



Efforts, challenges and progress made in Spatial Data Openness in Croatia

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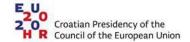
Joint PCC and EuroGeographics CLRKEN webinar "Importance of Land Administration Data in Strengthening Competitiveness and Economic Development"

State Geodetic Administration (SGA) - organization

- Head Office in Zagreb
- 20 Regional Cadastral Offices
- 92 Branch Offices
- Approx. 1200 employees
- Zagreb: City Office for Cadaster and Geodetic activities







Legal Framework

- Law on State Survey and Real Estate Cadaster (OG 112/18)
- Law on Performing Geodetic Activities (OG 25/18)
- Law on National Spatial Data Infrastructure Law (OG 56/13, 52/18, 50/20)



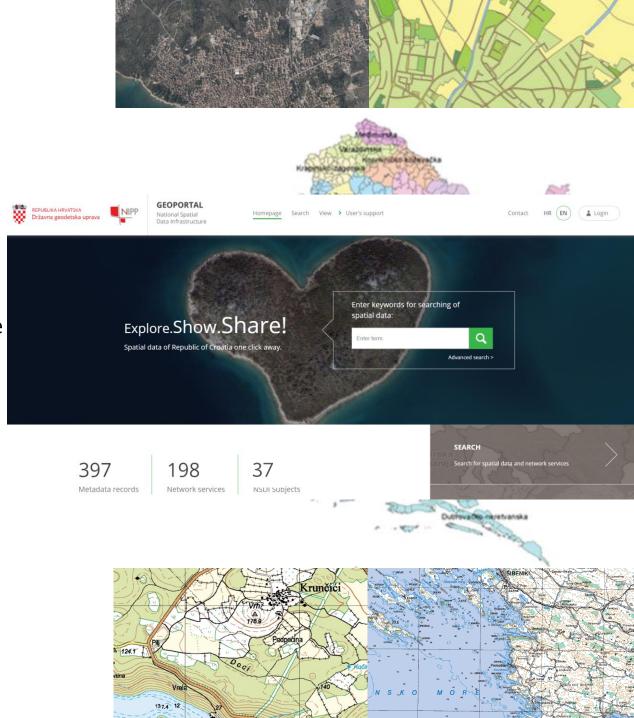




Scope of work

- Real-estate cadastre
- State survey:
 - Digital orthophoto
 - Basic Topographic Database
 - State cartography (1:5000, 1:25 000, 1:50 000, 1:100 000, 1:250 000)
 - Geodetic and cadastral affairs for the state border
 - Basic geodetic work
- Register of Spatial Units (administrative units and addresses)
- Register of Geographical Names
- Infrastructure cadastre
- Buildings register
- National Spatial Data Infrastructure

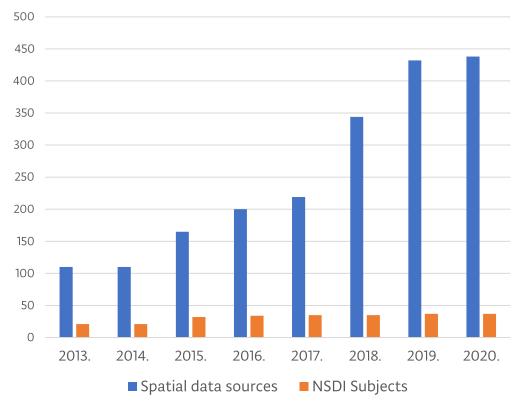




National Spatial Data Infrastructure

- 439 NSDI spatial data sources:
 - 231 dataset
 - 208 network services
- 37 NSDI Subjects
- 2 projects co-financed by the European Structural Funds:
 - Capacity building for the National Spatial Data Infrastructure establishment – ESF
 - Increasing availability of NSDI spatial data through e-services – ERDF

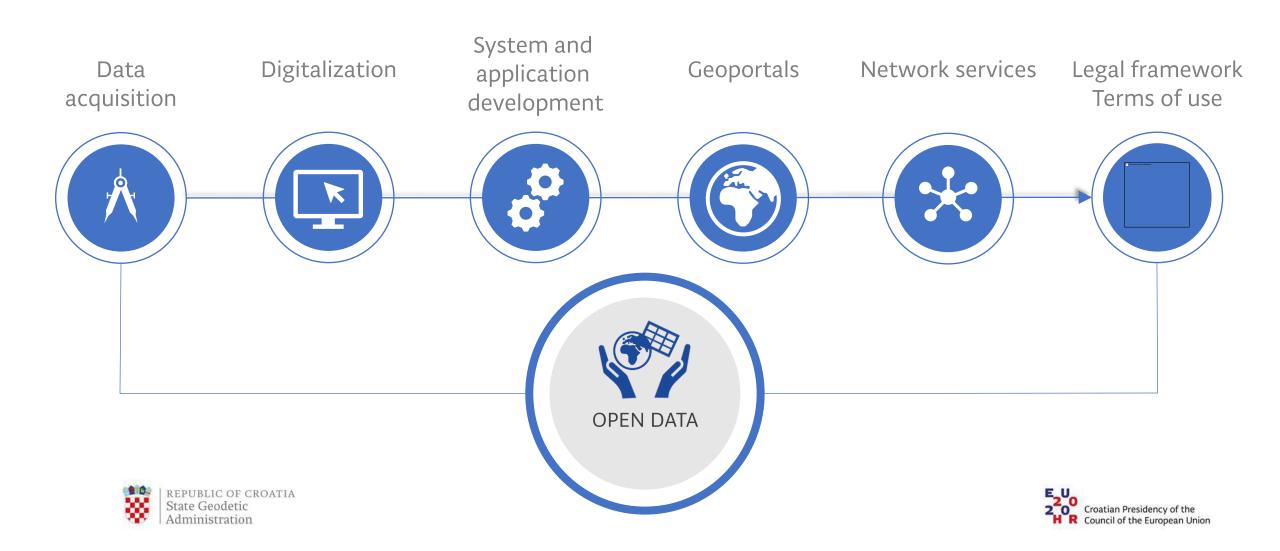








Journey from analogue data to open data



Effort made on spatial data accessibility and openness



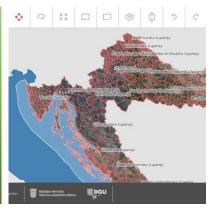
OSS

Subsystem of JIS Export of cadastral and land registry data Delivering of geodetic reports



SUR

Spatial Units Register 6 757 settlements 51 097 streets and squares 1 484 479 house no.



DAS

Digital archives system > 16 000 000 scanned documents

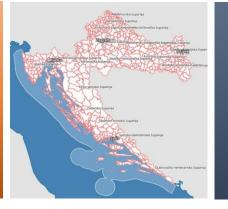
JIS

Joint land registry and cadaster information system > 14 000 000 cadastral parcels



DGRS

Creating and validating elaborates > 2 500 users > 34 000 produced digital geodetic reports



GEOPORTAL

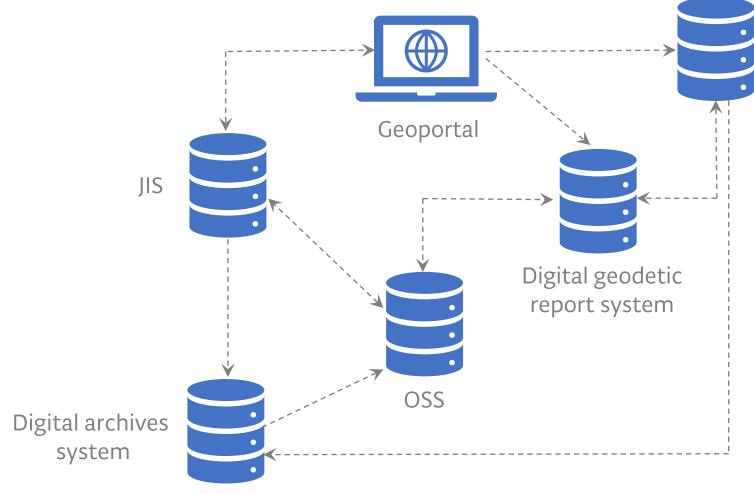
Network services DOF (2011, 2014/2016, 2017/2018) SUR Topographic maps







SGA system interoperability



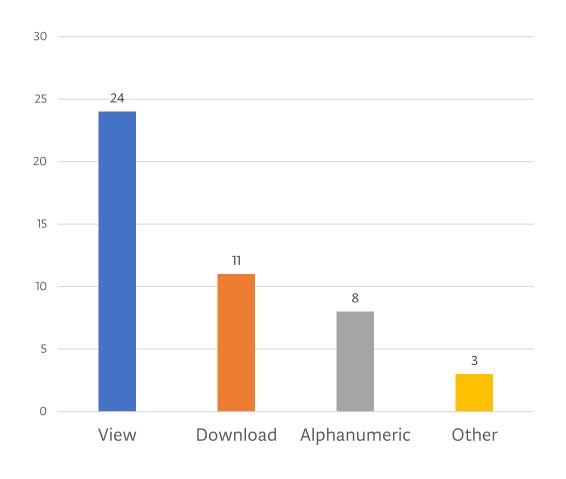
Spatial Units Register





Development of spatial data services

Spatial dataset	Type of service	Type of licence	Marginal costs
Digital cadastral plan	WMS, WFS	SGA licence	Yes
Digital orthophoto	WMS, WMTS	SGA licence	No
Croatian Base Map (1 : 5000)	WMS, WMTS	SGA licence	No
Topographic maps (1 : 25000, 1 : 100000, 1 : 200000)	WMS, WMTS	SGA licence	No
Digital elevation model	WMS, WCS	SGA licence	Yes
Register od Spatial Units	WMS, WFS	SGA licence	Yes
Register of Geographical Names	WMS, WFS	SGA licence	No

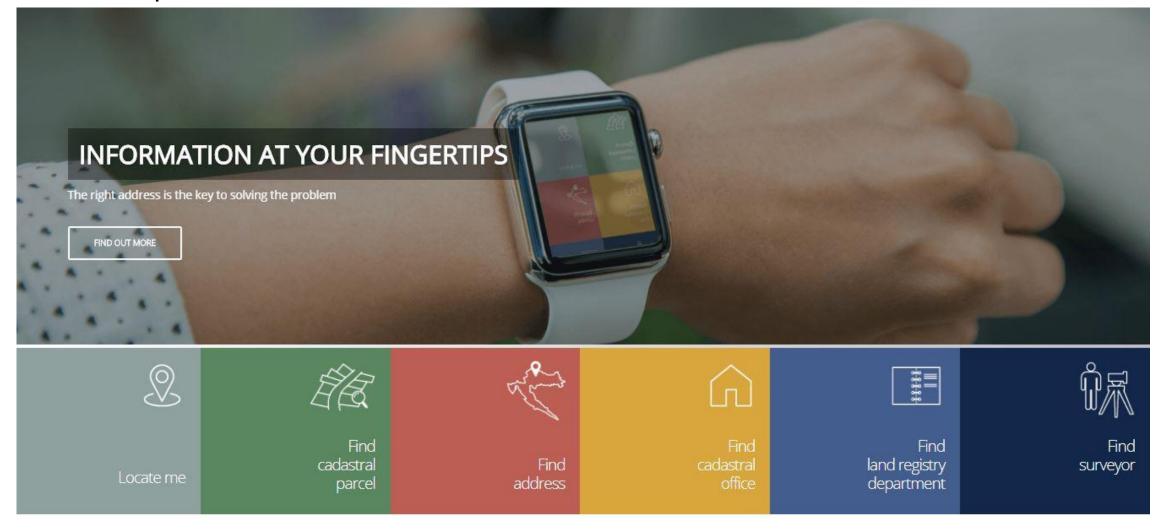




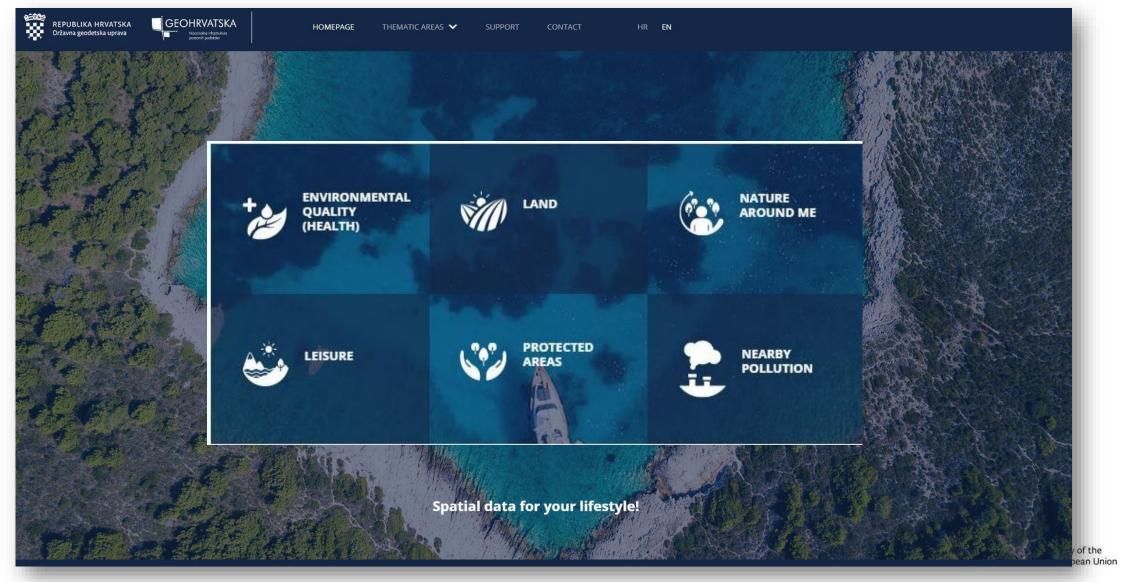


Cadastral data available to everyone

https://katastar.hr/en

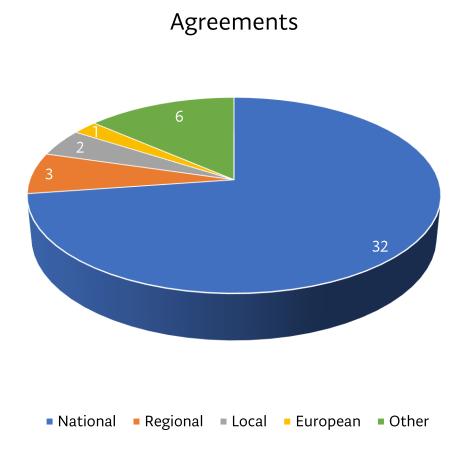


GeoHrvatska – spatial data of the Republic of Croatia



Reuse of SGA data

- Ordinance on determining marginal costs of using the data of State Survey and Real Estate Cadastre (OG 59/18)
 - Marginal costs
 - Terms of use
- 44 active agreements
- Data sharing with public administration bodies – free of charge







SGA general terms of use

Commercial and non-commercial use

No sharing, copy or redistribution of original

Adapt – remix, transform, and build upon the original data

Publication of original data only in raster format

Attribution





Data sharing and accessibility

Sharing on digital media (portable storage, USB, CD/DVD, etc.)

Spatial services (view, download) and alphanumeric services

Data accessible through SGA or NSDI Geoportals

Specialized applications (JIS, OSS, DGRS, Katastar.hr, GeoHrvatska)







Next steps...

- In 2021 **list of specific high value datasets** defined by Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information.
- By QII 2021 implementation of the Action Plan of the Government of the Republic of Croatia from 28. May 2020 which abolishes marginal costs for all datasets.
- Preparing amendments of the:
 - Law on State Survey and Real Estate Cadastre (OG 112/18)
 - Ordinance on determining marginal costs of using the data of State Survey and Real Estate Cadastre (OG 59/18)
- Defining new Terms of Use





Conclusions

- SGA has made a lot of effort in digitalizing and preparing its spatial data for sharing and reuse.
- Many databases, systems and applications have been developed to administer the data more efficiently.
- The number of network services and their availability has grown in the last few years as well as the number of its users.
- We expects that future opening of the data will bring many positive feedbacks, e.g., data quality improvement, increase of administration transparency as well as business and economic growth.





Thank you for the attention!



