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Bundeskanzlei BK  
**Kompetenzzentrum Amtliche Veröffentlichungen (KAV)**

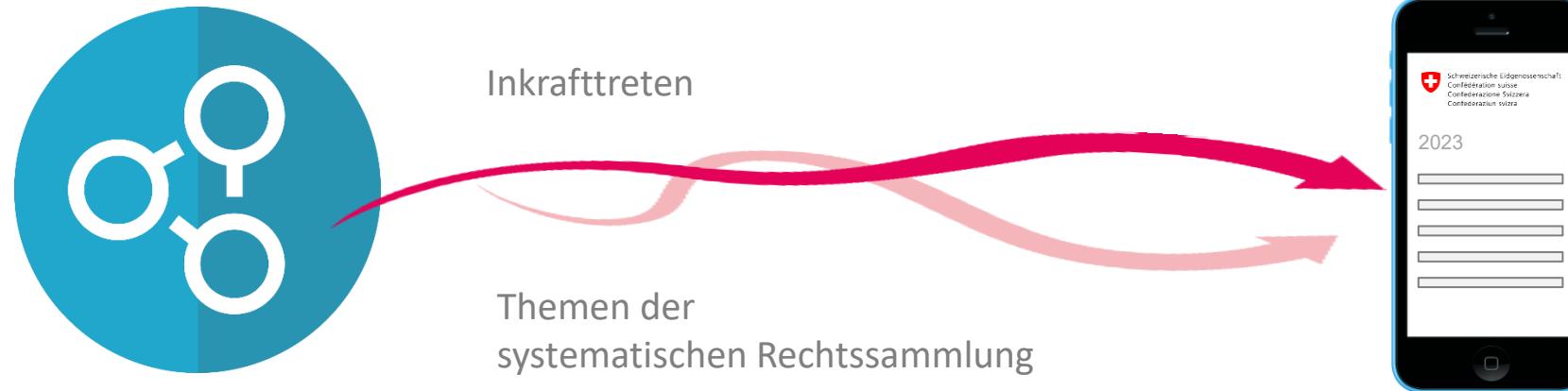
# **Triple store, sparql endpoint and mobile app: explore new trends for fedlex!**



Schweizerische Bundeskanzlei - Cédric Joseph, Jean-Louis Morard



# Challenge



Fedlex SPARQL-Endpoint:  
<https://fedlex.data.admin.ch/sparql>



# SPARQL endpoint Fedlex

<https://fedlex.data.admin.ch/sparql>

The screenshot shows a web-based SPARQL endpoint interface. At the top, there is a navigation bar with links to various services: "List of all publications with filter or file format", "List of all currently valid CC (year, text type & lang...)" (which is highlighted), "All the manifestations of the Classified Compilation on a specific date", "List of all CC with CC-number, title and abbr. in all available languages", "Chronology of the basic act of a CC", and "Chronology of an entry of the Classified Compilation after the publication of the Bas...". Below the navigation bar is a code editor containing a SPARQL query:

```
1 PREFIX jolux: <http://data.legilux.public.lu/resource/ontology/jolux#>
2 PREFIX skos: <http://www.w3.org/2004/02/skos/core#>
3 PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
4 select distinct (str(?srNotation) as ?rsNr) (str(?dateApplicability) as ?currentVersionDate) (str(?dateDocument) as ?decisionDate)
5   ?titleDe ?abrevDe ?titleFr ?abrevFr ?titleIt ?abrevIt ?titleRm ?abrevRm ?titleEn ?abrevEn
6   ?cc {
7     ?cc a jolux:ConsolidationAbstract .
8     ?cc jolux:classifiedByTaxonomyEntry/skos:notation ?srNotation .
9     filter(datatype(?srNotation) = <https://fedlex.data.admin.ch/vocabulary/notation-type/id-systematique>)
10    ?cc jolux:dateDocument ?dateDocument .
11
12    ?conso jolux:isMemberOf ?cc .
13
14    ?conso jolux:dateApplicability ?dateApplicability .
```

Below the code editor are several buttons: a refresh icon, "Table" (which is selected and highlighted in blue), "Raw Response", "Pivot Table", "Google Chart", and "Geo". To the right of the code editor is a vertical scroll bar.



# Objectives

Use the SPARQL Endpoint of fedlex.admin.ch in a smartphone app!

- Objective 1:
  - Develop a mobile app that lists which legal texts come into effect on a given date / over a given period.
- Objective 2:
  - Subscribe to specific topics of the classified compilation of federal legislation. In this case, only the legal texts belonging to these topics are listed.
- Objective 3:
  - Search results can be presented by date/topic or by topic/date.
- Objective 4:
  - The app notifies as soon as a legal text in the selected topics enters into force.



# Team



## Challenge Owners:

- Cédric Joseph
- Jean-Louis Morard

## Developers:

- Christian Ribeaud
- Holger Keibel
- Oleg Lavrovsky

## Jurists:

- Raphaël Jeannerat
- Loïc Pittet



# Achievements and next steps

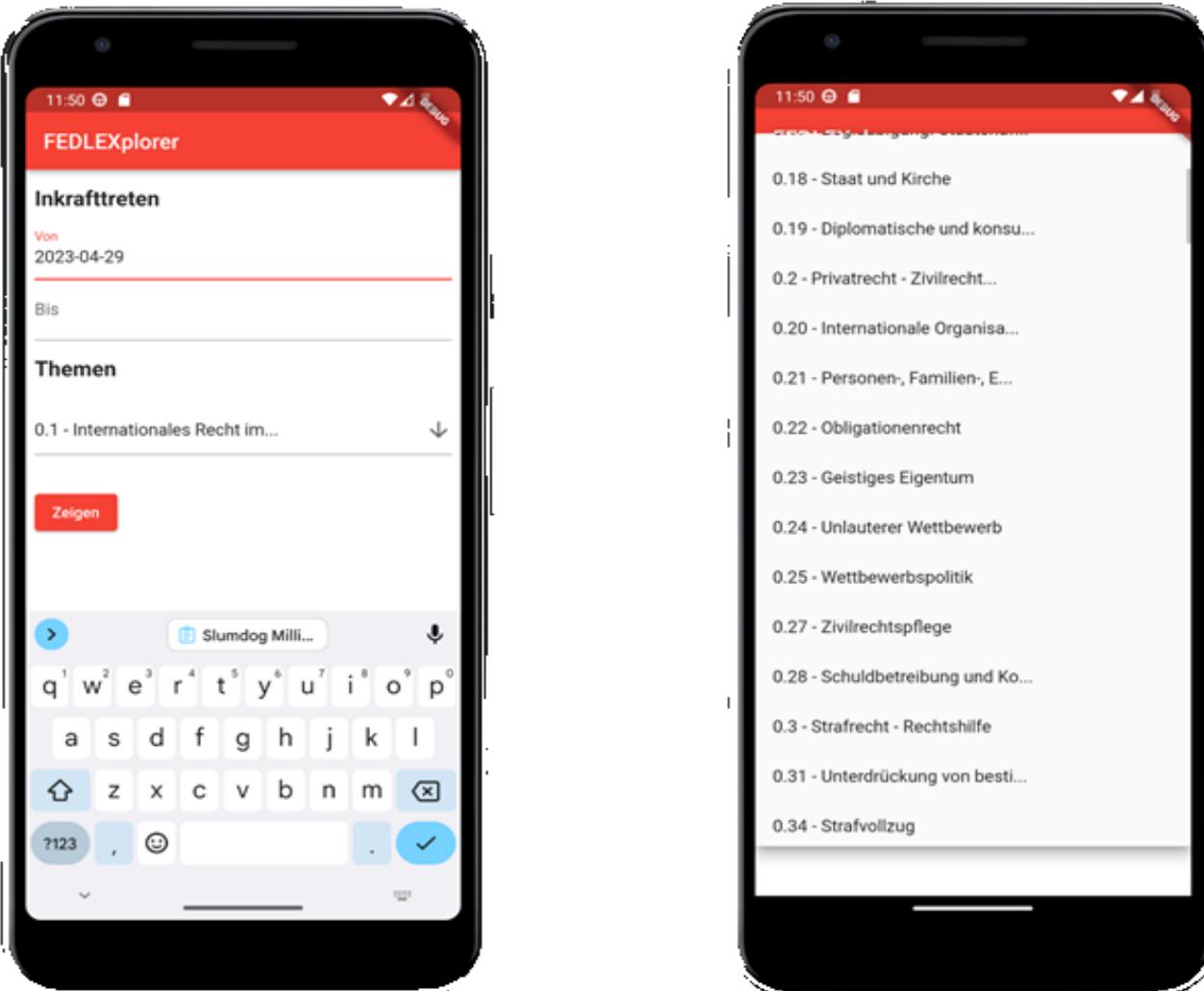
- **Achievements:**
  - Working prototype for objectives 1 and 2 (**FEDLEXplorer**)
  - Project published on GitHub / Open Legal Lab:  
<https://github.com/ribeaud/fedlexplorer>  
<https://challenges.openlegallab.ch/event/4>
- **Next steps:**
  - Federal Chancellery (KAV) will continue to develop this prototype
  - Publish this app in the app stores



# Demo



# Demo – search filters





# Demo – search results

The image shows two smartphones side-by-side, both displaying search results for Swiss laws and regulations. The phones have a red header bar with the word "Ergebnisse" (Results) and a back arrow icon.

**Phone on the left:**

- 2023-04-29 - 916.443.102.1 - Verordnung
- 2023-05-01 - 0.514.164.91 - Abkommen
- 2023-05-01 - 221.214.111 - Verordnung
- 2023-05-01 - 453.1 - Verordnung
- 2023-05-01 - 531 - Bundesgesetz
- 2023-05-01 - 531.215.611 - Verordnung
- 2023-05-01 - 531.82 - Verordnung
- 2023-05-01 - 631.012 - Verordnung
- 2023-05-01 - 818.102.2 - Verordnung
- 2023-05-01 - 832.112.31 - Verordnung
- 2023-05-01 - 916.01 - Verordnung
- 2023-05-01 - 916.511 - Verordnung

**Phone on the right:**

- 2023-04-29 - 916.443.102.1 - Verordnung
- 2023-05-01 - 0.514.164.91 - Abkommen
- 2023-05-01 - 221.214.111 - Verordnung
- 2023-05-01 - 453.1 - Verordnung
- 2023-05-01 - 531 - Bundesgesetz**  
Bundesgesetz vom 17. Juni 2016 über die  
wirtschaftliche Landesversorgung  
(Landesversorgungsgesetz, LVG)  
National
- 2023-05-01 - 531.215.611 - Verordnung
- 2023-05-01 - 531.82 - Verordnung
- 2023-05-01 - 631.012 - Verordnung
- 2023-05-01 - 818.102.2 - Verordnung
- 2023-05-01 - 832.112.31 - Verordnung