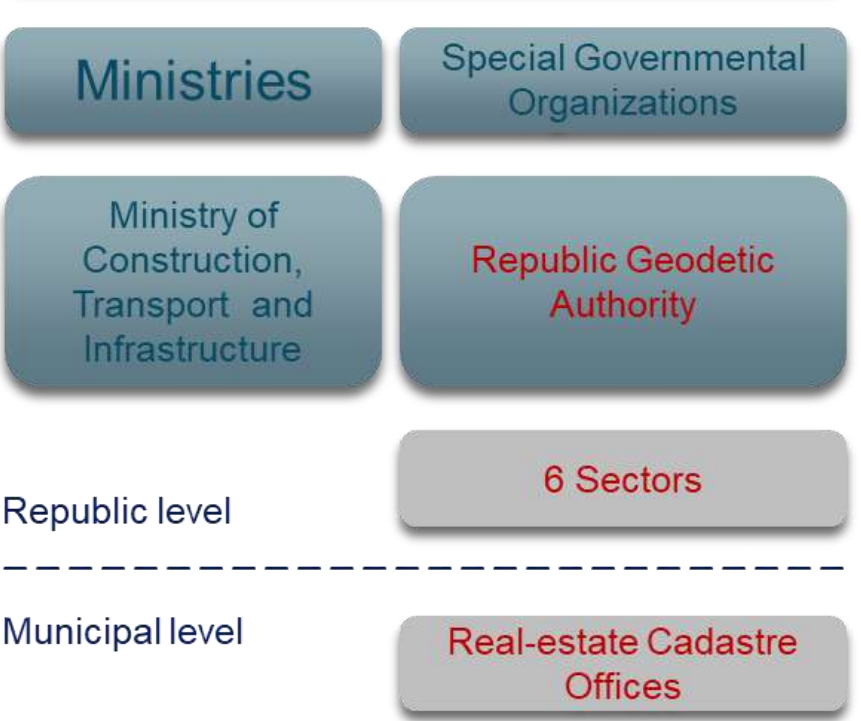


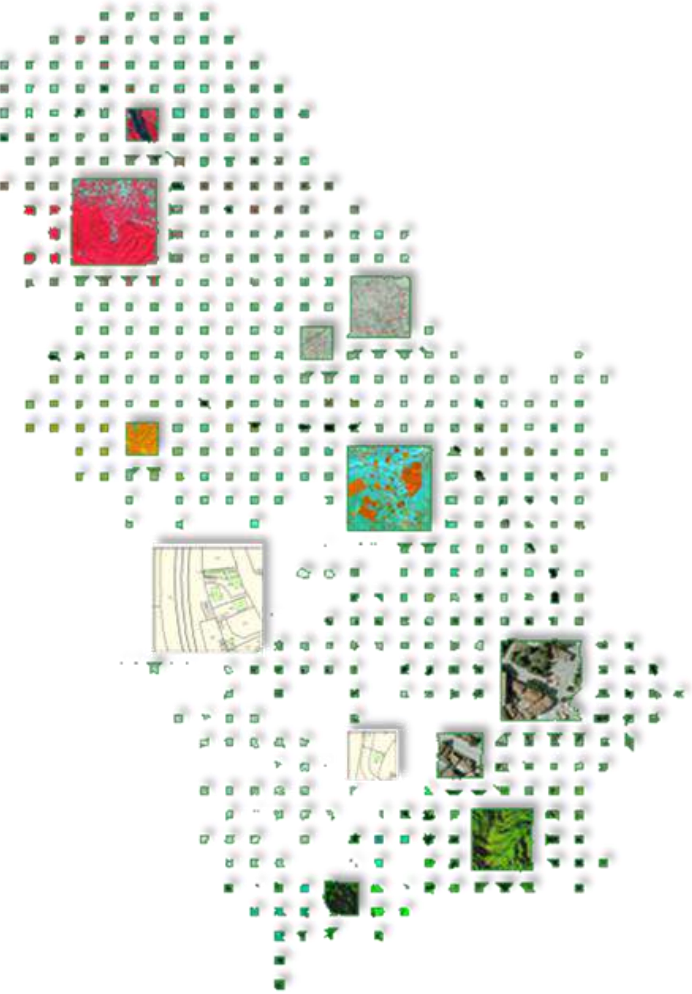
REPUBLIC GEODETIC AUTHORITY

GEOSPATIAL DATA IN THE SERVICE OF
DIGITAL SERBIA





- ✓ NSDI;
- ✓ Geodetic Reference Systems;
- ✓ State Survey;
- ✓ Real-estate cadastre;
- ✓ Infrastructure and underground assets cadastre;
- ✓ Utility cadastre;
- ✓ Registry of Administrative Units;
- ✓ Addresses Registry;
- ✓ Registry of Geographic Names;
- ✓ Topography
- ✓ Cartography;
- ✓ Real-estate Mass Valuation;
- ✓ Professional supervision and licensing of geodetic organizations;
- ✓ Geomagnetism and aeronomy;
- ✓





REPUBLIC GEODETIC AUTHORITY - THE HIGHEST QUALITY, SECURITY, AND INFORMATION MANAGEMENT STANDARDS

11000 digital processes per **SECOND**

>3000 employees



>400 law graduates

>800 graduate engineers

LEADER IN DIGITALIZATION

>3,8 Petabytes of data

>50% of employed are women



More than **4000** computers



More than **500** virtual and **70** physical servers



More than **330** institutions are digitally connected to **RGA**



More than **185** years of professional existence



170 At **170** locations in Serbia

AN INSTITUTION OF PUBLIC INTEREST, PART OF THE STATE'S CRITICAL INFRASTRUCTURE, AND A SYSTEM OF IMPORTANCE FOR THE SECURITY OF THE REPUBLIC OF SERBIA.

RGA Long Term Strategy from 2016



RGA is a special governmental institution that collects, connects and creates GEOSPATIAL DATA.



Allowing fast and easy access to the available geospatial data in a **TRANSPARENT, RELIABLE AND EFFICIENT MANNER** and delivering new services and possibilities for public and private sector.



All RGA data are free for state and local-self government institutions, up-to-date, available to citizens and professional users 24/7.



RGA provides **THE MOST ACCURATE** data in Serbia for other state institutions.

NSDI DIAGNOSTIC TOOL 2016



- Data exist on national level
- No clear definition of responsible institutions for some core data sets

Core Data I

(DOP, administrative units, addresses, cadastral parcels, elevation, geographical names...)

- Data exist on national level
- Outdatedness of some data sets

Core Data II

(stat. units, buildings, land cover, utilities...)

- Underway usage of NSDI for decision making in areas of planning and construction and environment protection
- No incentive in usage of NSDI in other areas
- Generally Public decision making is not based on usage of NSDI
- „Crowd-sourcing“ solutions still not introduced

Use of NSDI/Applications

- Developed capacities through development projects
- No clear strategy on CD within NSDI
- Insufficient engagement of educational sector
- Unsatisfactory capacities in public sector

Capacity Development

- RGA Strategy adopted
- New NSDI Strategy under development
- NSDI in line with e-Gov
- No clear „Open Data“ policy

Policy and Strategy

- Established NSDI Council, and TWGs
- Support and Access to data and services provided
- No estimation of realtion : NSDI – SDGs
- Uninsufficient participation of other institutions

Governance arrangements

- New Law on NSDI under adoption
- Laws on Information, Intellectual rights and Personal data Protection exist
- Inadequate legal basis for data sharing and exchange and data licencing
- No link between Laws on on data protection in case of geospatial information

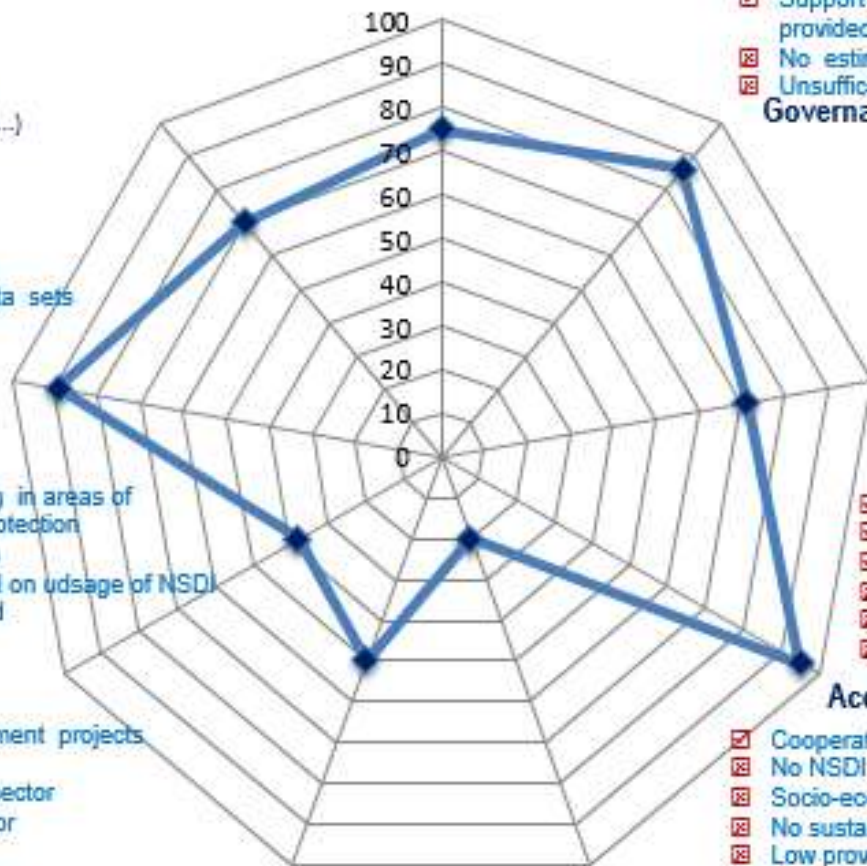
Legal framework

- Spatial reference system and ICT infrastrucuter established
- Standards on data , metadata and services exist
- National geoportal provided
- Technical performances of National geoportal low
- Transformation of data into unique coord.system to be done
- Low degree of spatial data access by internet technology

Accessibility and Technical Infrastructure

- Cooperation with other institutions improved through agreements
- No NSDI business model
- Socio-economic impact never estimated
- No sustainable system of spatial data pricing and licencing
- Low provision of data and services based on NSDI by private sector

Socio-Economic impact



COMPREHENSIVE REFORM OF GEOSPATIAL AND LAND ADMINISTRATION SYSTEM FROM 2016-2024



The **overall goal** - support the economic reform of the Government by effective provision of information in the sphere of real-estate and geospatial related activities for the **fast, easy and rightful decision-making at all strategic levels.**

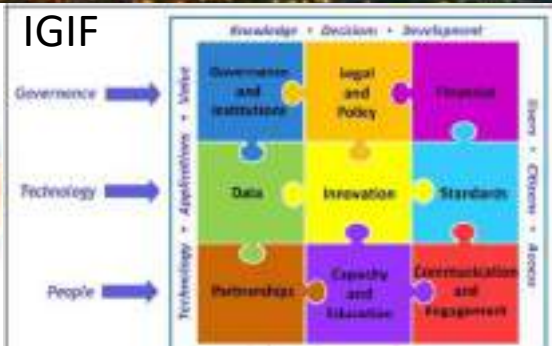
KEY PILLARS OF REFORMS



Participatory
Transparency
Equal access to information
Efficiency
Gender equality
Accountability

TODAY: RGA = PLATFORM (SmartSDI)

Republic geodetic authority provides platform for geospatial data driven decision making





LAND ADMINISTRATION SYSTEM

RGGA BEFORE THE REFORM



RGGA AFTER THE REFORM



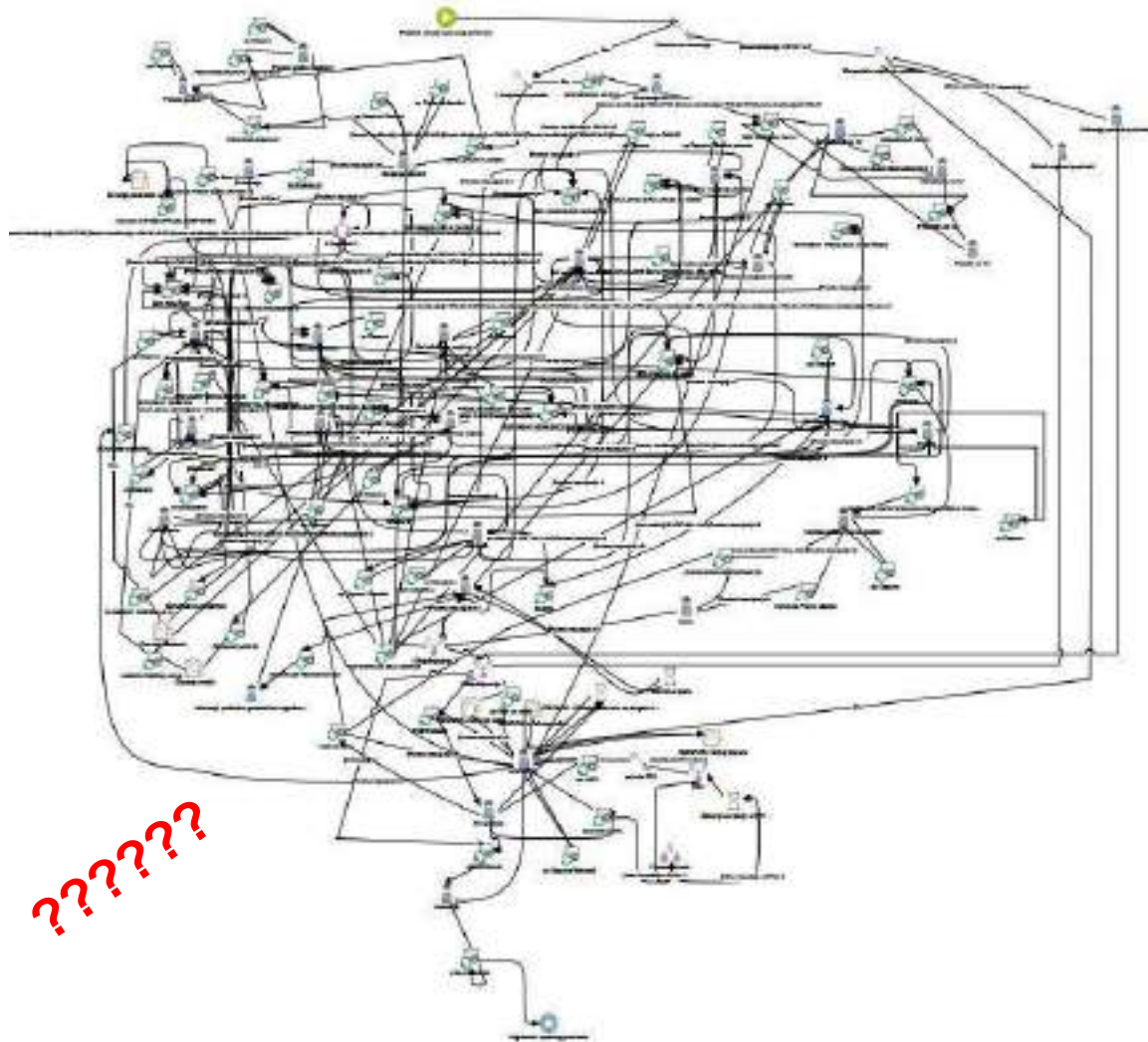
SIMPLIFIED BUSINESS PROCESSES

Changed policy, many laws, procedures and technologies
Since July 2018 all services are available **end-to-end digital**



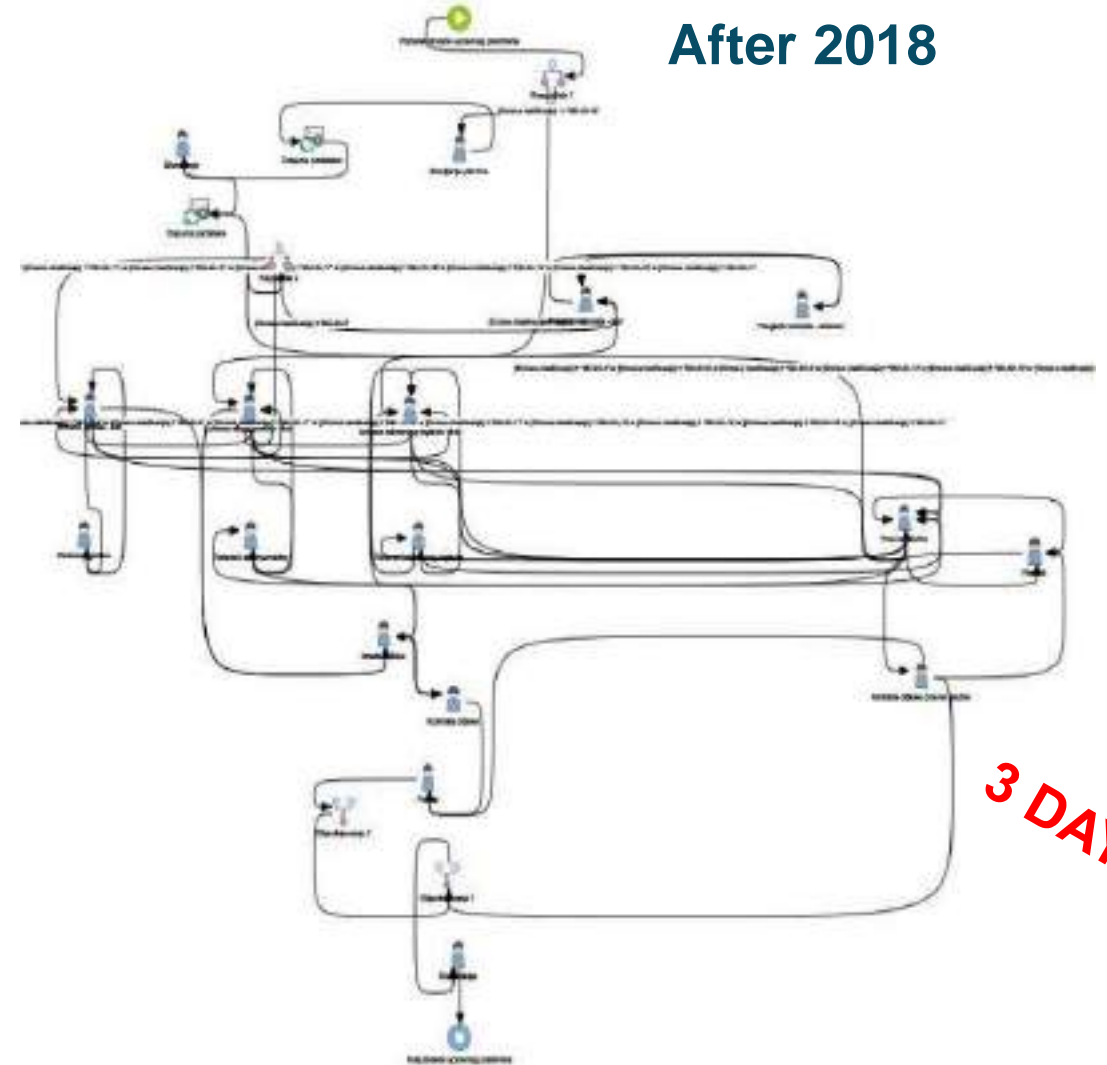
REPUBLIC GEODETIC AUTHORITY

Before 2018



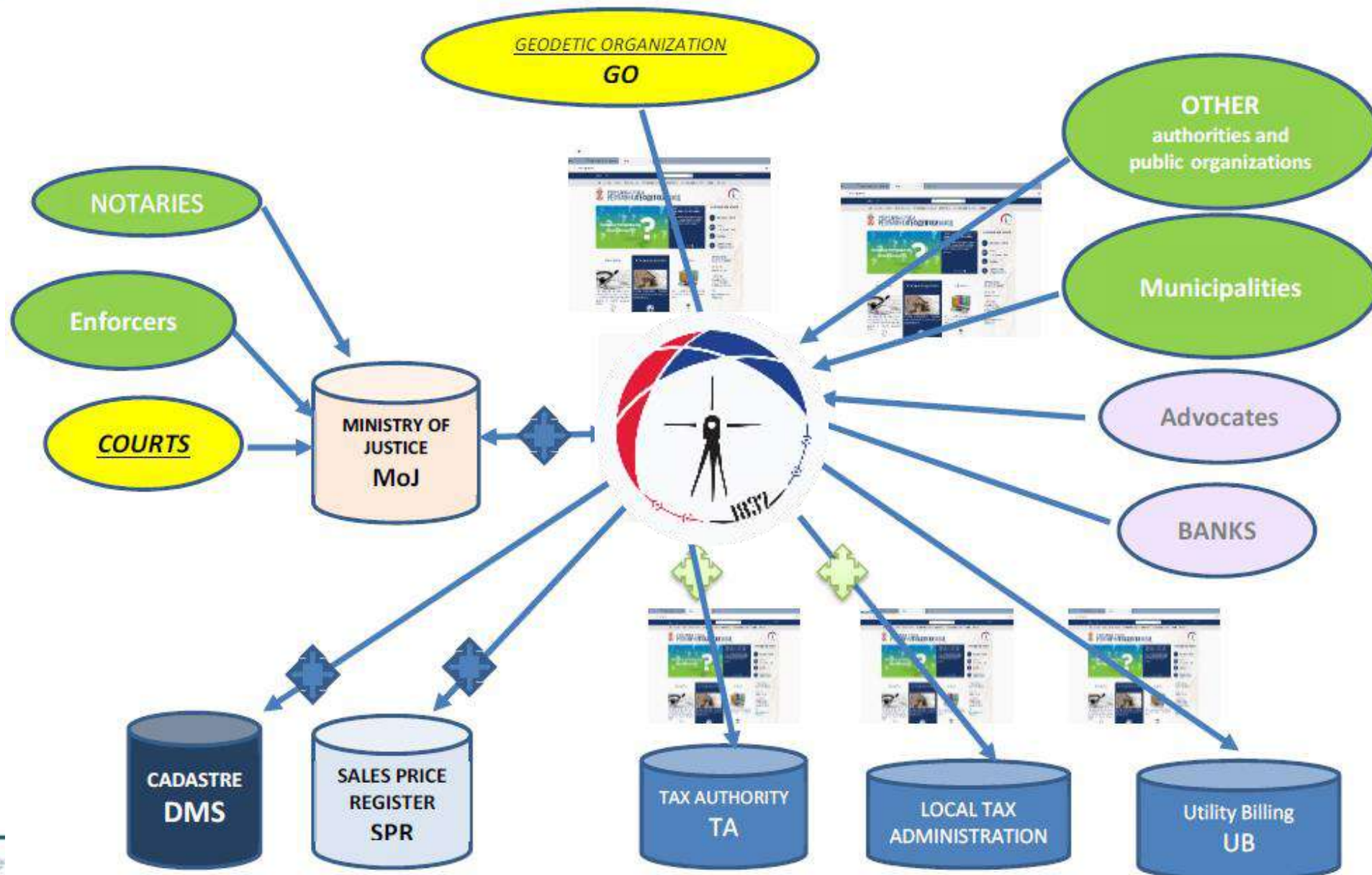
??????

After 2018



3 DAYS

eFrontDesk and eServices





RGA Portal

Home
eServices
News






EPAYMENT

Platform for eServices of the Republic Geodetic Authority

 RGA ID Approval of access to authorities and organizations → REQUEST	 Digital platform Visual representation of the data of the Republic Geodetic Authority	 eCadastrre Overview of real estate data	 eServices Electronic services of the portal of the Republic Geodetic Authority
--	--	--	---

ESERVICES

All categories

Professional users			EHO Professional users		Professional users			
AGROS  NEW RGA ID <p>Active Geodetic Reference Base of Serbia (AGROS) implies a permanent service of precise satellite positioning on the territory of the Republic of Serbia.</p> <p>→ SEE MORE</p>	Cadastral Alarm  <p>The cadastral alarm of the owner or someone who has a legal interest, in real time, informs about changes, in terms of submitting any request, as well as about any activity related to a certain immovable property.</p> <p>→ SEE MORE</p>	Digital archive  NEW <p>Review and access documents from the database of the Digital Archive of the Republic Geodetic Authority.</p> <p>→ SEE MORE</p>	eCadastrre  NEW RGA ID <p>The Central Database of Real Estate Cadastre in the Republic of Serbia which is established by taking over the data maintained by the Real Estate Cadastre Departments of the Republic Geodetic Authority.</p> <p>→ SEE MORE</p>	eCase status  <p>Check the status of the submitted request by entering the case number.</p> <p>→ SEE MORE</p>	eFrontDesk  <p>Obligees of official delivery of documents, i.e. public administration bodies and other bodies and organizations that, in the exercise of public authority, make decisions that are the basis for registration in the real estate cadastre, submit through the eFrontDesk executive decisions and other documents that represent a suitable legal basis for registration in the real estate cadastre.</p> <p>→ SEE MORE</p>	ePayment  NEW <p>Application for electronic payment of services provided by RGA and integrated with the RGE ID System through the ePayment System of eGovernment.</p> <p>→ SEE MORE</p>	eRemarks on the work of the cadastre  <p>File an objection to the work of the real estate cadastre service.</p> <p>→ SEE MORE</p>	eScheduling  <p>Make an appointment to submit the request at the real estate cadastre service courtlet.</p> <p>→ SEE MORE</p>

Over 330 data sets; more than 500 000 unique users; over 15 mil sessions /month!

Services



Metadata catalog

A national application enables searching, creating, maintaining and sharing metadata for spatial data sets, spatial data set series and spatial data services.



Collaborative platform

National portal enables the cooperation between relevant national and regional communities, support, trainings and informing.



Digital platform

The national web GIS application enables the display, search, analysis, transformation, creation, sharing and maintenance of geospatial data of Serbia.



Geosrbija mobi



Crowd SDI



OGC services



Rest api



Stakeholders



Training





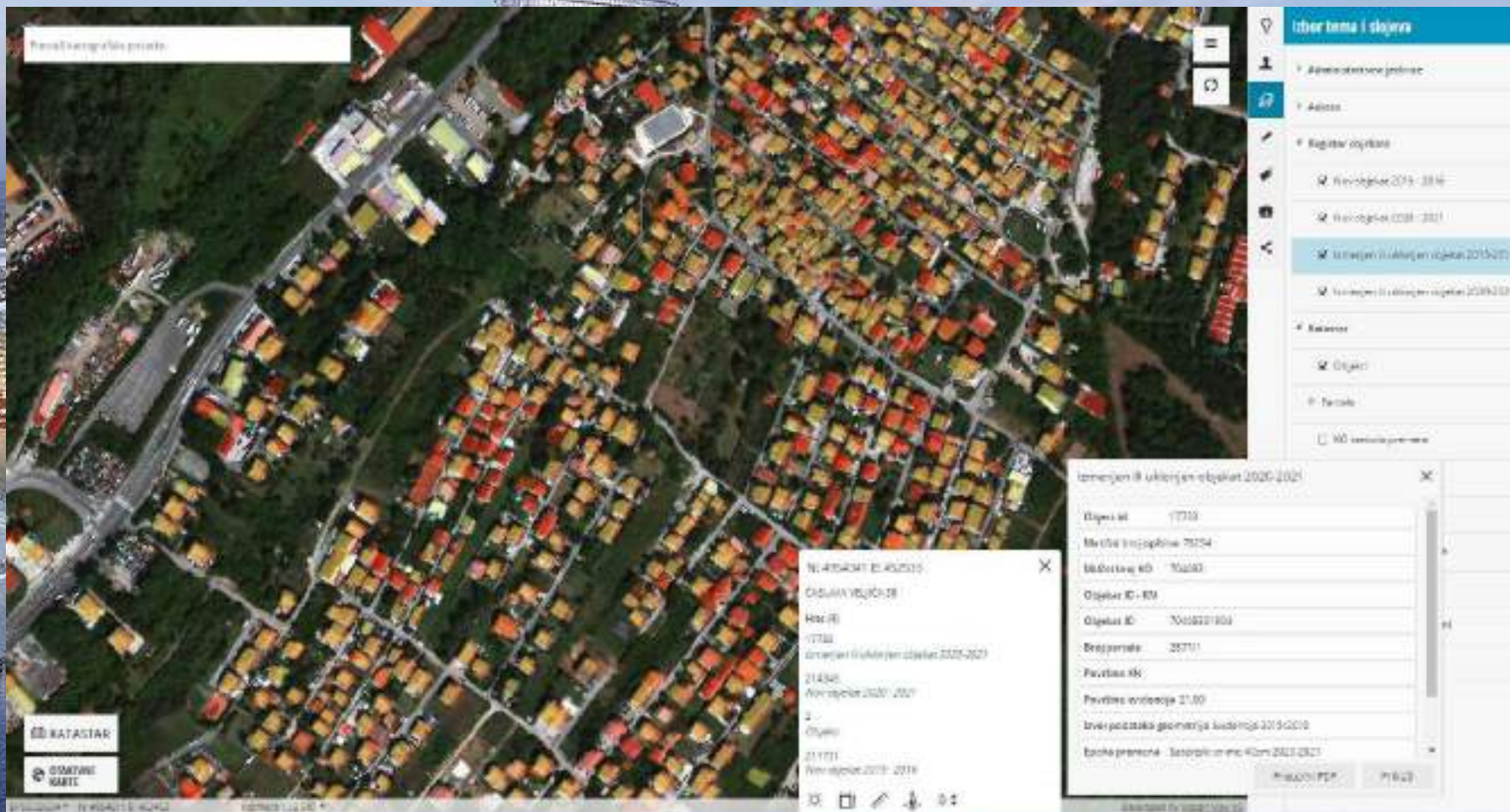
REAL ESTATE REGISTER DATA



REGISTER OF INFORMAL BUILDINGS - PUBLICLY AVAILABLE

NUMBER OF FORMAL AND REGISTERED OBJECTS - 4.911.436

NUMBER OF INFORMAL OBJECTS - 4 782 469



- CONSTRUCTION INDUSTRY
- BANKING AND FINANCIAL SECTOR
- INVESTMENT SECTOR
- INSURANCE
- TELECOMMUNICATION
- ENERGY
- SALES AND MARKETING
- TRANSPORT AND LOGISTICS
- URBAN PLANNING AND SPATIAL PLANNING
- CITIZENS

EXAMPLE OF BENEFITS FOR CITIZENS OF SERBIA

- ▶ **LEADERSHIP AND GOOD MANAGEMENT + COMMUNICATION AND ENGAGEMENT = SYSTEM SUCCESS**
- ▶ Digitization of real estate cadastre data, automation of processes and development of technological solutions made it possible to abolish the REAL ESTATE DEED
- ▶ Over 220 institutions have direct access to the CENTRAL BASE OF REAL ESTATE REGISTRATION through the Service Highway of state bodies - the most numerous and active local governments

SAVINGS FOR CITIZENS

> 25 000 000 hours compared to the old system, when they had to personally obtain documents at the counter

> 120,5 miliona euros how much they would pay for administrative fees before the digitization of the cadastre



REAL ESTATE MARKET AND VALUE OF PROPERTIES

REAL ESTATE PRICE REGISTRY

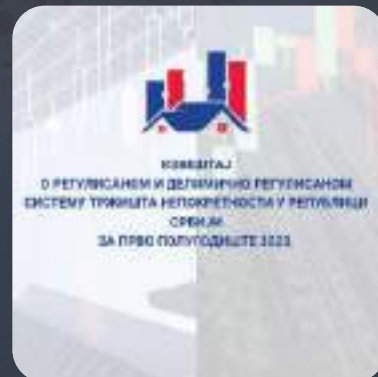


1,3 million transactions.

MONITORING AND REPORTING ON THE REAL ESTATE MARKET



- Quarterly
- Semi-annual
- Annual



RGA PRICE INDEX

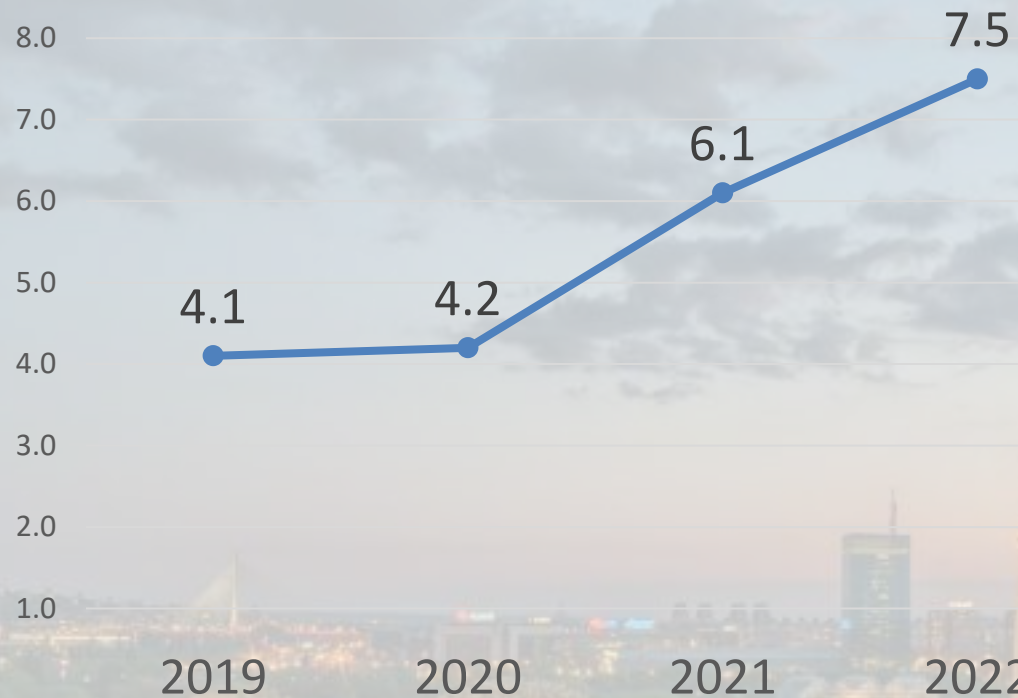




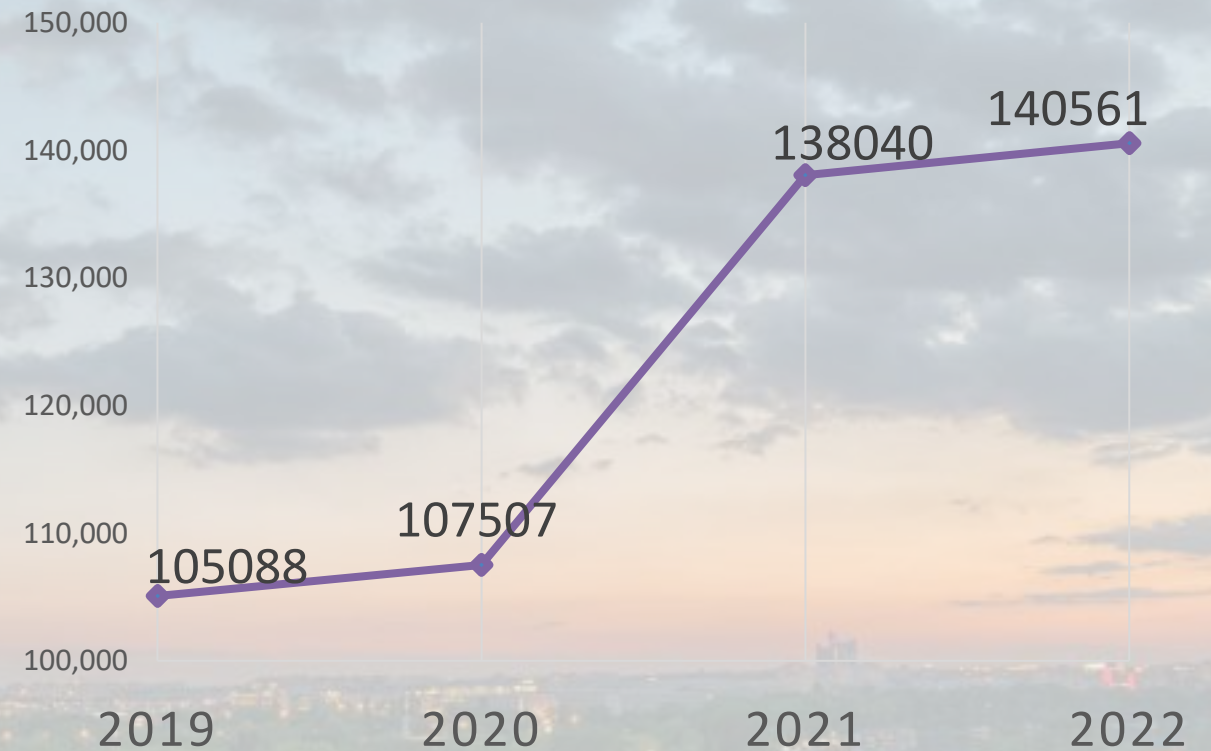
TRENDS IN THE REAL ESTATE MARKET



The value of the annual turnover of real estate in Serbia measured in billions of euros



Number of real estate transactions in Serbia



Partnership between RGA and IAAO for the establishment of the SEE IAAO



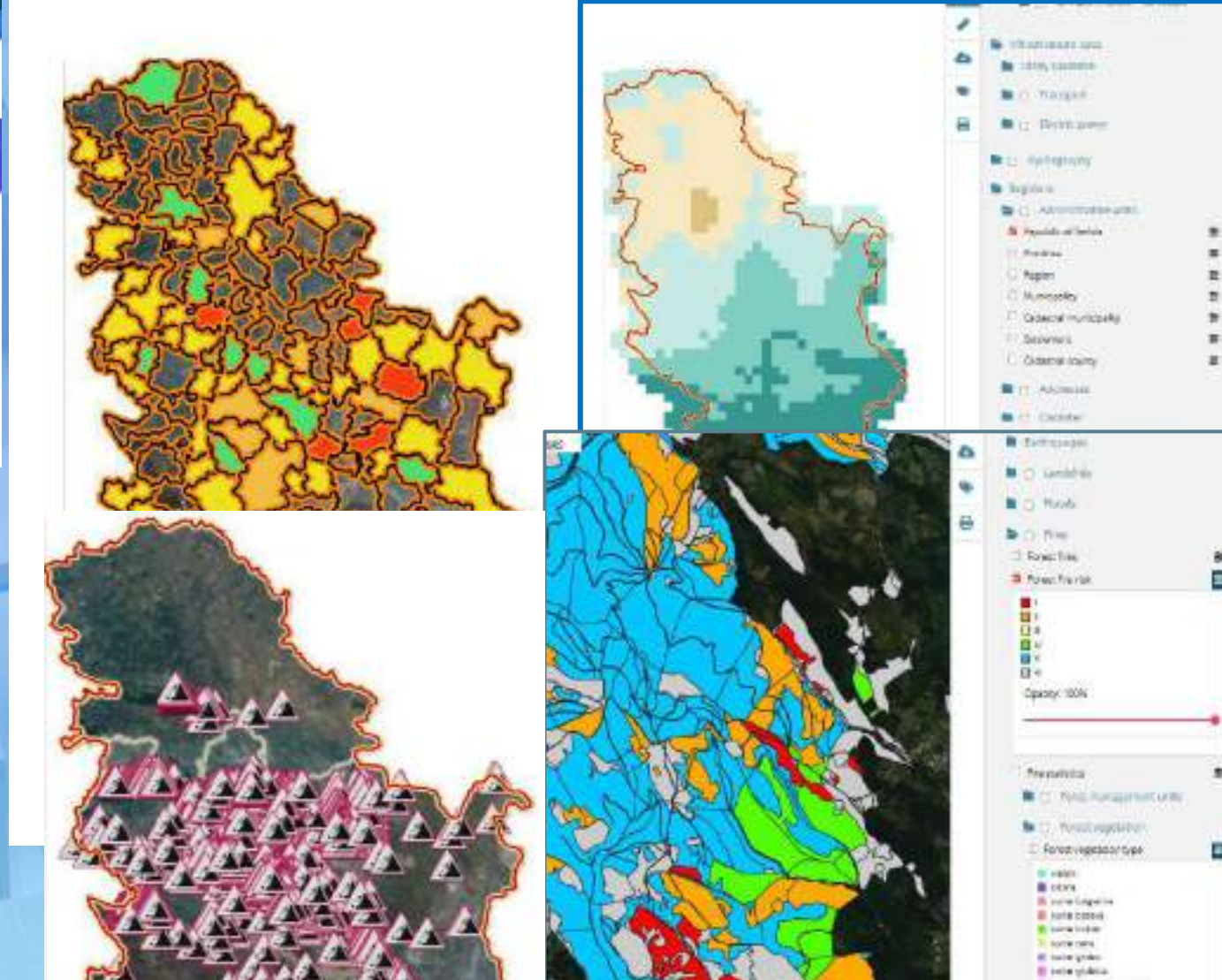
Republic Geodetic Authority and International Association of Assessing Officers (IAAO) are establishing collaboration with the objective of establishing the **South East Europe (SEE) IAAO** organizational unit to enhance professionalism, standardisation and best practises in Mass Valuation of real estates in the SEE region.

An aerial photograph of a coastal region, possibly a delta or estuary, with a blue semi-transparent overlay. The map features a network of red lines, likely representing roads or infrastructure, and green lines, possibly indicating waterways or natural features. The text is centered over the blue overlay.

DISASTER RISK REDUCTION AND RESILIANCE SYSTEM

Most popular subsystem of Geosrbija

GIS data in a single spot for professional and timely risk management.
Good example of integration with other registries and international cooperation.



Disaster Risk Register
Interactive, electronic INFORMATION SYSTEM
containing data of importance for risk
management.
Link to the application: <https://drr.geosrbija.rs>

DRR- DATA

The screenshot displays a web-based GIS application interface. The main map area shows a satellite view with red polygonal overlays representing hazard zones. A search bar at the top left contains the text "Трешави картографске податке". The browser address bar shows "http://a3.geosrbija.rs".

On the right side, there is a panel titled "Избор тема и слојева" (Layer Selection). It lists various layers, including "Својичке казарне" (Military barracks) and several "земљиште засићено водом" (water-saturated soil) layers. At the bottom of this panel, there are four checked layer options: "Parcelle (исток)", "Parcelle (зуп)", "Parcelle (Београд)", and "Parcelle (зона)".

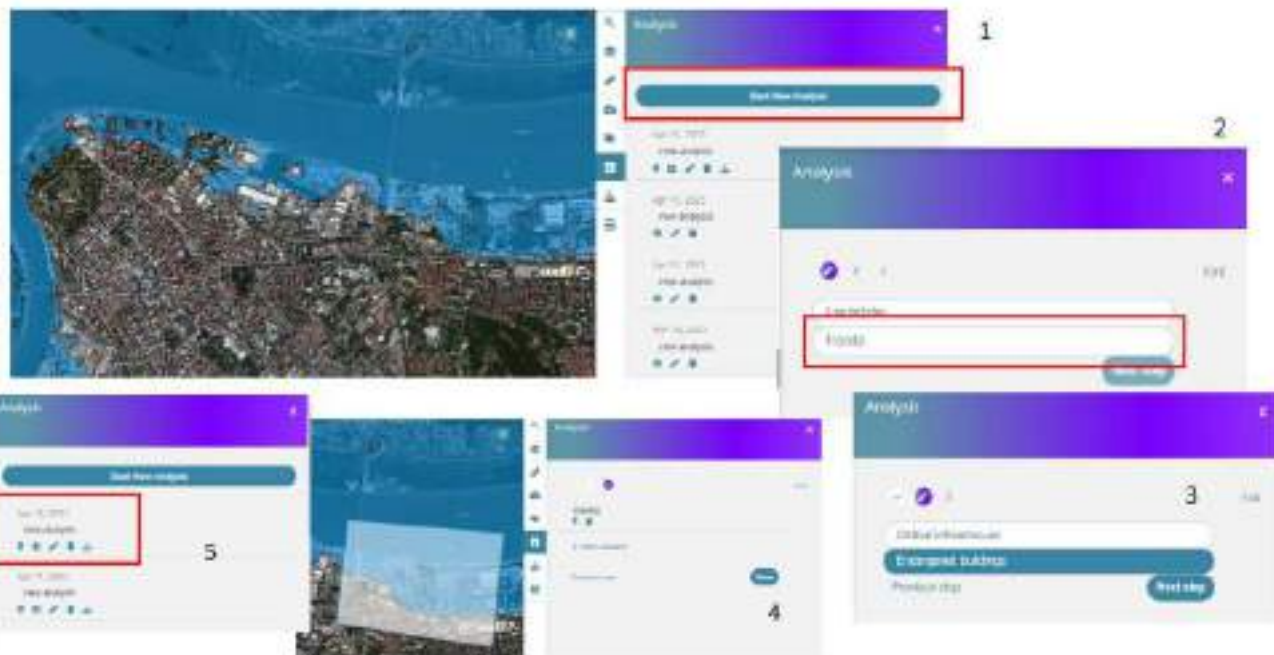
In the center, a data table is overlaid on the map. It has two main sections: "УПРАВЉАЊЕ КАЗАРНЕ" (Barracks Management) and "УПРАВЉАЊЕ ВОДНИМ ПОСРЕДСТВОМ" (Water Management). The table contains columns for "ИД", "ИМЕНА", "ОПШТИНА", "ПОВРШИНА", "СТАТУС", "ОПШТИНА", "ПОВРШИНА", "СТАТУС", "ОПШТИНА", "ПОВРШИНА", "СТАТУС".

Below the table, there is a satellite image of a wooded area with a path. Two red arrows point from the map area towards the data table and the satellite image.

At the bottom left, there are buttons for "КАТАСТАР" (Cadastral) and "ОСНОВНЕ КАРТЕ" (Basic Maps). The bottom status bar shows coordinates "E90252834", "N4913733E", "E7062", a scale of "Размера 1:10.000", and the text "Download by Google Earth Client".



DRR - ANALYSIS AND REPORTS



Име	Име датотеке	Тип	Величина
201_new_analysis	201_new_analysis.zip	Zip (Arhiva)	1.43
201_new_analysis	201_new_analysis.pdf	PDF (Dokument)	1.44
201_new_analysis	201_new_analysis.pdf	PDF (Dokument)	1.43
201_new_analysis	201_new_analysis.pdf	PDF (Dokument)	1.43
201_new_analysis	201_new_analysis.pdf	PDF (Dokument)	1.43
201_new_analysis	201_new_analysis.pdf	PDF (Dokument)	1.43
201_new_analysis	201_new_analysis.pdf	PDF (Dokument)	1.43
201_new_analysis	201_new_analysis.pdf	PDF (Dokument)	1.43
201_new_analysis	201_new_analysis.pdf	PDF (Dokument)	1.43



Изјављено изјављено изјављено

Изјављено	Изјављено	Изјављено
1	2	3

Изјављено изјављено

Изјављено	Изјављено	Изјављено	Изјављено
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

RGA Recognitions

The infographic consists of five horizontal bars of varying colors (gold, dark blue, light blue, grey, and dark blue) stacked vertically. Each bar starts with a globe icon and a number (01 to 05). To the right of each bar is a text box containing a recognition. In the background, there is a photograph of a group of people in formal attire standing on a stage. A man in a dark suit is holding a trophy at a podium with the 'NALED' logo. The background of the stage features a pattern of blue circles.

Rank	Recognition
01	SERBIAN LEADER in digital transformation of society. NALED 2019/UN WPLA 2023
02	www.rgz.gov.rs is on national level is THE MOST VISITED STATE WEBSITE
03	10th in Europe and 14th in World on Prindex list for tenure security!
04	RGA is an institution that SERBIAN CITIZENS TRUST THE MOST after army, church and police.
05	Gender equality in property rights – leader in Western Balkan



THANK YOU FOR YOUR ATENTION!



Info center

<https://www.rgz.gov.rs/>



REPUBLIC **GEODETIC** AUTHORITY

**TRANSPARENT
EFFICIENT AND RELIABLE
GEOSPATIAL AND REAL
ESTATE**

management system



Cadastre registration



Statistika



eScheduling, eComments
and Info center

eCadaster



Real estate
market

