

Three practical use-cases

on-line, May 17<sup>th</sup> 2021 Peter Hanečák <hanecak@opendata.sk> @PHanecak











- Peter Hanečák: interested in many things Open
  - programmer (since 1990)
  - enthusiastic user of Open Source (since 1998)
  - member of OpenData.sk initiative (since 2011)
  - member of SOIT (since 2012)
  - packager in Fedora Linux (since 2013)
  - Slovensko.Digital contributor (since 2015)







- little bit of Open Data basics
- use-case 1: RegisterUZ
- use-case 2: Address Registry
- use-case 3: Statistical Office
- use-case 4: LIDAR







- roughly in chronological order
- point of view mine
  - conclusions and lessons-learned possibly skewed
  - probably nice topics for a study (impacts, etc.)
- take with grain of salt









# Open Data - basics

#### main principles:

- "what is not classified is public" (OpenData.sk)
- "Open means anyone can freely access, use, modify, and share for any purpose (subject, at most, to requirements that preserve provenance and openness)."
   (http://opendefinition.org/)











# Open Data - basics





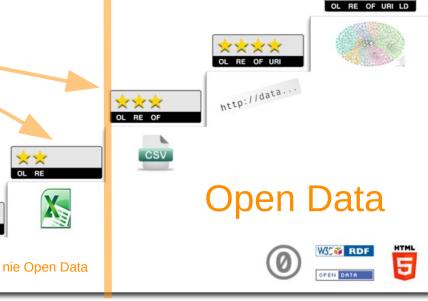


#### main aspects:

licensing compatible with Open Definition:
 "Open data and content can be freely used,
 modified, and shared by anyone for any purpose"

(http://opendefinition.org/, http://opendefinition.org/licenses/)

- proactive publishing
- open formats
- machine-readable



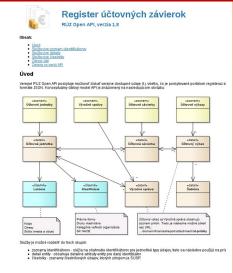








## Register UZ



- what: information from tax declarations of companies
- home page:
  - https://www.registeruz.sk/cruz-public/home/api
- license: CC0 Public Domain
- format: REST / JSON



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# Register UZ

## some history (1/2):

- published since 2014
- contribution of Ministry of Finance
  - project COMSODE
    - Open Data publication platform
    - FP7 project
    - Ministry of Interior as partner
    - Ministry of Finance as associated partner
    - I was participating too (via project partner EEA s.r.o.)



www.opendata.sk









#### Register UZ



# some history (2/2):

- sort of "collision" with community which later formed Slovensko. Digital
  - some of "them" reached the supplier independently of "us"
    (COMSODE) and ahead of us, contributing expertise and more
  - some of "us" and some of "them" plus some "others" later formed Slovensko. Digital









# Register UZ

#### unique because (1/2):

- world-wide phenomenon:
  - UK 1st
  - SK 2<sup>nd</sup>, but with much more detailed data
- first proper Open Data API in Slovakia
- low price
  - roughly additional 20 man days
    - for a project with complicated data scheme with a total price tags in tens of millions €
    - https://platforma.slovensko.digital/t/akcny-plan-iniciativy-pre-otvorene-vladnutie-na-roky-2016-2018-cast-open-data/1356/15
- high quality



Register účtovných závierok







# Register UZ

#### unique because (2/2):

done in collaboration with community

https://utopia.sk/wiki/pages/viewpage.action?pageId=45809724#OpenData.skMeetup3-BlokoAPIRegistra%C3%9AZ

- impact:
  - non-commercial:
    - investigative journalism, etc.
  - commercial:
    - FinStat, etc.















- what: registry of addresses (i.e. regions, counties, municipalities, streets, buildings, etc.)
- home page:
  - https://data.gov.sk/dataset?tags=register+adries
- license: CC0 Public Domain
- format: REST / SQL / JSON, CSV











## some history:

- published since 2016
- Ministry of Interior
  - as pilot for eDem/MOD project of NASES
    - eDem/MOD OPIS project: upgrade of data.gov.sk and "behind the scenes" data infrastructure











#### lessons learned (1/3):

did no go as smoothly as RegisterUZ, because:

- proper Open Data API not part of the system itself
- specialized and complicated G2G API used instead by NASES
- NASES, as middleman:
  - harvests data through G2G API (quite expensive integration, prone to errors, etc.)
  - publishes the data as Open Data decomposed to several datasets, with dumps (bulk download) and API options











#### lessons learned (2/3):

- deficiencies:
  - missing data, incorrect data, complicated structure
  - updates outages
  - complicated communication/support (two ministries, several suppliers and sub-suppliers)
  - complicated organizational structure:
    - municipalities are the creators and maintainers of data...
    - ... yet the system was not developed by them nor for them
    - official registry is sort of "second class citizen"
      from the point of view of municipalities (hence low-quality data)
- hence lower impact









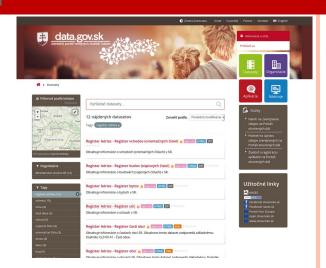
#### lessons learned (3/3):

#### recognized as important:

- base for census, etc.
- part of High Value Datasets

#### hence:

- data and deficiencies analyzed
- data clean-up under way
- under further scrutiny (MIRRI, municipalities, community, etc.)

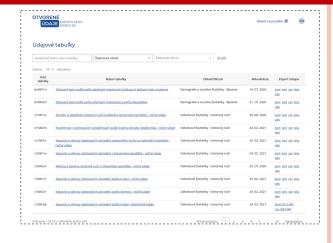








#### Statistical Office



- what: various statistical data
- home page:
  - https://data.statistics.sk/api/
- license: CC-BY 4.0
- format: REST / JSON, CSV, ...

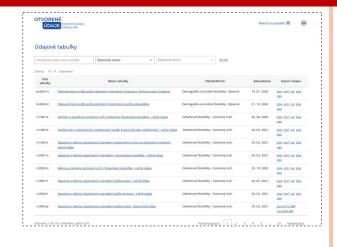








#### Statistical Office



#### some history:

- milestones:
  - 2015: licensing, CSV, entries at data.gov.sk
    - "early adopters" in Slovakia
      - 606 (out of 1051) datasets on data.gov.sk from Statistical Office (31.10.2016)
      - (768 out of 2359 as of 16.5.2021)
  - 2019: API

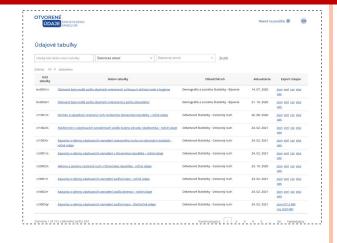








#### Statistical Office



#### unique because:

- "early adopters"
  - responded keenly and quickly to initial Open Data government actions
- implemented based on demand from public
- implemented incrementally
- in-house development
- low price
  - (compared to typical costs of their other systems)
- done in collaboration with community
  - specifically also with PSK regional government









- what: hi-res 3D laser scans of surface
  - started with national parks
  - now roughly half of Slovakia covered
- home page:
  - https://zbgis.skgeodesy.sk/mkzbgis/en/teren
- license: custom (seems similar to CC-BY)
- format: point cloud (LAS), and others









#### LIDAR data



## some history:

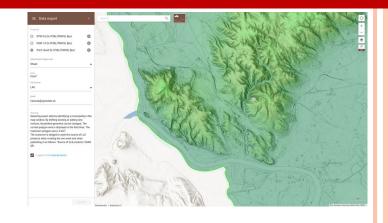
- published since 2019
  - https://rapidlasso.com/2019/12/11/another-european-country-opens-lidar-welcome-to-the-party-slovakia/
- ÚGKK SR
  - as a sort of pilot for (more) open licensing and publishing of data
  - (ortophoto as "prequel" year before)











#### good because:

- quite an improvement (compared to "prolonged battles" regarding Open Data from Cadaster)
- already used (considering that data is huge and quite hard to work with)
  - FreeMap.sk









utopia.sk



