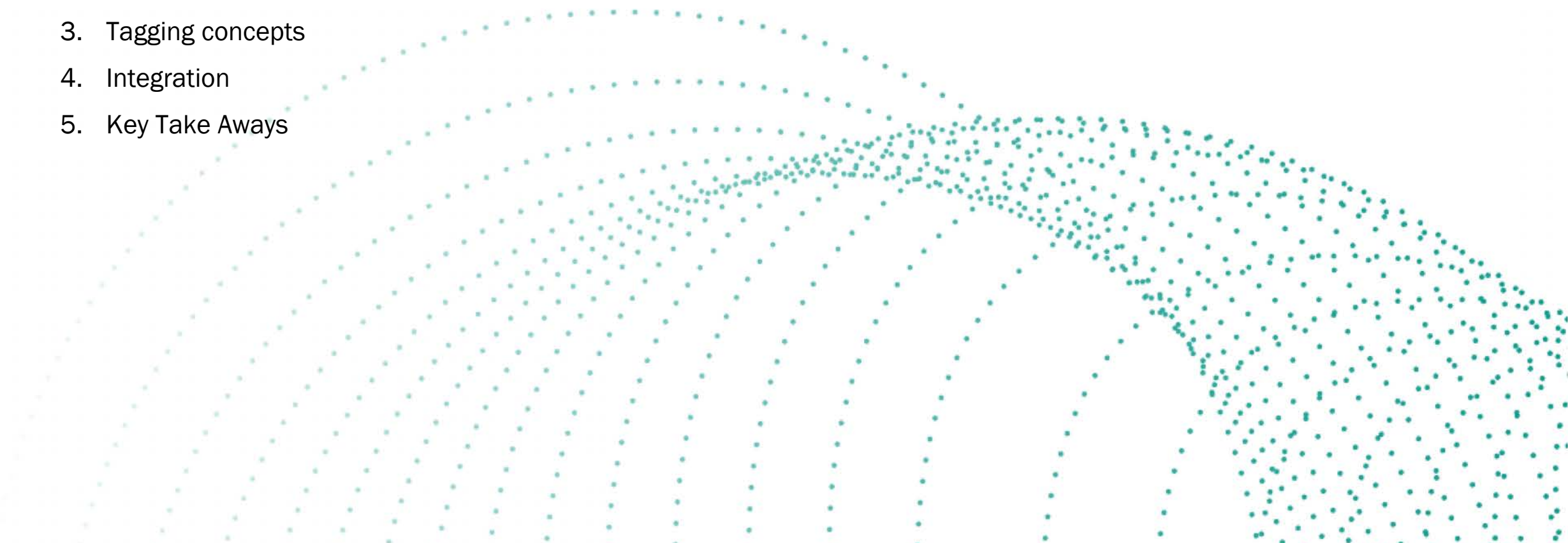


# Open Data Navigator & opendata.swiss

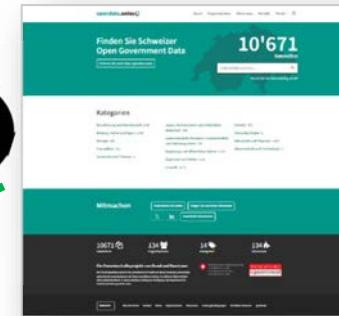
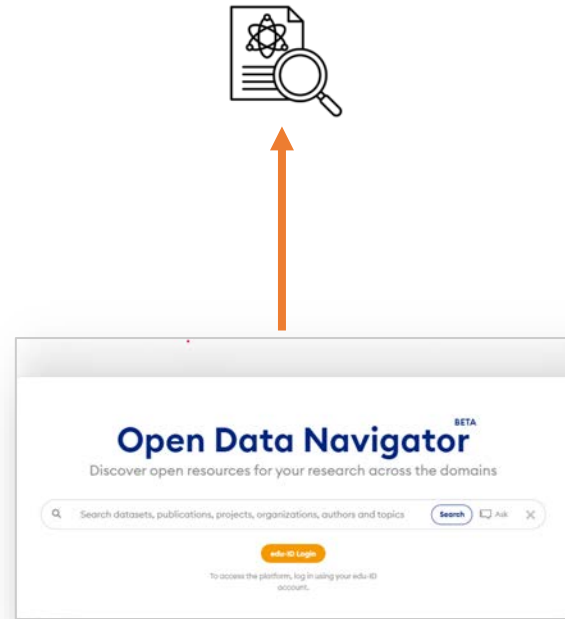
**OA publication recommendations for datasets –  
Concept tagging with Wikidata Identifiers**

# Agenda

1. Who we are, what we do
  2. Goal of the project
  3. Tagging concepts
  4. Integration
  5. Key Take Aways
- 

# Facilitating the discovery of Open Data and resources in the Swiss Open Data ecosystem

Improve and facilitate the findability of research projects, publications, ORD



Improve and facilitate the findability of OGD-Datasets

# Who we are what we do

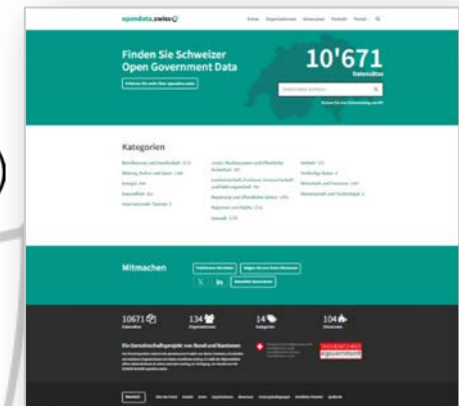
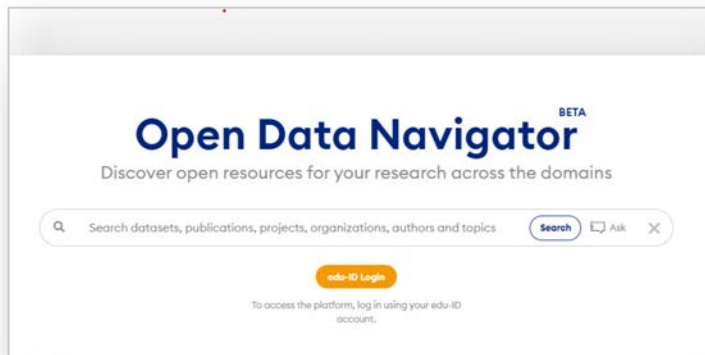
OA Publications

Keywords

Open Government Data

# Goal of the project

- Improvement of the **Open Government Data exploration journey** for users with a **research focus**
- **PoC of a recommendation system: show relevant resources** for delving into the topics and data on **opendata.swiss**
- **Build Bridges: develop a feature** that displays **Open Access (OA) publications** related to **each dataset on opendata.swiss**

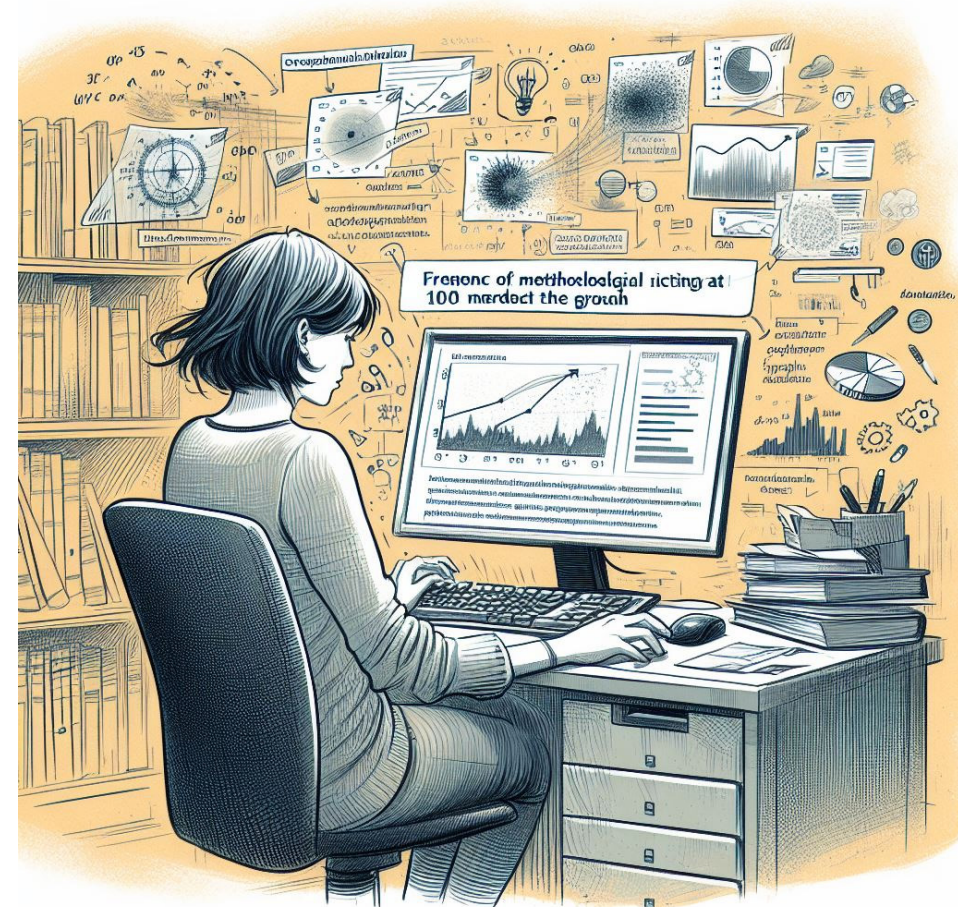




# User Story: How can we help Paula to find datasets and publications?

## Problem statement:

- Paula searches for open government data on "*Frequency of meteorological icing at 100 metres above the ground*" and relevant OA publications
- She goes to the portal [opendata.swiss](https://opendata.swiss) and finds a relevant dataset, and now she has to go to the open data navigator to find relevant OA publications
- Wouldn't it be nice if she could get recommendations for her search on [opendata.swiss](https://opendata.swiss)?



Eigene Darstellung mit MS Copilot, prompt: Draw me a serious but sketchy picture of this: Paula searches open government data to the topic «Frequency of meteorological icing at 100 metres above the ground» and relevant Open Access (OA) publications



# Idea for a solution to help Paula find recommended OA publications for her datasets

## Idea:

- Build a **recommendation system** for OA publications based on **linking common keywords** that are **captured in the metadata**

## Keywords

Environmental science, Engineering, Computer science, Physics, Electrical engineering, Power (physics), Quantum mechanics, Electricity generation, Wind power, Meteorology, Photovoltaic system, Electric power system, Hybrid power

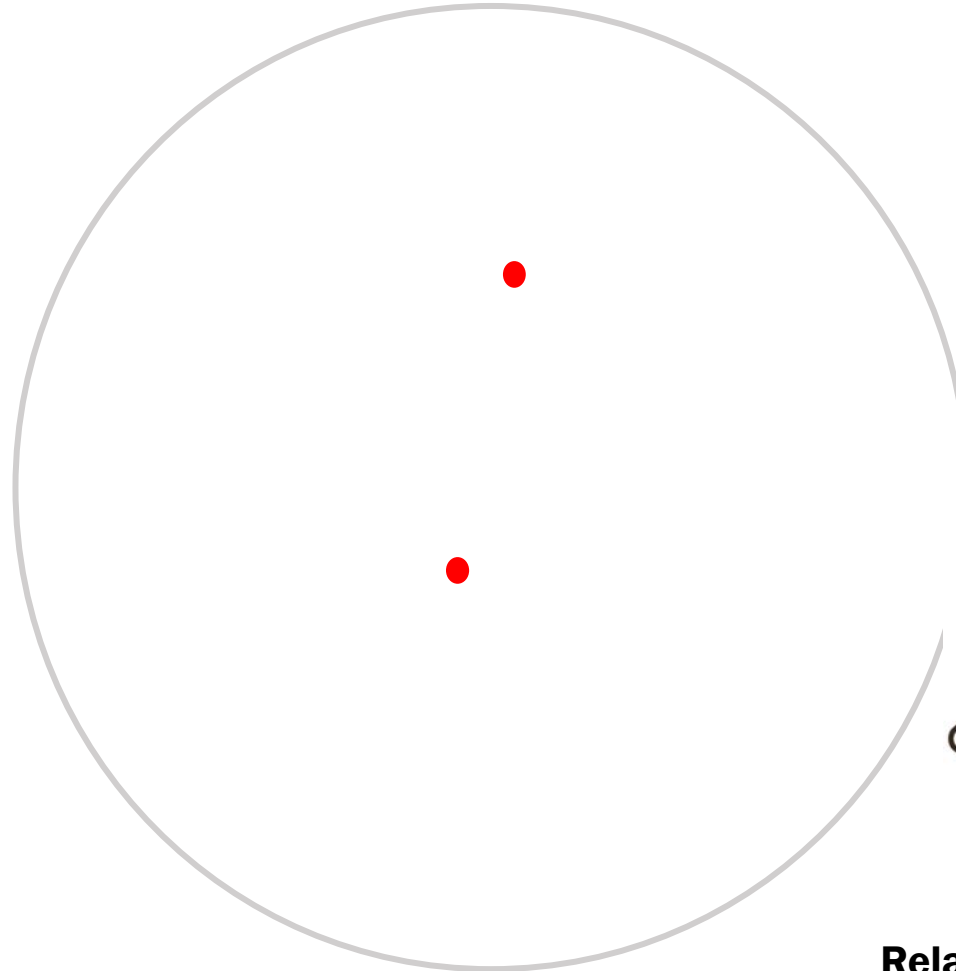


# Idea: Linking with common keywords

Datasets with keywords



opendata.swiss

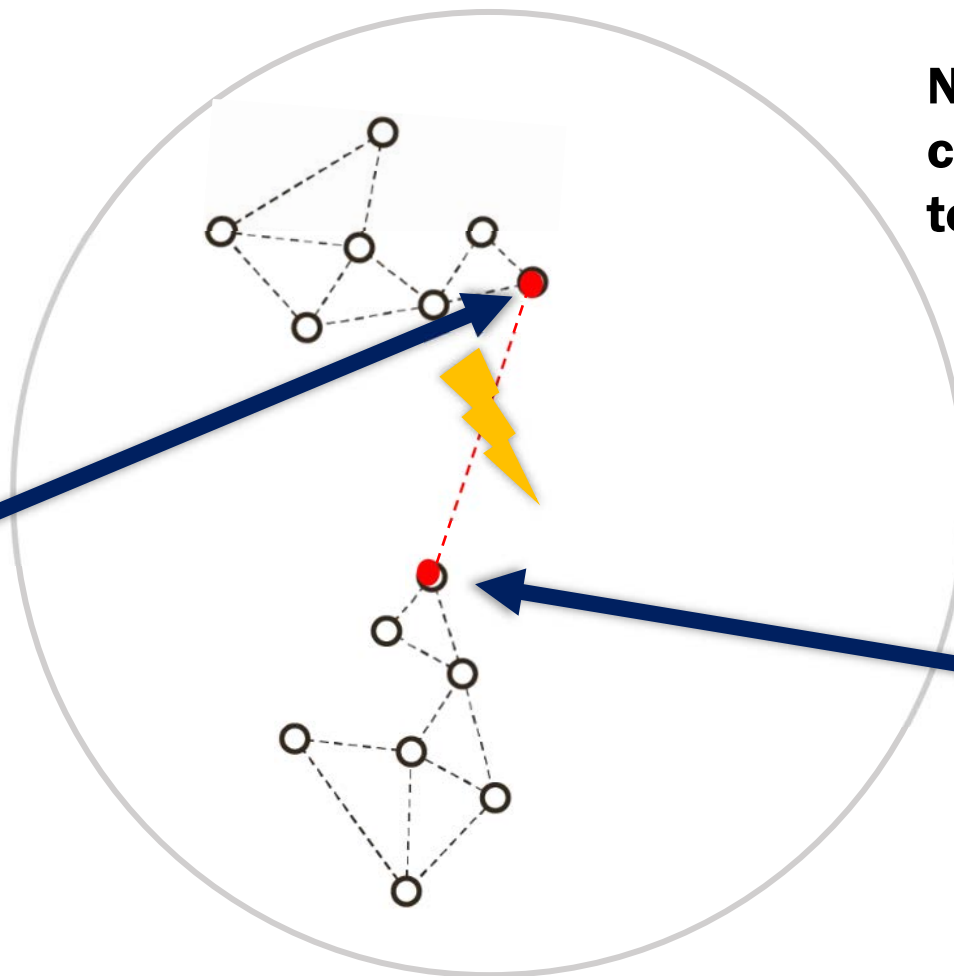


Related publications  
with keywords

# Problem: not the same terminology

opendata.swiss

Natural language  
keywords for a dataset



No match: semantically same  
concept, but not the same  
terminology

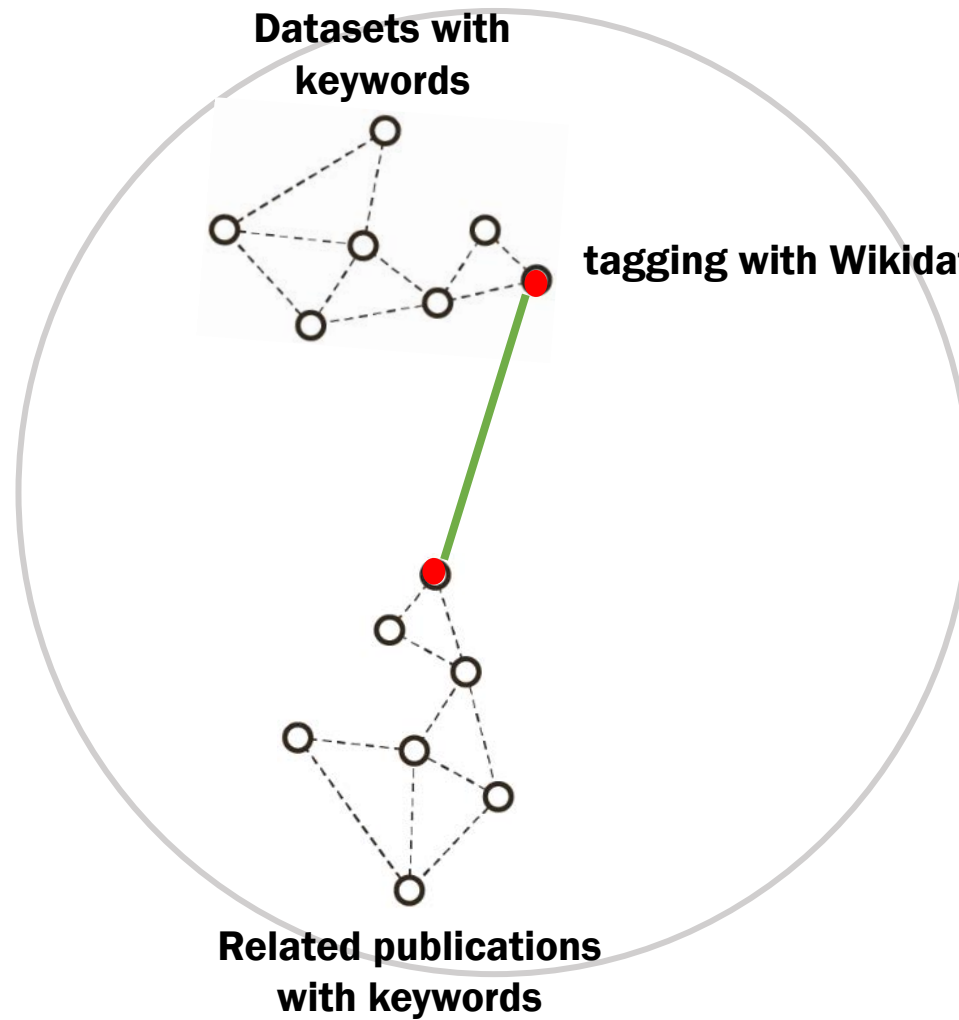


Keywords with the same  
concept but not the same  
terminology, e.g. term in  
different language



# Idea: concept tagging with wikidata identifiers

opendata.swiss



**concept tagging with wikidata identifiers**



# Natural language keywords on opendata.swiss

Find relevant publications for a given opendata.swiss dataset based on the given keywords

Keywords are entered manually by datapublishers (mostly experts but not necessarily)

The image displays two side-by-side screenshots of the opendata.swiss keyword input interface. Both screenshots show a form titled 'Keywords' with four sections: EN Keywords, DE Keywords, FR Keywords, and IT Keywords. Each section has a text input field and a list of pre-filled keywords with an 'x' icon to remove them.

**Left Screenshot (English keywords):**

- EN Keywords:** meteorology, energy, wind-power, wind-power-station, fsdi-federal-spatial-data-infrastructure
- DE Keywords:** meteorologie, energie, windenergie, windenergieanlage, bgdi-bundesgeodaten-infrastruktur
- FR Keywords:** meteorologie, energie, energie-eolienne, centrale-a-energie-eolienne, ifdg-linfrastucture-federale-de-donnees-geographiques
- IT Keywords:** meteorologia, energia, energia-eolica, generatore-eolico, ifdg-infrastruttura-federale-dei-dati-geografici

**Right Screenshot (German keywords):**

- EN Keywords:** (empty)
- DE Keywords:** vektordaten, geoportal, polygondaten, ausbauetappen, geodaten, stzh, fernwarme
- FR Keywords:** (empty)
- IT Keywords:** (empty)

At the bottom of both screenshots, there is a small icon and text: "Keywords help to increase findability. You can determine possible keywords from your metadata or your source system."

Images: Input mask for keywords in the CKAN-Backend opendata.swiss

**Problem:** It is difficult to search for international publications (English) with these keywords

**Solution:** Use concepts instead of natural language keywords

# Wikidata

- Wikidata contains a lot of information about **concepts, persons, locations** etc.
- A Wikidata entry is **uniquely identified** by a **Wikidata ID**
- As **Wikidata IDs** are very common, they can be **used as keywords** instead of natural language terms
  - For example, Q43302 stands for the concept of "wind power".
- Labels are given in many different languages.
- In addition, the concept is related to other concept (Wikidata IDs) such as "alternative energy" or "renewable energy"

WIKIDATA

Wikidata Leveling Up Days

Have you always wanted to learn more about Wikidata and its use in Wikimedia projects? Take part in the online event **Wikidata Leveling Up Days** from April 5th to 14th, 2024!

## wind power (Q43302)

conversion of wind energy into a useful form

[In more languages](#)

Language	Label	Description	Also known as
English	wind power	conversion of wind energy into a useful form	
German	Windenergie	Umwandlung von Wind in Strom	Windkraftenergie
Alemannic	No label defined	No description defined	
French	énergie éolienne	énergie du vent	électricité éolienne

All entered languages

### Statements

instance of renewable resource 0 references

subclass of alternative energy 0 references

renewable energy 0 references

economic sector 0 references

sustainable energy 0 references

image

### Wikipedia (96 entries)

- af Windenergie
- an Enerchia eolica
- ar طاقة الرياح
- ast Enerxía eólico
- as বতাহ শক্তি
- az Külək enerjisi
- bar Windenagie
- bat\_smg Viejė energeje
- bcl Kusog nin duros
- be\_x\_old Энэргія ветры
- be Энэргія ветры
- bg Вятрѝна енергия
- bn বায়ুশক্তি
- bs Energija vjetra
- ca Energia eòlica
- ca Energia eòlica
- ckb وریک با
- cs Větrná energie
- cv Çил энергетикки
- cy Egni gwynt
- da Vindenergi
- de Windenergie
- el Αιολική ενέργεια
- en Wind power
- eo Ventoenergio
- es Energía eólica
- et Tuuleenergia
- eu Energia eoliko
- fa انرژی بادی
- fi Tuulivoima
- fo Vindorka
- fr Énergie éolienne
- fy Wynenerzjy
- gan 風力
- ga Fuinneamh gaoithe
- gcr Énerji éolyenn
- gd Cumhachd na Gaoithe



# Controlled Vocabularies

- Wikidata is one example of controlled vocabularies
- There are many others such as the Dewey Decimal Classification (DDC):

**WebDewey Search** Suche mit der Dewey-Dezimalklassifikation

Suchbegriff oder Notation:  **SUCHE**  Kürzungsstriche (DDC-Kurznotationen) anzeigen

Suche in:  DNB  GBV  HeBIS  SUB  SWB  FUB

**Haupttafeln**

Notation	Thema	Titel in dieser Klasse	Titel in dieser Klasse und Unterklassen	Weitere Titel
	<a href="#">Haupttafeln</a>			
600	<a href="#">Technik</a>	0 (DNB) <a href="#">114</a> (GBV) <a href="#">1</a> (HeBIS) <a href="#">12</a> (SUB) <a href="#">183</a> (SWB) <a href="#">128</a> (FUB)	<a href="#">511368</a> (DNB) <a href="#">1276079</a> (GBV) <a href="#">1539557</a> (HeBIS) <a href="#">315445</a> (SUB) <a href="#">917671</a> (SWB) <a href="#">561408</a> (FUB)	0 (DNB)
620	<a href="#">Ingenieurwissenschaften</a>	0 (DNB) <a href="#">43</a> (GBV) <a href="#">0</a> (HeBIS) <a href="#">7</a> (SUB) <a href="#">20</a> (SWB) <a href="#">149</a> (FUB)	<a href="#">97022</a> (DNB) <a href="#">312290</a> (GBV) <a href="#">362087</a> (HeBIS) <a href="#">41374</a> (SUB) <a href="#">229912</a> (SWB) <a href="#">71124</a> (FUB)	0 (DNB)
621	<a href="#">Angewandte Physik</a>	<a href="#">530</a> (DNB) <a href="#">4069</a> (GBV) <a href="#">4571</a> (HeBIS) <a href="#">392</a> (SUB) <a href="#">3321</a> (SWB) <a href="#">2907</a> (FUB)	<a href="#">36805</a> (DNB) <a href="#">117667</a> (GBV) <a href="#">155411</a> (HeBIS) <a href="#">13626</a> (SUB) <a href="#">87042</a> (SWB) <a href="#">15944</a> (FUB)	<a href="#">10</a> (DNB)
621.3	<a href="#">Elektrotechnik, Magnettechnik, technische Optik, Kommunikationstechnik, Computertechnik; Elektronik, Lichttechnik</a>	<a href="#">284</a> (DNB) <a href="#">5664</a> (GBV) <a href="#">5238</a> (HeBIS) <a href="#">3036</a> (SUB) <a href="#">4658</a> (SWB) <a href="#">474</a> (FUB)	<a href="#">22417</a> (DNB) <a href="#">84600</a> (GBV) <a href="#">109208</a> (HeBIS) <a href="#">9559</a> (SUB) <a href="#">62585</a> (SWB) <a href="#">8718</a> (FUB)	<a href="#">174</a> (DNB)
621.31	<a href="#">Erzeugung, Modifikation, Speicherung, Übertragung elektrischer Energie</a>	<a href="#">336</a> (DNB) <a href="#">1621</a> (GBV) <a href="#">3715</a> (HeBIS) <a href="#">59</a> (SUB) <a href="#">1353</a> (SWB) <a href="#">222</a> (FUB)	<a href="#">6576</a> (DNB) <a href="#">15458</a> (GBV) <a href="#">19097</a> (HeBIS) <a href="#">1641</a> (SUB) <a href="#">11559</a> (SWB) <a href="#">1476</a> (FUB)	<a href="#">6</a> (DNB)
621.312	<a href="#">Erzeugung, Modifikation, Speicherung</a>	<a href="#">63</a> (DNB) <a href="#">213</a> (GBV) <a href="#">177</a> (HeBIS) <a href="#">60</a> (SUB) <a href="#">177</a> (SWB) <a href="#">18</a> (FUB)	<a href="#">2829</a> (DNB) <a href="#">6204</a> (GBV) <a href="#">8065</a> (HeBIS) <a href="#">1012</a> (SUB) <a href="#">4457</a> (SWB) <a href="#">693</a> (FUB)	0 (DNB)
621.3121	<a href="#">Erzeugung</a>	<a href="#">166</a> (DNB) <a href="#">334</a> (GBV) <a href="#">1250</a> (HeBIS) <a href="#">22</a> (SUB) <a href="#">222</a> (SWB) <a href="#">38</a> (FUB)	<a href="#">572</a> (DNB) <a href="#">1483</a> (GBV) <a href="#">3661</a> (HeBIS) <a href="#">98</a> (SUB) <a href="#">1009</a> (SWB) <a href="#">171</a> (FUB)	<a href="#">9</a> (DNB)
621.31213	<a href="#">Einzelne Arten mechanischer Erzeugung</a>	<a href="#">19</a> (DNB) <a href="#">44</a> (GBV) <a href="#">90</a> (HeBIS) <a href="#">3</a> (SUB) <a href="#">25</a> (SWB) <a href="#">3</a> (FUB)	<a href="#">385</a> (DNB) <a href="#">1093</a> (GBV) <a href="#">2593</a> (HeBIS) <a href="#">70</a> (SUB) <a href="#">759</a> (SWB) <a href="#">125</a> (FUB)	0 (DNB)
621.312136	<a href="#">Erzeugung durch Windenergie</a>	<a href="#">188</a> (DNB) <a href="#">508</a> (GBV) <a href="#">1362</a> (HeBIS) <a href="#">32</a> (SUB) <a href="#">396</a> (SWB) <a href="#">66</a> (FUB)	<a href="#">231</a> (DNB) <a href="#">577</a> (GBV) <a href="#">1369</a> (HeBIS) <a href="#">37</a> (SUB) <a href="#">433</a> (SWB) <a href="#">70</a> (FUB)	<a href="#">7</a> (DNB)

DNB = Deutsche Nationalbibliothek | GBV = Gemeinsamer Bibliotheksverbund | HeBIS = HeBIS Verbundkatalog | SUB = SUB Göttingen | SWB = Südwestdeutscher Bibliotheksverbund | FUB = FU Berlin

Source: <https://deweysearchde.pansoft.de/webdeweysearch>

# Which Controlled Vocabulary?

- Mappings between different vocabularies can be queried (correspondence, equivalence of entries)

The screenshot shows a web interface with three main sections: 'Concordances', 'Search', and 'Navigator'. The 'Mappings' section is active, displaying a table of results for the query 'wind power'. The table has five rows, each showing a mapping from Wikidata (WD) to another vocabulary. The 'Wikidata-Mappings' section includes a pagination bar showing '1 2' and '5 of 8' results. Below the mappings, there are sections for 'Suggestions', 'Co-Occurrences', and 'Wikidata Reconciliation', all of which show 'no results'.

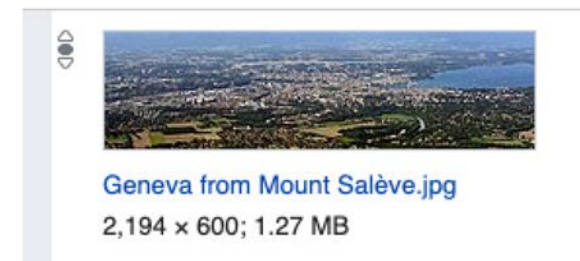
WD	Q43302 wind power			
GND	Windenergie			
BNCF	35634			
NDLA	00575250			
AAT	300055230			
UNESCO Thesaurus	concept9712 Wind power			

# Named Entity Recognition and Linking

"La vittoria di **Ferdy Kübler**. A **Ginevra**, i  
38 concorrenti rimasti in lizza iniziano la terza tappa del Giro di Romandia ..."

```
{  
  "text": "Ferdy Kübler",  
  "kbid": "Q458713",  
  "label": "PER",  
  "start": 15,  
  "end": 27  
}
```

```
{  
  "text": "Ginevra",  
  "kbid": "Q71",  
  "label": "LOC",  
  "start": 31,  
  "end": 37  
}
```



Source: <https://www.wikidata.org/>



# Integration

1. Users browse on [opendatanavigator.switch.ch](https://opendatanavigator.switch.ch) and discover datasets from [opendata.swiss](https://opendata.swiss)

The screenshot shows the 'Open Data Navigator' interface. At the top, the search bar contains the text 'Frequency of meteorological icing'. Below the search bar, there are two results listed. The first result is a Dataset titled 'Wind Atlas of Switzerland: Frequency of meteorological icing at 100 metres above the ground', published in 2010 by the Swiss Federal Office of Energy SFOE. The second result is a Scholarly Article titled 'Arctic Regions: Icing at Low Temperatures and Modern Semiconductor Systems for De-Icing Overhead Transmission Line Wires' by KUVSHINOV A. A., ALEKSANDROV N. M., and KHRENNIKOVA, YU., published in 2022. The article snippet discusses conversion units for melting glacial deposits and mentions 'ultra-low frequency current' and 'industrial frequency'.

Dataset

## Wind Atlas of Switzerland: Frequency of meteorological icing at 100 metres above the ground

Publisher

[SWISS FEDERAL OFFICE OF ENERGY SFOE](#)

Date Published

2010

In Switzerland, the mountain regions (Jura, Alps and Alpine foothills) are the most suitable regions for exploiting wind energy potential. But here, the air temperature during the winter months is frequently below 0° C for lengthy periods, and this can cause measuring instruments and rotor blades to ice up. Icing influences the planning and operation of a wind power plant in a variety of ways: ice formation on the rotor blades interferes with their aerodynamics and results in production losses. The additional weight and imbalance associated with ice formation also burden the structural elements of a wind turbine. For safety reasons (ice fall-off), and in view of the additional burden placed on their components, wind turbines have to be turned off when they ice up. Ice formation on a wind turbine's measuring instruments can also give rise to faulty operation. Calculations of icing frequency are based on comprehensive data relating to cloud water, temperature and wind obtained from analyses of the MeteoSwiss COSMO-2 weather forecasting model. The icing model calculates the ice load on a cylindrical, freely rotating structure. The icing frequency is depicted on a 2.2-kilometre raster and has been verified on the basis of measurements carried out at IMIS stations in the Alps and readings recorded in the Jura range. The map depicts the frequency of meteorological icing at a height of 100 metres above the ground for the period from August 2007 to July 2009. The 10-year average is around 5 percent lower. The frequency data are based on calculations made with the aid of models, and they indicate where icing can occur in Switzerland. However, the data cannot be regarded as absolutely precise for a given location, because deviations can occur in confined spaces such as those frequently encountered in the central Alps. The frequency of icing is higher in exposed areas and lower in protected areas than the levels shown on the map. The map depicts meteorological icing, while the periods of measured icing tend to be longer on average. To assess the icing conditions at a specific location, measurement on site is thus essential.

Link to Source

[94cedad7-6d19-46b2-9ecf-0d1d1a58bea8@bundesamt-fur-energie-bfe](#)

Keywords

[energy](#), [fsdi-federal-spatial-data-infrastructure](#), [meteorology](#), [wind-power](#), [wind](#)





# corresponding page on opendatanavigator. switch.ch

- User leaves the page to the corresponding page

Dataset

## Wind Atlas of Switzerland: Frequency of meteorological icing at 100 metres above the ground

**Publisher**  
[SWISS FEDERAL OFFICE OF ENERGY SFOE](#)

**Date Published**  
2010

**Link to Source**  
[94cedad7-6d19-46b2-9ecf-0d1d1a58bea8@bundesamt-fur-energie-bfe](#)

**Keywords**  
[energy](#), [fsdi-federal-spatial-data-infrastructure](#), [meteorology](#), [wind-power](#), [wind-power-station](#)

**Language**  
deu, fra, eng, ita

**Distributions**

ID	Format	Access Conditions	
<a href="#">ch.bfe.meteorologische-vereisung</a>		NonCommercialAllowed-CommercialAllowed-ReferenceRequired	Open Access
<a href="#">ch.bfe.meteorologische-vereisung</a>		NonCommercialAllowed-CommercialAllowed-ReferenceRequired	Open Access
<a href="#">Map (Preview)</a>		NonCommercialAllowed-CommercialAllowed-ReferenceRequired	Open Access
<a href="#">GeoTIFF</a>		NonCommercialAllowed-CommercialAllowed-ReferenceRequired	Open Access
<a href="#">swisstopo REST API</a>		NonCommercialAllowed-CommercialAllowed-ReferenceRequired	Open Access

**Related OA Publications** | **Related Resources** | **AI suggestions (10)** | **JSON-LD**

**ScholarlyArticle**  
[Power Generation Forecast of Hybrid PV-Wind System](#)  
Publication shares keywords: wind-power-station, meteorology

[Scheduling Analysis of Coordinated Operation of Wind and Hydro Power Considering Electricity Price](#)  
Publication shares keywords: meteorology, wind-power-station

[Including Wind Power Generation in Brazil's Long-Term Optimization Model for Energy Planning](#)  
Publication shares keywords: wind-power-station, meteorology



# Integration

1. Users browse on [opendatanavigator.switch.ch](https://opendatanavigator.switch.ch) and discover datasets from [opendata.swiss](https://opendata.swiss)
2. In development: [opendata.swiss](https://opendata.swiss) implements a button on a dataset's detail view that leads the user to the corresponding page on [opendatanavigator.switch.ch](https://opendatanavigator.switch.ch) (Connectome resolver)
3. Possible future development: **opendata.swiss queries the Connectome GraphQL endpoint** to get related publications for a given dataset (using its identifier)

# Possible integration of option 3 – Mock up

Advantage: Users see related OA publications without having to leave the page



opendata.swiss Daten Organisationen Showcases Kontakt Portal - Q

Startseite > Organisationen > Bundesamt für Energie BFE > Windatlas Schweiz...

## Windatlas Schweiz: Häufigkeit meteorologischer Vereisung in 100 m Höhe über Grund + Abonnieren

Zuletzt aktualisiert 31. Mai 2016 Nutzungsbedingungen  Organisation Bundesamt für Energie BFE Kategorien Bildung, Kultur und Sport, Energie, Regionen und Städte, Umwelt

### Beschreibung

In der Schweiz liegen die Potentialgebiete für Windenergie unter anderem auf den Jurahöhen, wie auch in den Alpen und Voralpen. Während der Wintermonate liegt dort die Lufttemperatur regelmässig und für längere Zeit unter 0° Celsius. Damit verbunden sind Vereisungseffekte an Messinstrumenten und Rotorblättern. Die Vereisung beeinflusst die Planung und den Betrieb einer Windenergieanlage (WEA) auf unterschiedliche Weise: Eisansatz an den Rotorblättern führt zu einer gestörten Aerodynamik der Flügel und verursacht Produktionsverluste. Die mit der Vereisung verbundenen Zusatzlasten und Unwuchten belasten die Strukturelemente der WEA. Aus Sicherheitsgründen (Eiswurf) und auf Grund der zusätzlichen Materialbelastung werden die WEA bei Vereisung abgeschaltet. Weiter kann Eisansatz an den Windmessgeräten einer WEA zu einem fehlerhaften Betrieb führen. Die Berechnungen der Vereisungshäufigkeit basieren auf flächendeckenden Daten zu Wolkenwasser, Temperatur und Wind aus der Analyse des Wettervorhersagemodells COSMO-2 der MeteoSchweiz. Das Vereisungsmodell berechnet die Eislast an einer zylindrischen, frei rotierenden Struktur. Die Vereisungshäufigkeit liegt auf einem 2.2-km-Raster vor und wurde anhand von Messungen von IMIS-Stationen in den Alpen und Messungen im Jura verifiziert. Die Karte zeigt die Häufigkeit meteorologischer Vereisung auf 100 m über Grund für den Zeitraum August 2007 bis Juli 2009. Im 10-Jahres-Mittel liegt die mittlere Vereisung etwa 5% tiefer. Die Häufigkeitsangaben sind modellierte Werte. Sie geben Hinweise, wo in der Schweiz Vereisungen auftreten können. Die Häufigkeitsangaben können nicht als punktgenaue, exakte Werte interpretiert werden. In kleinräumigem Gelände, wie es häufig in den Zentralalpen anzutreffen ist, gibt es Abweichungen. Bei stark exponierten Lagen liegt der Vereisungswert höher, bei abgeschatteter Lage liegt der Vereisungswert tiefer als in der Karte dargestellt. Auf der Karte ist die meteorologische Vereisung dargestellt, die Perioden von instrumenteller Vereisung dauern im Durchschnitt länger. Bei Interesse an einer Standortentwicklung ist eine Messung vor Ort unumgänglich.

[meteorologie](#) [energie](#) [windenergie](#) [windenergieanlage](#) [bgi-bundesgeodateninfrastruktur](#)

### Related OA Publications

**ScholarlyArticle**  
[Power Generation Forecast of Hybrid PV-Wind System](#)  
Publication shares keywords: wind-power-station, meteorology

[Scheduling Analysis of Coordinated Operation of Wind and Hydro Power Considering Electricity Price](#)  
Publication shares keywords: meteorology, wind-power-station

[Including Wind Power Generation in Brazil's Long-Term Optimization Model for Energy Planning](#)  
Publication shares keywords: wind-power-station, meteorology

# opendata.swiss queries Connectome GraphQL Endpoint – Developer Interface

The image shows a GraphQL IDE interface with three main sections: Operation, Variables, and Response.

**Operation:** A GraphQL query named `GetRelatedCreativeWork` is shown. It uses variables `$identifier` and `$provider`. The query structure is as follows:

```
1 query GetRelatedCreativeWork($identifier: String!, $provider: Provider!) {
2   getRelatedCreativeWork(identifier: $identifier, provider: $provider) {
3     nodes {
4       ... on Thing {
5         __typename
6         name
7         sameAs
8       }
9     }
10  }
11 }
```

**Variables:** The variables section shows the following JSON:

```
1 {
2   "identifier": "94cedad7-6d19-46b2-9ecf-0d1d1a58bea8@bundesamt-fur-energie-bfe",
3   "provider": "opendata"
4 }
```

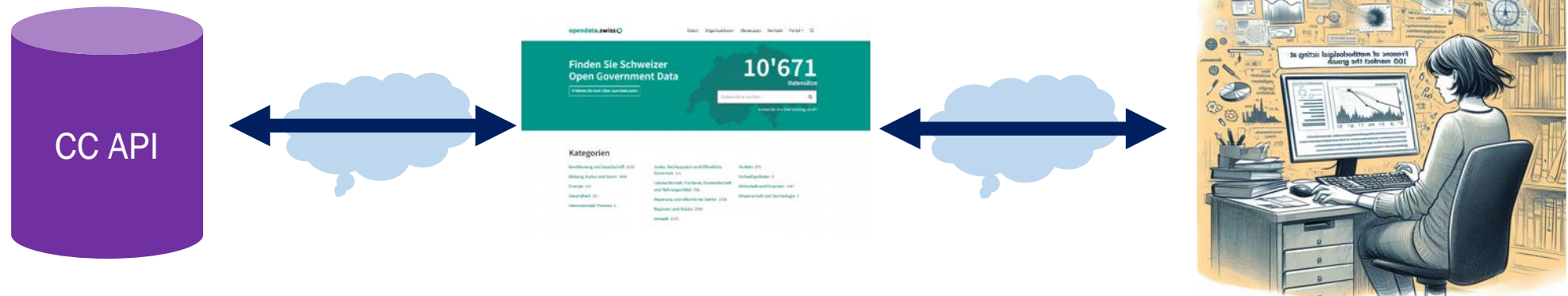
**Response:** The response shows a status of 200, a duration of 295ms, and a body of 0B. The JSON response is:

```
{
  "data": {
    "getRelatedCreativeWork": {
      "nodes": [
        {
          "__typename": "Book",
          "name": "Wind Solar Hybrid Renewable Energy System",
          "sameAs": [
            "https://doi.org/10.5772/intechopen.77440"
          ]
        },
        {
          "__typename": "Book",
          "name": "Clean Water Using Solar and Wind: Outside the Power Grid (Persian Translation)",
          "sameAs": [
            "https://doi.org/10.2166/9781789062953"
          ]
        },
        {
          "__typename": "Book",
          "name": "Making Sense of Natural Disasters",
          "sameAs": [
            "https://doi.org/10.1007/978-3-030-94778-1"
          ]
        },
        {
          "__typename": "ScholarlyArticle",
          "name": "The Role of Cyclone Activity in the Interannual Variability of the Summertime Beaufort High",
          "sameAs": [
            "https://doi.org/10.2151/sola.2015-025"
          ]
        },
        {
          "__typename": "ScholarlyArticle",
          "name": "Motion Synthesis of a Planar Watt II Type Six-Bar Mechanism with Two End-Effectors",
          "sameAs": [
            "https://doi.org/10.1007/978-3-319-17067-1_10"
          ]
        }
      ]
    }
  }
}
```



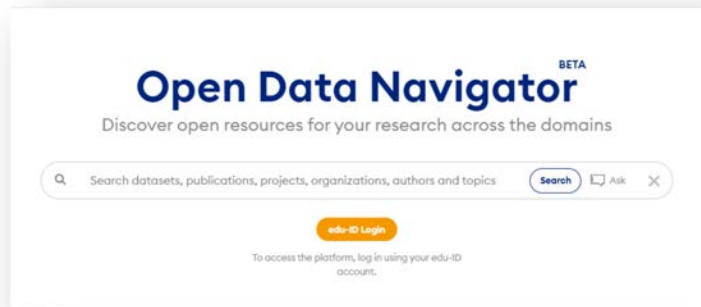
# Different Ways of Accessing the Connectome Knowledge Graph (KG)

- End users use UIs, not APIs
- **Platform interoperability** can be achieved through
  - **linking between UIs** (user switches between platforms in browser, e.g., different tabs)
  - **platform queries** the Connectome API and **displays the data to the user** (user remains on the same platform, e.g. opendata.swiss)



# Key Take Aways

- Information in Metadata (e.g. keywords) helps to build a recommendation system
- Using controlled vocabularies enhances Metadata Quality (e.g. consistency)
- Wikidata serves as an introduction to a conceptual world that simplifies many things for us (e.g. multilingualism, related concepts)
- Concepts can be mapped with each other (differences in specificity)





# Try it out:

## Open Data Navigator:

<https://opendatanavigator.switch.ch/> (Stand Q1 2024)

Button on Abnahme-Environment [opendata.swiss](https://opendata.swiss)  
categories energy and health

Energy: <https://ogdch-abnahme.clients.liip.ch/en/dataset?groups=ener>

Health: <https://ogdch-abnahme.clients.liip.ch/en/dataset?groups=heal>



## Email

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[michele.spichtig@bfs.admin.ch](mailto:michele.spichtig@bfs.admin.ch)

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## LinkedIn Switch

<https://www.linkedin.com/company/switch-switzerland/mycompany/>

## LinkedIn opendata.swiss

<https://www.linkedin.com/showcase/92970995>

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## Questions about the PoC:

[opendata@bfs.admin.ch](mailto:opendata@bfs.admin.ch)

# Get In Touch