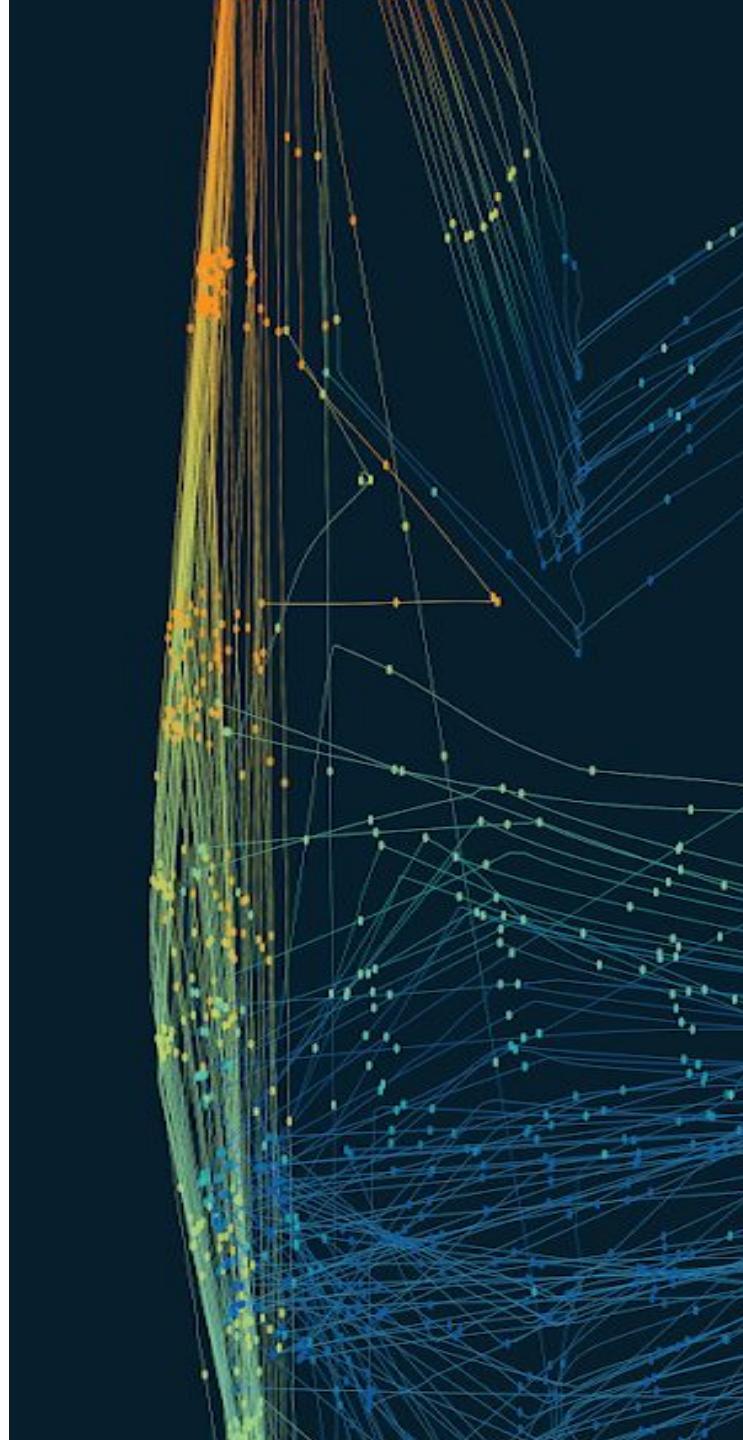
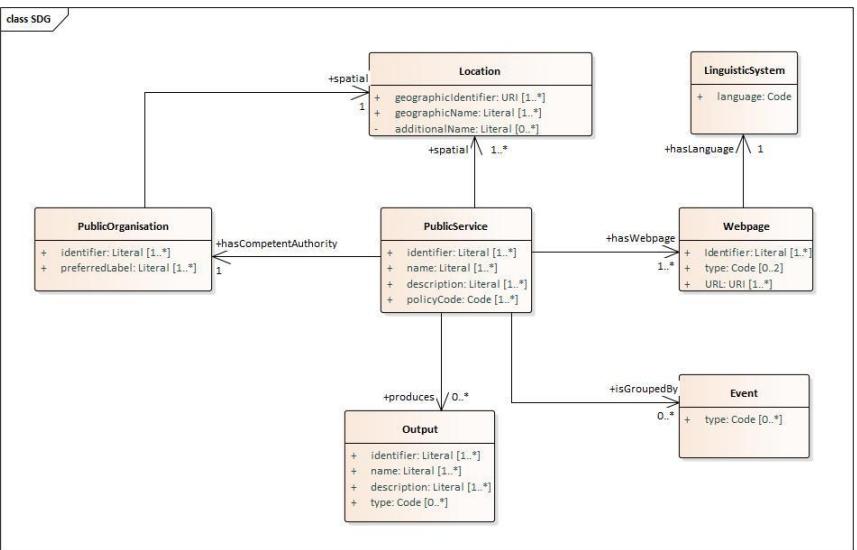
- See how easily new metadata can be collected and added to the YourEurope portal
- Assess improved findability and searchability of public service information on the YourEurope portal by enriching information

Practical steps for the pilot

1

Conceptual groundwork

Defining the SDG Search Service model on a conceptual level
(completed in a previous phase)



Creation of mapping sheets for model mapping

2

Mapping between the SDG model and your data model available.

	Usage	Mandatory	Codelist	Identifier	Expected range/datatype	Mapping relation	Target Vocabulary	Data model	Target Identifier	Description	Mapping comment
olic	/	no	/	http://data.europa.eu/m8g/isGroupedBy	Event						Can be derived from the category indicated
public	The Public Organisation reuses Core Public Organisation Vocabulary (https://semieu.github.io/CPGV/releases/2.00/#Public%20)	yes	/	http://data.europa.eu/m8g/PublicOrganisation	/	Near Match	gov.gr.schemas.v1.sdg._organization	SDG - Organization			
	/		/	http://purl.org/dc/terms/identifier	Literal	Near Match			id		
	As defined in the ORG Ontology, a preferred label is used to provide the primary, legally recognised name of the organization. An organization may only have	yes	/	http://www.w3.org/2004/02/skos/core#prefLabel	Literal	Exact Match			title		
sation	/	yes	/	http://purl.org/dc/terms/_spatial	Location	No Match			-		not available - Currently all organisations included are have nationwide competency
on the	/	yes	/	http://purl.org/dc/terms/_LinguisticSystem	/						
	The linguistic system will be defined by the ISO 639-1 code, e.g. 'en' for English. The Publications Office proposes a controlled vocabulary for languages fully compliant with ISA 639-1 (alpha 2):	yes	OP's controlled vocabulary (ISO639-1)	http://purl.org/dc/terms/_language	Code	No Match					the gov.gr.schemas.v1.sdg.service-page supports bilingual fields

3

Translation to metadata tags for the Repository of Links

Translation to a structure which can be reused for tagging and within the Repository of Links.

- SDG.PublicService.URI
- SDG.PublicService.identifier
- SDG.PublicService.name
- SDG.PublicService.description
- SDG.PublicOrganisation.URI
- SDG.PublicOrganisation.identifier
- SDG.PublicOrganisation.preferredLabel
- SDG.PublicService.Location.additionalName
- SDG.PublicOrganisation.Location.administrativeLocation
- SDG.PublicOrganisation.Location.additionalName



European
Commission



4

Extension of uploading methods for the Repository of Links

Updating the currently available methods for providing information with the additional metadata tags:

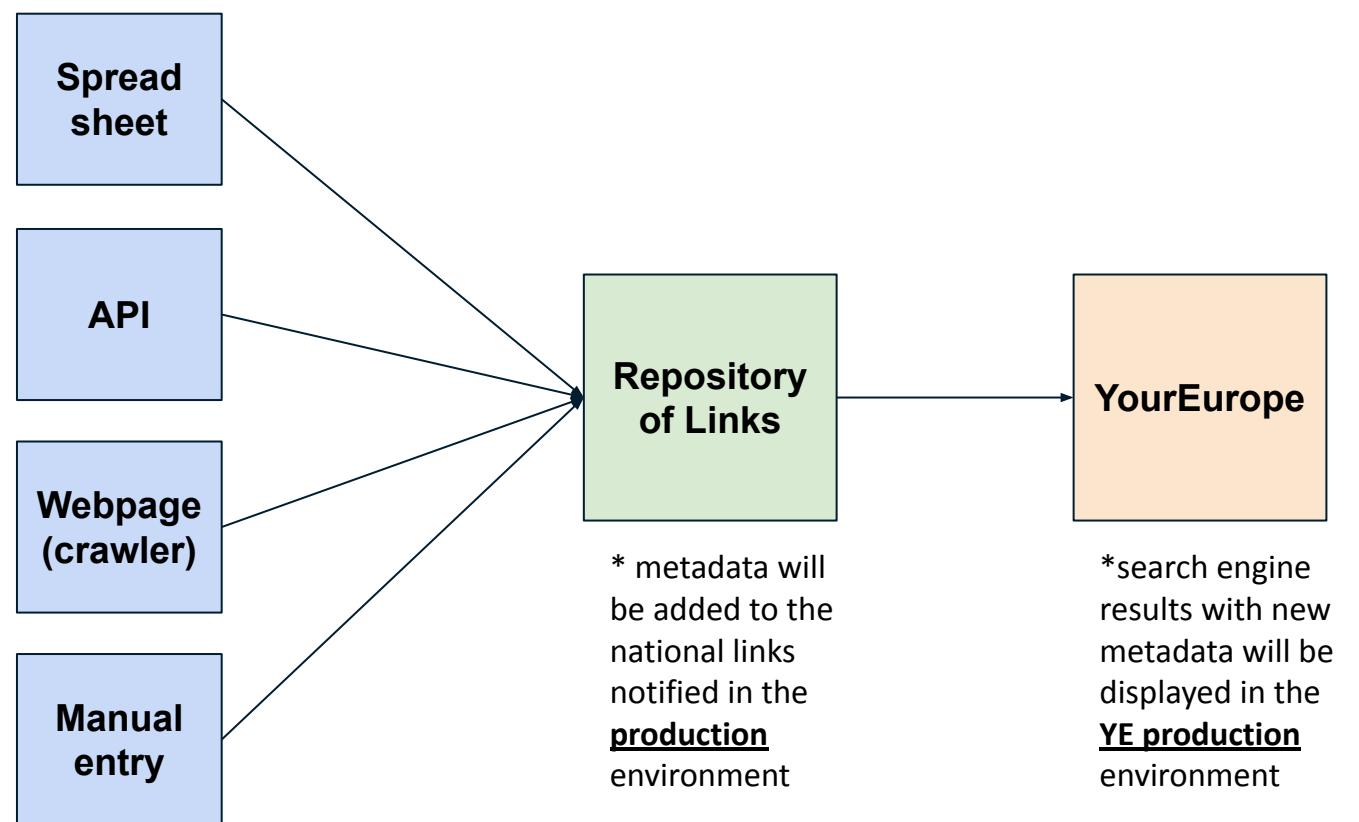
- Excel sheet
- API to the repository
- Crawler through HTML tagging
- Manual entry into the repository UI

5

Uploading the additional information to the Repository of Links



Implementation flow





EU Single Digital Gateway Annex I in the Netherlands

Marco Aarts
May 2022

bNC-SDG, Den Haag

The Netherlands

Central government

- National implementing organizations

Regional government

- 12 provinces
- 21 water boards

Local government

- 344 municipalities



Four national portals play a central role for Annex I

Citizen



The screenshot shows the homepage of Rijksoverheid.nl. At the top, there's a banner with a photo of people outdoors. Below it, a sidebar lists 'Veel bekijken' (Often viewed) items such as COVID-19 information, refugee reception, and public holidays. The main content area has four columns: 'Belastingen, uitkeringen en toeslagen', 'Bouwen en wonen', 'Economie', and 'Familie, zorg en gezondheid'. Each column contains links to specific government services.



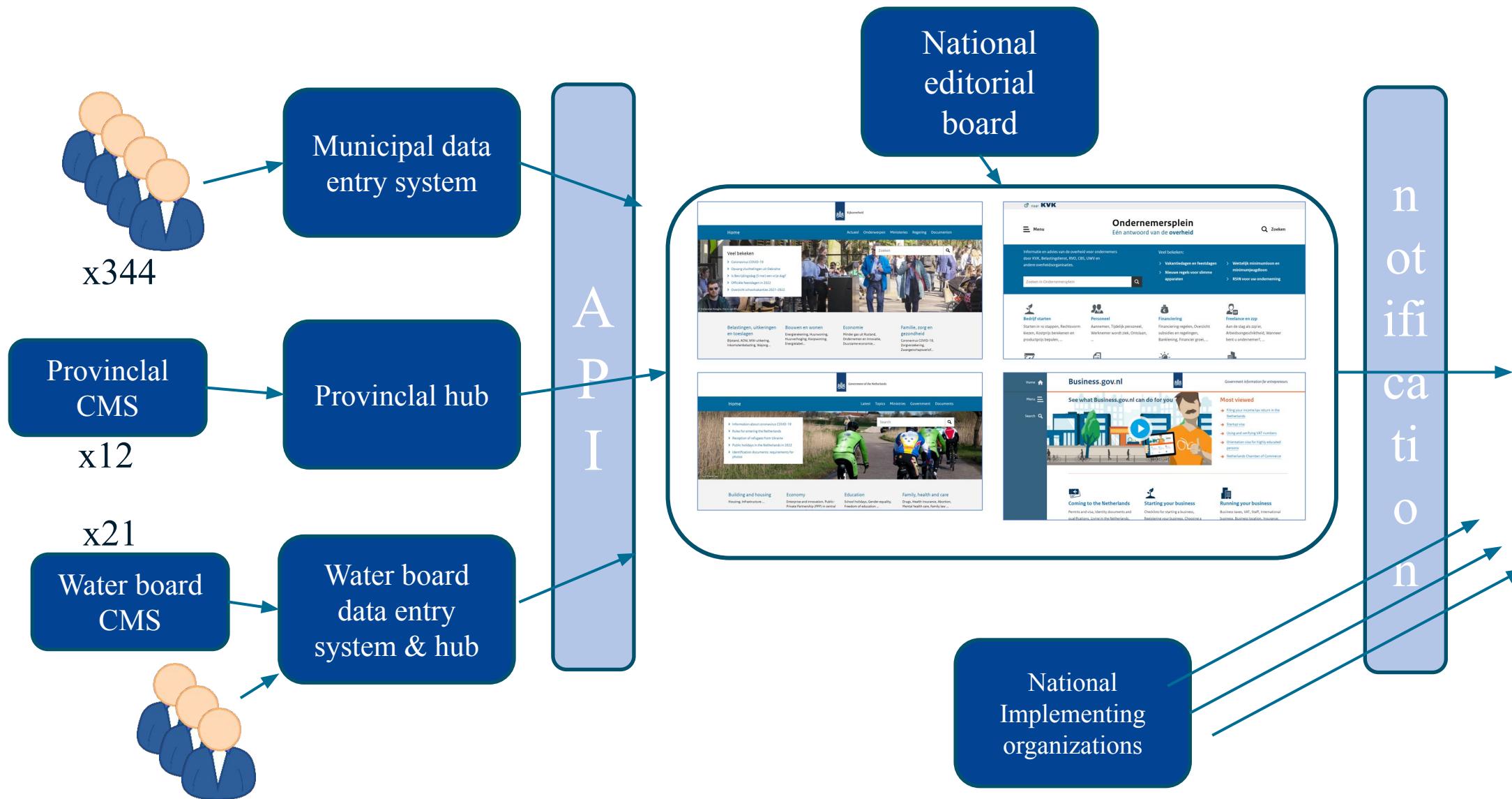
The screenshot shows a citizen-oriented section of the Government of the Netherlands website. It features a banner with a photo of cyclists. A sidebar on the left provides information about COVID-19, rules for entering the Netherlands, and identification documents. The main content area includes sections for 'Building and housing', 'Economy', 'Education', and 'Family, health and care'.

Business

The screenshot shows the homepage of Ondernemersplein, operated by KVK. It features a banner with a photo of people. The main content area includes a sidebar with 'Veel bekijken' items like vacation days, new regulations for self-employed workers, and minimum wages. Below this are four large cards: 'Bedrijf starten' (with a plant icon), 'Personnel' (with two people icons), 'Financing' (with a euro coin icon), and 'Freelance en zzp' (with a person icon).

The screenshot shows the homepage of Business.gov.nl. It features a banner with a cartoon character holding a tablet. The main content area includes a sidebar with 'Most viewed' items like filing income tax returns and startup visas. Below this are three cards: 'Coming to the Netherlands' (with a passport icon), 'Starting your business' (with a plant icon), and 'Running your business' (with a building icon).

SDG Annex I in the Netherlands



Your
Europe

Information model

- Each service is described using attributes derived from SDG art. 9+10
- We have ‘information services’ and ‘procedure services’, which obviously have more attributes
- We have opted for a literal translation from art. 9+10 to our model
 - To ensure that all organizations provide information for all quality requirements
 - Each article is implemented as one (mostly free text) attribute (i.e. ‘cost’) to allow different service catalogues and editors to easily provide the information
- As such, the information model is in line with the earlier ISA2 SDG Data Model (based on CPSV-AP)

Part of the Dutch SDG information model

	A	B	C	D	I	J	K	L	M
1	SDG Informatiemodel								
2	Entiteit	Cardinaliteit	Kenmerk		Omschrijving	Formaat	Eigenaar / beheerder	Presentatie in	Herkomst kenmerk
33	Product (specifiek procedure art 10)								
	1-n	Talen procedure			Naast de taal van de informatie, dient ook aangegeven te worden in welke aanvullende taal/talen de procedure kan worden uitgevoerd. elke productbeschrijving is in één taal (nl of en). De 'additional languages' betreft dus altijd de andere taal (en of nl). Aanname: de portalen richten zich uitsluitend op Nederlands en Engels, geen andere talen	Lijst met taalcodes Taalcodes moeten voldoen aan de standaard 'ISO 639-1' ISO 639 is a standardized nomenclature used to classify languages' (https://en.wikipedia.org/wiki/List_of_ISO_639-1_codes)	D	Portaal	art 10i
34	0-1	Procedurebeschrijving			Zie verordeningstekst	Tekstblok, zie tabblad Formaat	D	Portaal en invoervoorziening	art 10a
35	0-1	Vereisten auth/id/sign			Zie verordeningstekst	Tekstblok, zie tabblad Formaat	D	Portaal en invoervoorziening	art 10c
36	0-1	Bewijs (type/format)			Zie verordeningstekst	Tekstblok, zie tabblad Formaat	D	Portaal en invoervoorziening	art 10d
37	0-1	Bezwaar en beroep			Zie verordeningstekst	Tekstblok, zie tabblad Formaat	D	Portaal en invoervoorziening	art 10e
38	0-1	Kosten en betaalmethoden			Zie verordeningstekst	Tekstblok, zie tabblad Formaat	D	Portaal en invoervoorziening	art 10f

Information structure

- Fixed list of services deemed relevant for SDG
- For each *national* service, the information is provided by a national editorial board
- For each *local/regional* service:
 - A national editorial board provides *generic information*
 - Each local/regional organization provides *specific information* (cost, procedure, etc.)
 - These are presented together as a whole on the national portal

List of municipal services

	A	B	C	D	E	M	N	O
1	Prioriteit	Status	Doelgroep	Titel product	UniformeProductnaam	Informeren of aanvragen	Dienstenwet product	Opmerk
2		Nieuw in v1.8	Burgers	aangifte vertrek buitenland	aangifte vertrek buitenland	aanvraagproduct		
3	Longlist	Definitief	Burgers	adoptieaangifte	adoptie aangifte	aanvraagproduct	Nee	momen de redactie
4	Longlist	Definitief	Burgers	afvalstoffenheffing	afvalstoffenheffing	informatieproduct	Nee	link naar bijgewerkt
5	Shortlist	Definitief - aangepast na v1.3	Ondernemers	Alcohol schenken en drank- en horeca	alcoholvergunning	aanvraagproduct	Ja	
6	Shortlist	Definitief	Ondernemers	Bestemmingsplan controleren	bestemmingsplan inzage	informatieproduct	Ja	
7	Longlist	Definitief	Burgers	Attestatie de vita (bewijs van in leven zijn)	bewijs van in leven zijn (attestatie de vita)	aanvraagproduct	Nee	
8		Nieuw in v1.8	Burgers	bijstand	bijstand			
9		Nieuw in v1.8	Burgers	bijzonderebijstandsuitkering	bijzonderebijstandsuitkering			
	Shortlist	Definitief	Burgers	hrn-inschrijving	hrn-inschrijving	aanvraagproduct	Nee	

SDG Search Services pilot

- We have provided some extra metadata for a handful of services using the template provided
 - Most notably description & competent authority
- We concluded that the services were already quite findable before adding extra metadata
 - The added distinction (tabs) between information provided by the member states themselves and EU authored information was very useful
 - The current YE search function still has some quirks
 - We expect that the 'filtered search' option will be better and more user friendly
- We had problems uploading the spreadsheet with extra metadata to the repository of links
- In our opinion, adding extra metadata should be optional since changing our information model and systems this late in the game is simply not feasible

More information:

marco.aarts@ictu.nl

<https://www.linkedin.com/in/marcoaarts/>

SDG.pleio.nl

Results of the pilot

DEMO



Screenshots

Driving license validity



www.gov.gr/en/sdg/vehicles/acquiring-and-renewing-driving-licence/driving-license-recognition...

Dec 24, 2020 ... Driving licenses for categories AM, A1, A2, A, B1, B and BE are valid for fifteen (15) years from the day of successful qualifications and ...



General information

Type: Information

Category: acquiring and renewing a driving licence

Public service

Name: Driving license validity

Description: If you hold a valid driving license issued by another EU country, it is still valid in Greek territory as it stands, as long as the conditions for granting the corresponding category of Greek driving license are met.

Availability: Greece

Public organisation

Name: MINISTRY OF INFRASTRUCTURE AND TRANSPORT

Website: <http://www.yme.gov.gr>

Location: EL

Screenshots

Child and adult immunisation



www.gov.gr/en/sdg/healthcare/public-preventive-healthcare-measures/general/child-and-adult-...

Jan 8, 2021 ... **Child and adult immunisation** takes place in accordance with the applicable National Immunisation Programme approved by the Ministry of Health.

General information

Type: Information

Location: ΕΛΛΑΣΑ

Category: general information on access rights or obligations to participate in available public preventive healthcare measures

Public service

Name: Child and adult immunisation

Description: Child and adult immunisation takes place in accordance with the applicable National Immunisation Programme approved by the Ministry of Health. It should be pointed out that the National Immunisation Programme is recommended and not mandatory in its implementation by the public.

Availability: Greece

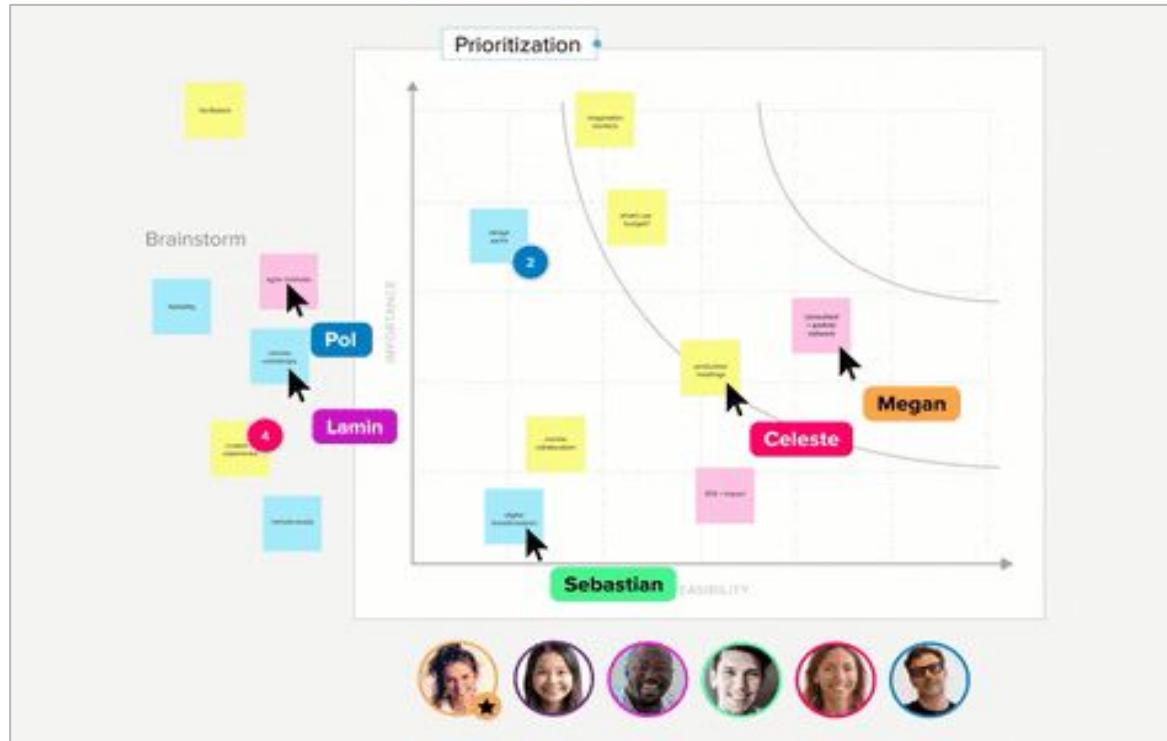
Public organisation

Name: NATIONAL ORGANIZATION FOR HEALTH CARE SERVICES (EOPYY) - Directorate for Strategic Planning

Website: <https://www.eopyy.gov.gr/>

Location: EL

Enriched search results in the pilot: Feedback



<https://app.mural.co/t/beadvtc7549/m/beadvtc7549/1651474381923/2ee90c8bc3045e193f25c25d55917f15398075b?sender=ud1618f9c5110ea8274576765>



The next steps for the SDG Search Service Data model and the YourEurope portal

Extending the SDG Search Service model

Metadata for URLs

sdg-tag	The sdg-tag will contain the text sdg identifying the page as part of the Single Digital Gateway
DC.ISO3166	It will contain the two characters ISO 3166-1 representation of names of countries
DC.Location	Describes the NUTS or LAU location id for which the content on the page is valid (http://purl.org/dc/terms/Location)
DC.Service	It will contain the information about the type of content present on the page (http://purl.org/dc/dcmitype/Service)
policy code	It will contain the information about the code of the content area covered by the page according to Annex I and II or the full name of the assistance service in Annex III
DC.Policy	It will contain the information about the name of the content area covered by the page according to Annex I and II (http://purl.org/dc/terms/Policy)

Additional metadata through the SDG Pilot

Public Service	URI, identifier, name, description, location.additionalName
Public Organisation	URI, identifier, preferredLabel, location.additionalName, location.administrativeLocation



Extending the SDG Search Service model

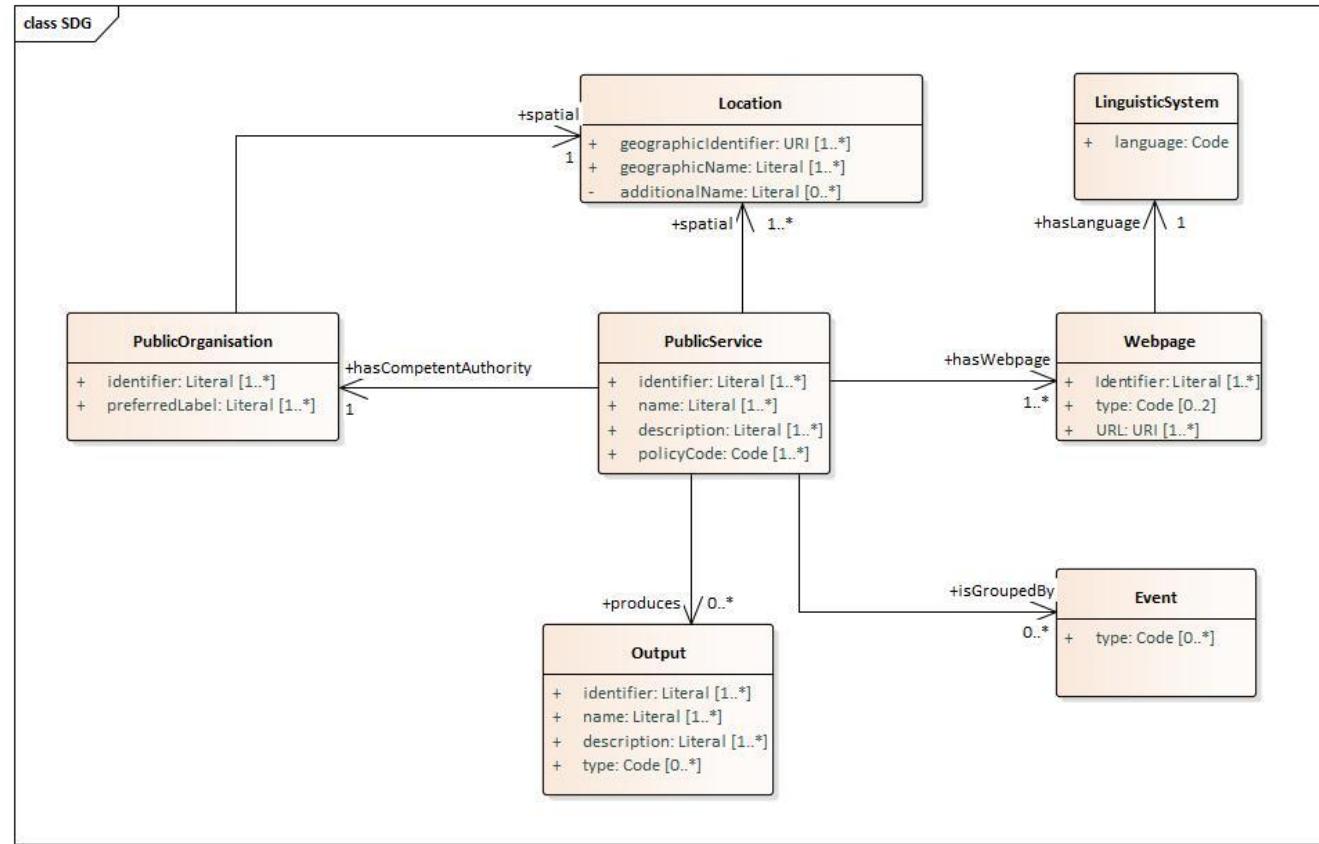
- Analysing which information concepts can be added to the model
- Collaboratively deciding on the most interesting use cases for extending the model
 - Guided search
 - Enriched search results
 - Google indexing



Add additional metadata to web pages to support guided search, enriched search results or indexing of pages on Google



Capture information needs regarding the Single Digital Gateway



Describing more web pages to extend the pilot

- Interest in participating in the pilot trajectory
- Increasing the number of pages tagged with the additional information



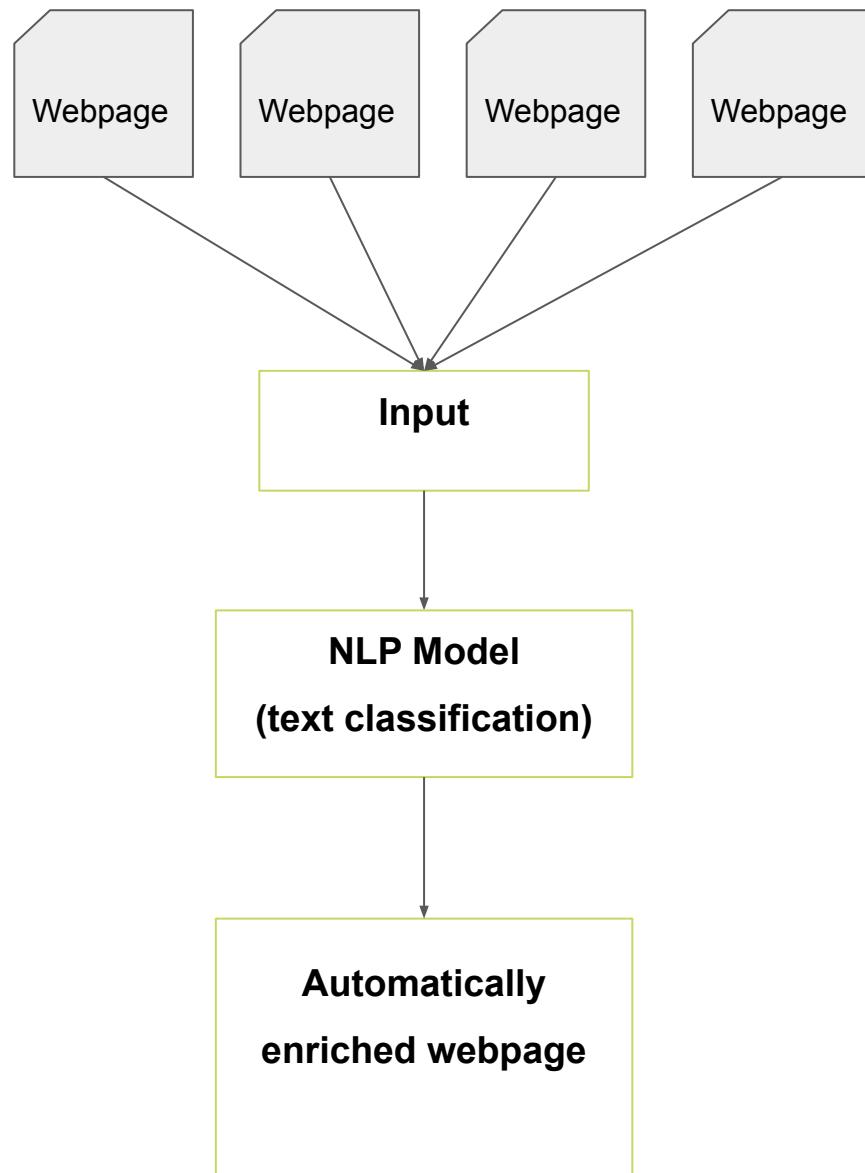
Provide enriched search results for more pages to the user



Structure URL metadata according to the SDG Search Service Model

SDG.PublicService.URI	SDG.PublicService.identifier	SDG.PublicService.name	SDG.PublicService.description	policy-code	/	/	/
Public Service	identifier	name	description	policyCode	hasCompetentAuthority	spatial	hasWebpage
https://www.gov.gr/en/sdg/work-and-retirement/equal-treatment/general/regular-leave/	informationpage_416	Regular leave	Each employed person with a fixed-term or indefinite-term employment relationship is entitled to paid annual leave from the start of employment in a specific company, without the need to complete basic working time (Article 2(1) of Emergency Law No 539/1945, as amended by Article 13(1) of Law 3227/2004 and replaced by Article 1 of Law 3302/2004).	B7	organization_43	EL	1;4
https://www.gov.gr/en/sdg/vehicles/acquiring-and-renewing-driving-licence/driving-license-recognition-and-validity/driving-license-validity/	informationpage_164	Driving license validity	If you hold a valid driving license issued by another EU country, it is still valid in Greek territory as it stands, as long as the conditions for granting the corresponding category of Greek driving license are met.	C2	organization_31	EL	2;5
https://www.gov.gr/en/sdg/healthcare/public-preventive-healthcare-measures/general/child-and-adult-immunisation	informationpage_21	Child and adult immunisation	Child and adult immunisation takes place in accordance with the applicable National Immunisation Programme approved by the Ministry of Health. It should be pointed out that the National Immunisation Programme is recommended and not mandatory in its implementation by the public.	F4	organization_12	EL	3;6
https://www.gov.gr/en/sdg/work-and-retirement/taking-up-employment/pd-ui-portable-document-v1/supporting-documents-for-issue-of-pd-ui/	informationpage_447	Supporting documents for the issue of PD UI	The required documents for issuing the PD UI	B2;K1	organization_102	EL	7;8

Adoption of the NLP Proof-of-Concept



- Making use of the NLP Proof-of-Concept to automatically tag web pages (deadline 2022)
- Implementing the application in your current infrastructure, supported by the Catalogue of Services team



Pilot the use of state-of-the-art technologies in a public context



Automatically tag web pages in different languages (e.g. Policy Code)

Using NLP for clustering/classifying web pages for guided search

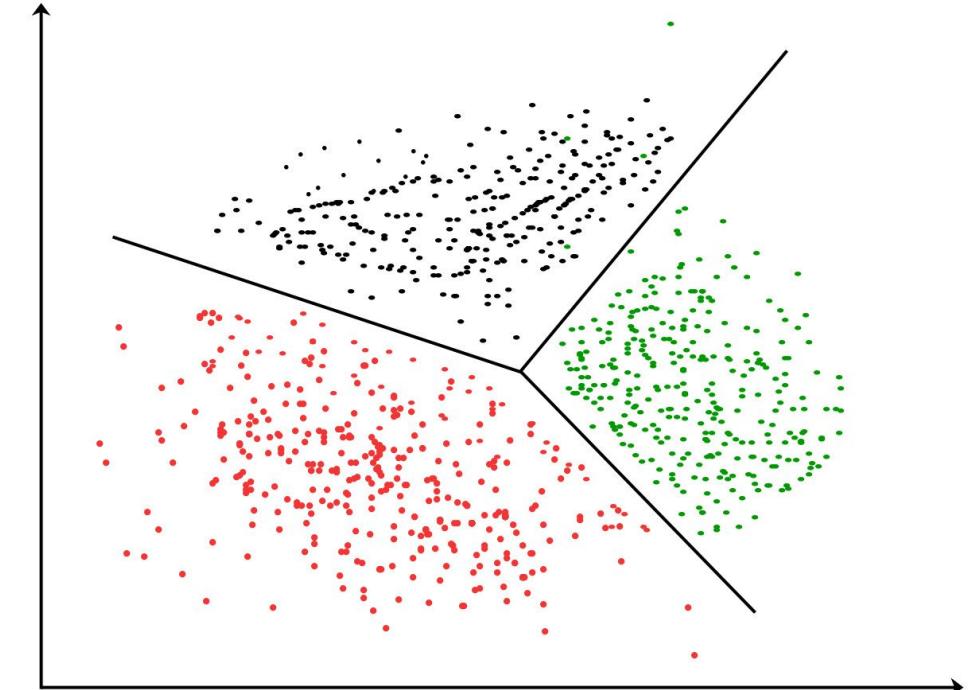
- Using NLP to classify web pages according to the filters used on the YourEurope portal (guided search)



Pilot the use of state-of-the-art technologies in a public context



Automatically provide metadata according to the filters used in the guided search
YourEurope Portal



Using analytics to predict/recommend pages to a user

- Gathering data on users and their behaviour on the YourEurope portal
- Recommending:
 - pages of interest (“you might also be interested in”)
 - optimal flow based on the current position in the menu

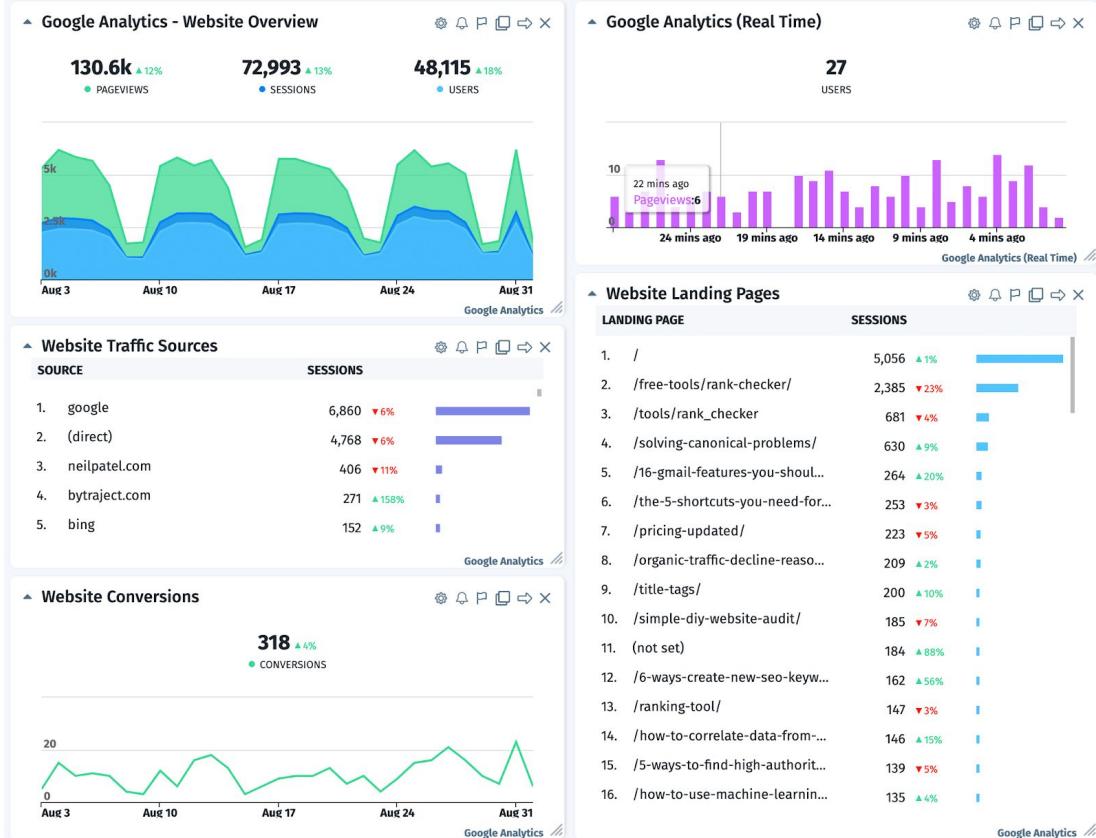


Increase findability of public services in a data-driven way



Get insights into user behaviour and interests

Creating a reporting tool for analytics on links in the repository



- Gathering data on users and behaviour on the YourEurope portal
- Visualization of data to gain insights into the use of the YourEurope portal, and make improvements accordingly

 Get insights into user behaviour and interest

 Increase user friendliness in a data-driven way

Improving the API between national portals and the repository of links

- Assessing if there are opportunities for improvement
- Building linked data between national portals, repository of links, YE portal in the databases behind YourEurope.



Increase semantic and technical interoperability



**Improve efficiency of data exchange
between the different sources**

Improving the positioning of the YE portal on the web / user journey from YE to national portals

- Assessing opportunities for SEO to make the YourEurope portal more findable on commonly used search engines
- Analysing and improving the complete user journey between search engines, national portals and the YourEurope portal

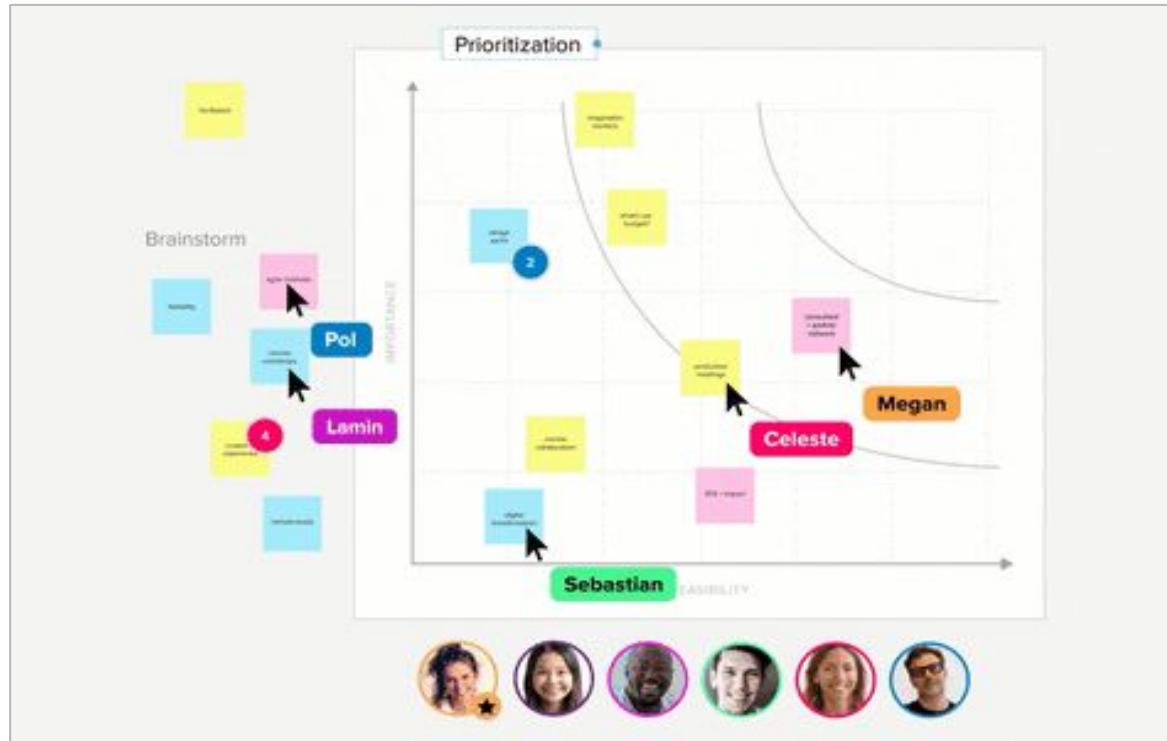


Increase the findability of the YourEurope portal in search engines



Redirect users to the correct portals and pages in an optimised user journey

Next steps for the SDG Search Service model: prioritisation



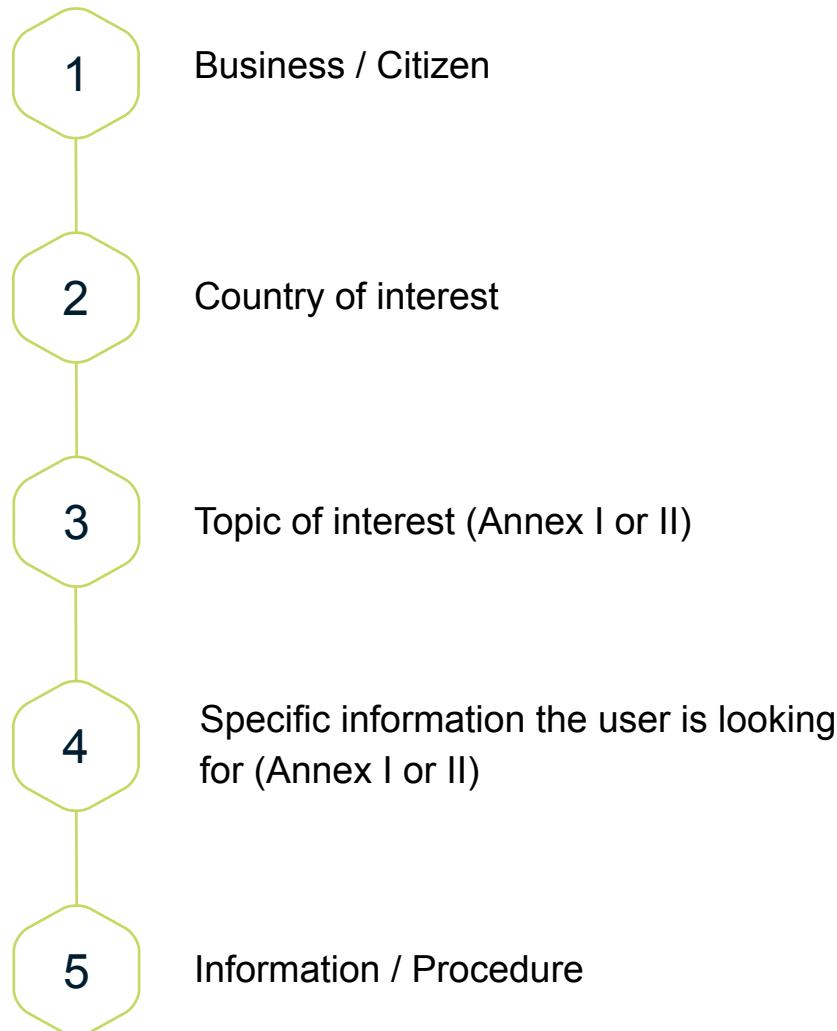
<https://app.mural.co/t/beadvtc7549/m/beadvtc7549/1651474381923/2ee90c8bc3045e193f25c25d559179f15398075b?sender=ud1618f9c5110ea8274576765>



The guided search approach on the
YourEurope portal



Guided Search questions: user flow on the home page



What are you looking for?

Questions on your rights in the EU? Or your obligations?

Find answers on EU and national websites for citizens and businesses.

Travel

Entry and exit requirements within EU countries – which travel documents do you need to cross borders? Visas, identity cards, passports, etc.

Travel and covid: rules and restrictions
Documents you need for travel in Europe
Passenger rights
Transport and disability
Driving abroad

Work & Retirement

Rights and conditions for EU nationals working, looking for a job or retiring in another EU country: social security benefits, taxes, qualifications for employment, etc.

Working abroad
Professional qualifications
Unemployment & benefits
Retiring abroad
Taxes

Running a business

Starting, relocating, merging and closing a business, setting up a European company. Intellectual property, Erasmus for Young Entrepreneurs and EMAS registration

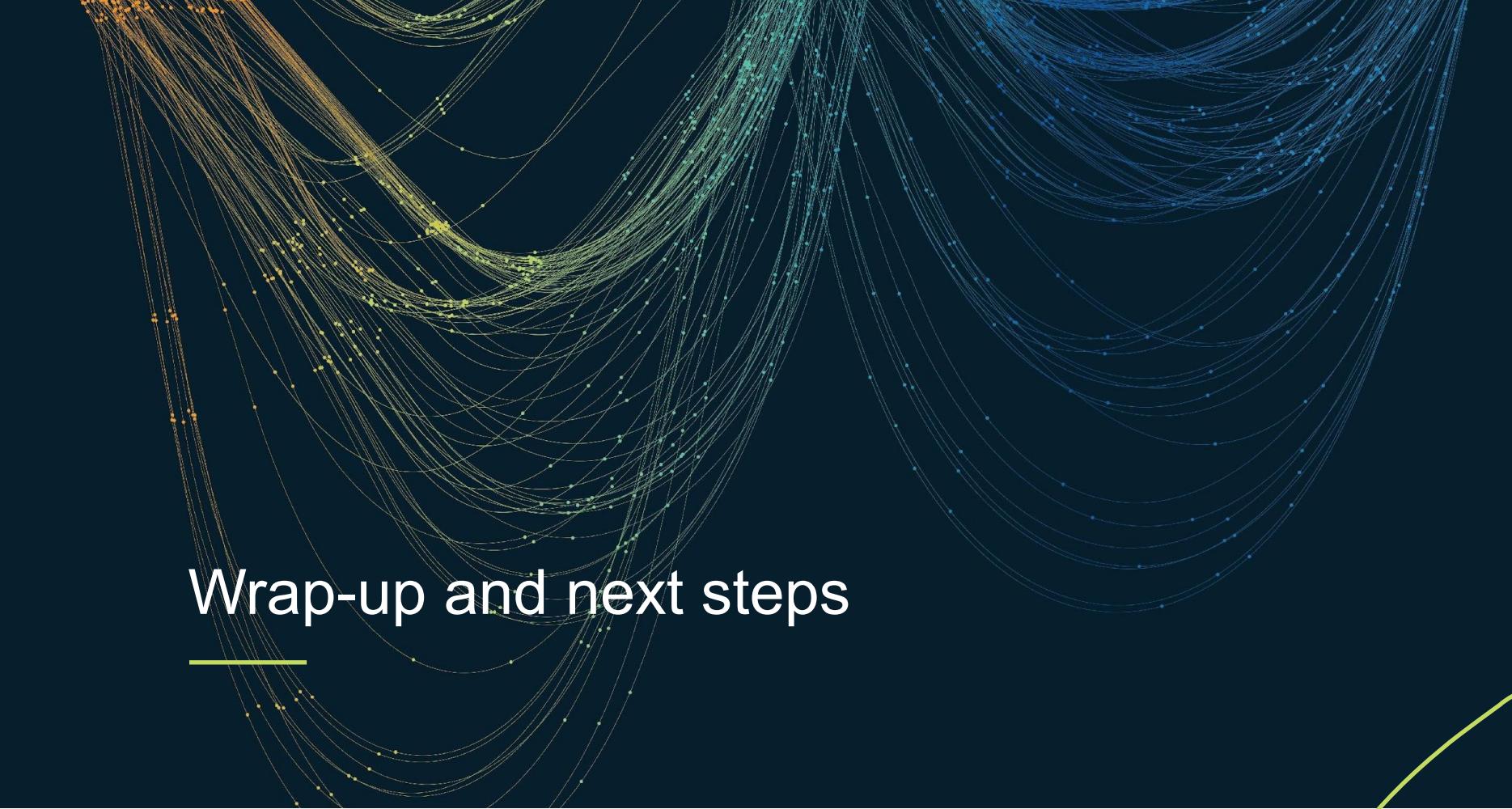
Intellectual property
Developing a business
Start-Ups
Digitalising a business

Results page filters:

- National/EU content
- Locations
- Language

Guided/filtered search approach: feedback

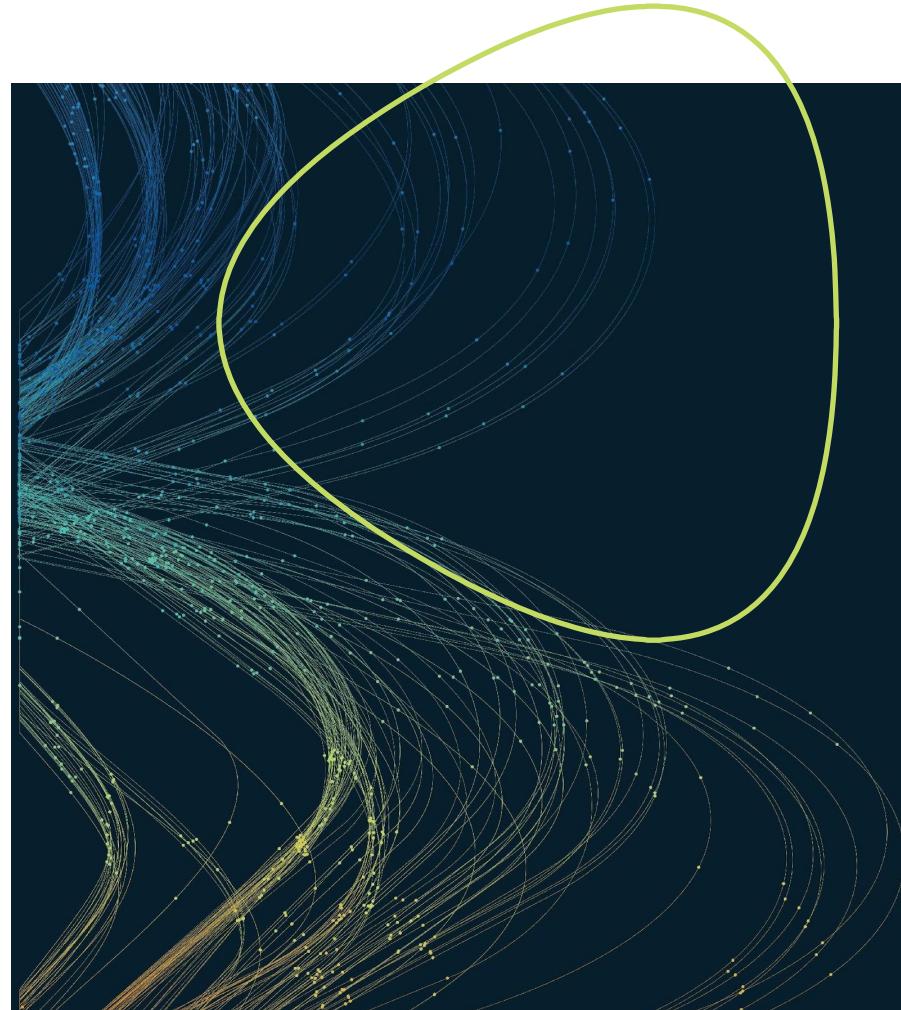




Wrap-up and next steps

Next steps

- Determine the next steps for the SDG pilot following up on the feedback received
- Follow up on the prioritisation exercise by taking into account the feedback received
- Summarisation of additional information concepts for the guided search approach



How to stay in contact with the Catalogue of Services Action?



- [SDG Search Service model](#)
- [CPSV-AP](#)
- [CPSV-AP: Issues page](#)



- [Catalogue of Services Collection](#)



- Training on CPSV-AP:
[Introduction to the Core Public Service Vocabulary Application Profile \(CPSV-AP\)](#)

The Catalogue of Services team

Programme Manager

Miguel Alvarez Rodriguez
(miguel.alvarez-rodriguez@ec.europa.eu)

Project team

Florian Barthélémy
(barthelemy.florian@pwc.com)

Emidio Stani
(emidio.s.stani@pwc.com)

Nathan Ghesquière
(nathan.ghesquiere@pwc.com)





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