

DRŽAVNI ZAVOD ZA STATISTIKU  
CROATIAN BUREAU OF STATISTICS

# GIS in Croatian Bureau of Statistics

Presented by Branko Crkvenčić



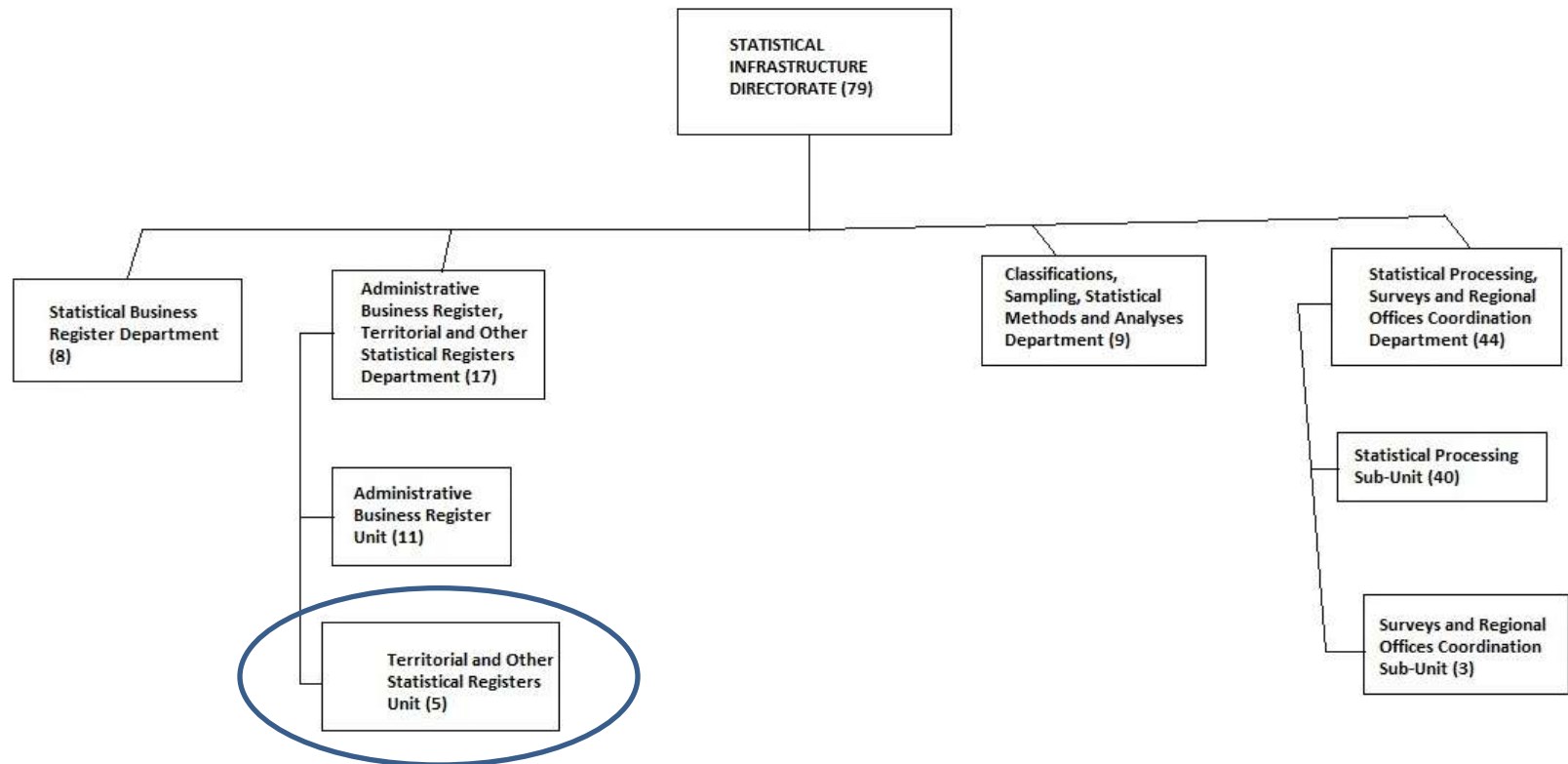
# Croatia – position



# Content

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- Starting page of the application and options
- Maps
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# Organisational Chart 2012



# Human Resources

Total staff in 2009	425
Total staff with integrated regional offices in 2010	603



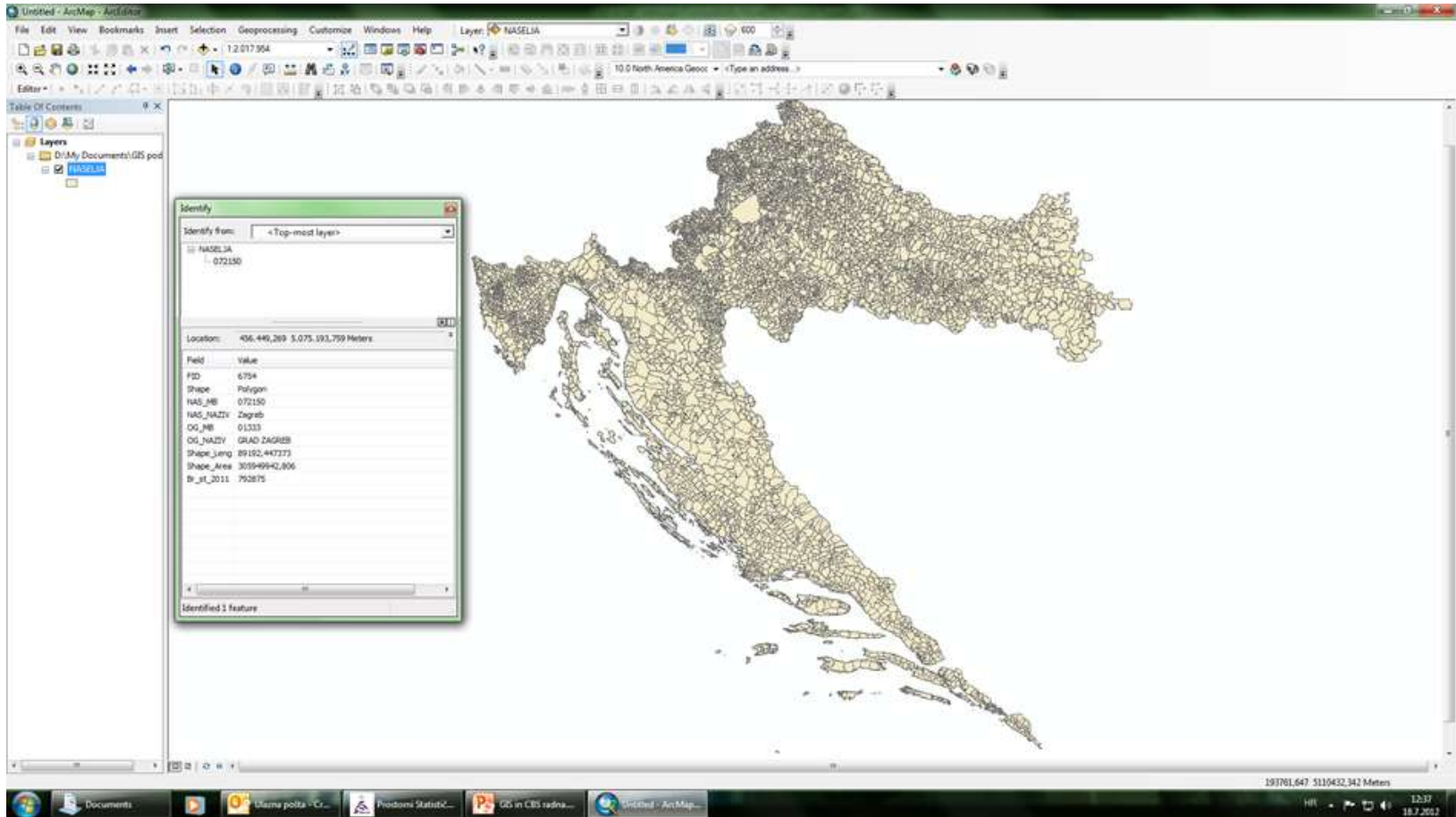
# GIS in production and preparation of statistics

- CBS produces and prepares following data that are not officially published:
- Administrative and territorial constitution
- Population
- Employment
- Gross domestic product
- Agriculture
- Industry
- Energy
- Transport
- Tourism
- Environment
- Education
- Health care
- Administration of justice



# GIS in production and preparation of statistics

On this map we can see total population for city of Zagreb which is 792 875 inhabitants



## Software in use

- Croatian Bureau of Statistics currently uses ArcMap 10 version which we bought in november 2010 from GISDATA company.
- Before that we used ArcMap 9.2 version.
- Six persons have passed GIS education in GISDATA company Zagreb.
- They passed Arc Gis Desktop II: tools and features and Arc Gis Desktop III: GIS processing and analysis packages.





# Geostatistical units

- Croatian Bureau of Statistics uses geostatistical units from state level down to house number level.
- This units are obtained from State Geodetic Administration who is in charge for this units based on Law on state survey and real estate cadastre ( Official Gazette no. 16/2007, 152/2008 and 124/2010 ).
- State level
- County level
- Municipality level
- Settlement level
- Statistical area
- Enumeration area
- House numbers

# Statistical confidentiality

- Law on Official statistics is published in the Official Gazette no. 103/3, 75/09., 59/12.
- In accordance with the Statistical code of practice in our Law confidentiality is defined as: Statistical confidentiality implies the protection of confidential information relating to individual statistical unit, which are collected for statistical purposes directly or indirectly from administrative or other sources and includes a ban on the use of collected information for non-statistical purposes and also their unlawful disclosure.
- Rules regarding confidentiality will be strictly used for display of official statistics in GIS technology.

# Application spatial statistical register

- It consists of alpha numerical and graphical part.
- Data ( shapefiles ) from State Geodetic Administration.
- Map consists of ortho-photo maps that are put together.
- Each map is in measure 1:5000.
- Application is not finished yet, especially the part called history of changes on spatial units.
- Application should show history changes for all spatial units except house numbers.



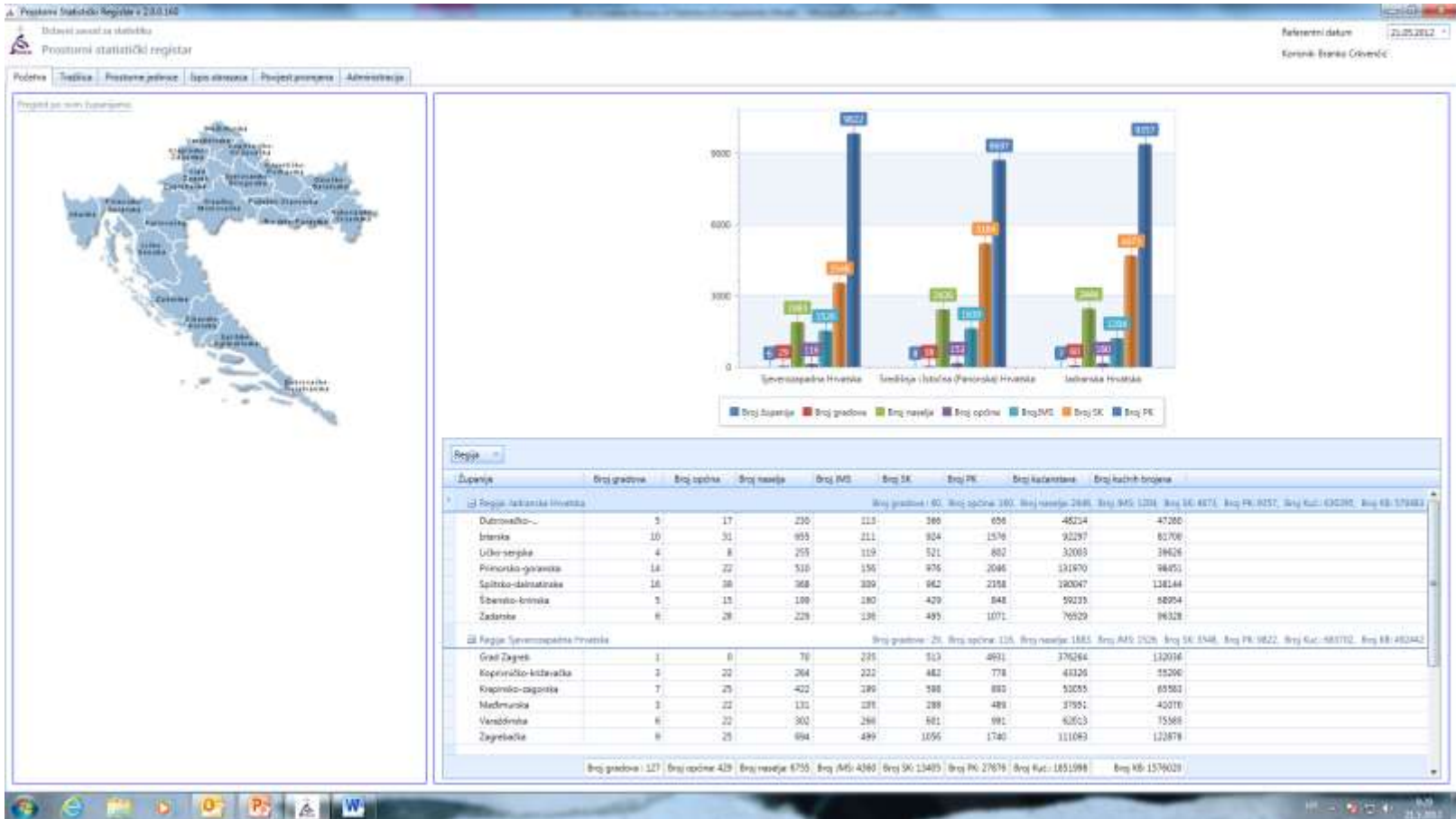
# Application spatial statistical register

## Main goals of the application

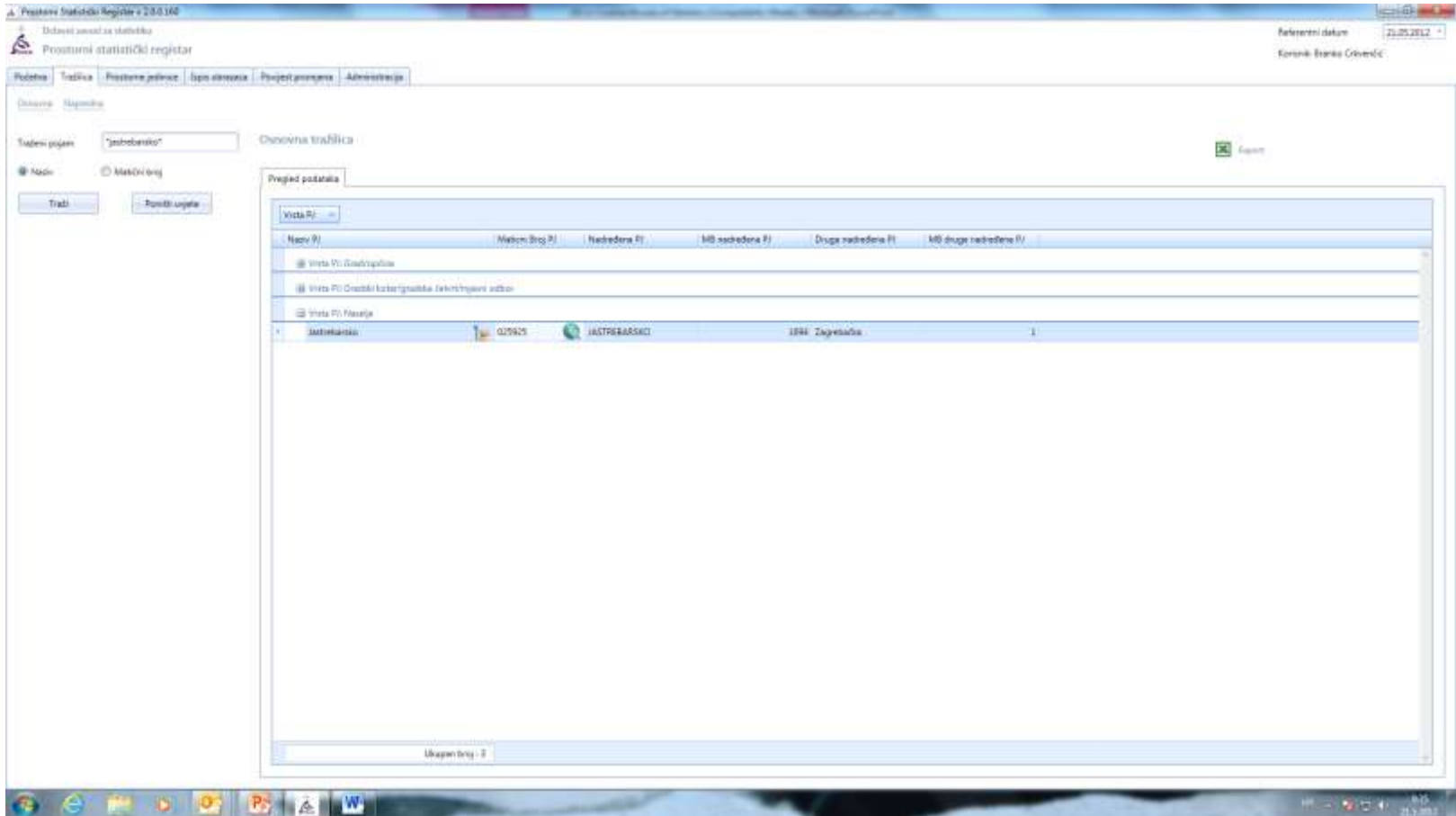
- Compliance with the functionality of the new register with methodology of spatial units registry as described in the ordinance on the registers of spatial units.
- Periodic automated upload of data from the application of the central registry of spatial units of the State Geodetic Administration.
- Develop a data model and interface of the new registry that will allow tracking the history of changes in the way that user's actions complete set of data in the registry can display the current status on the date in the past.



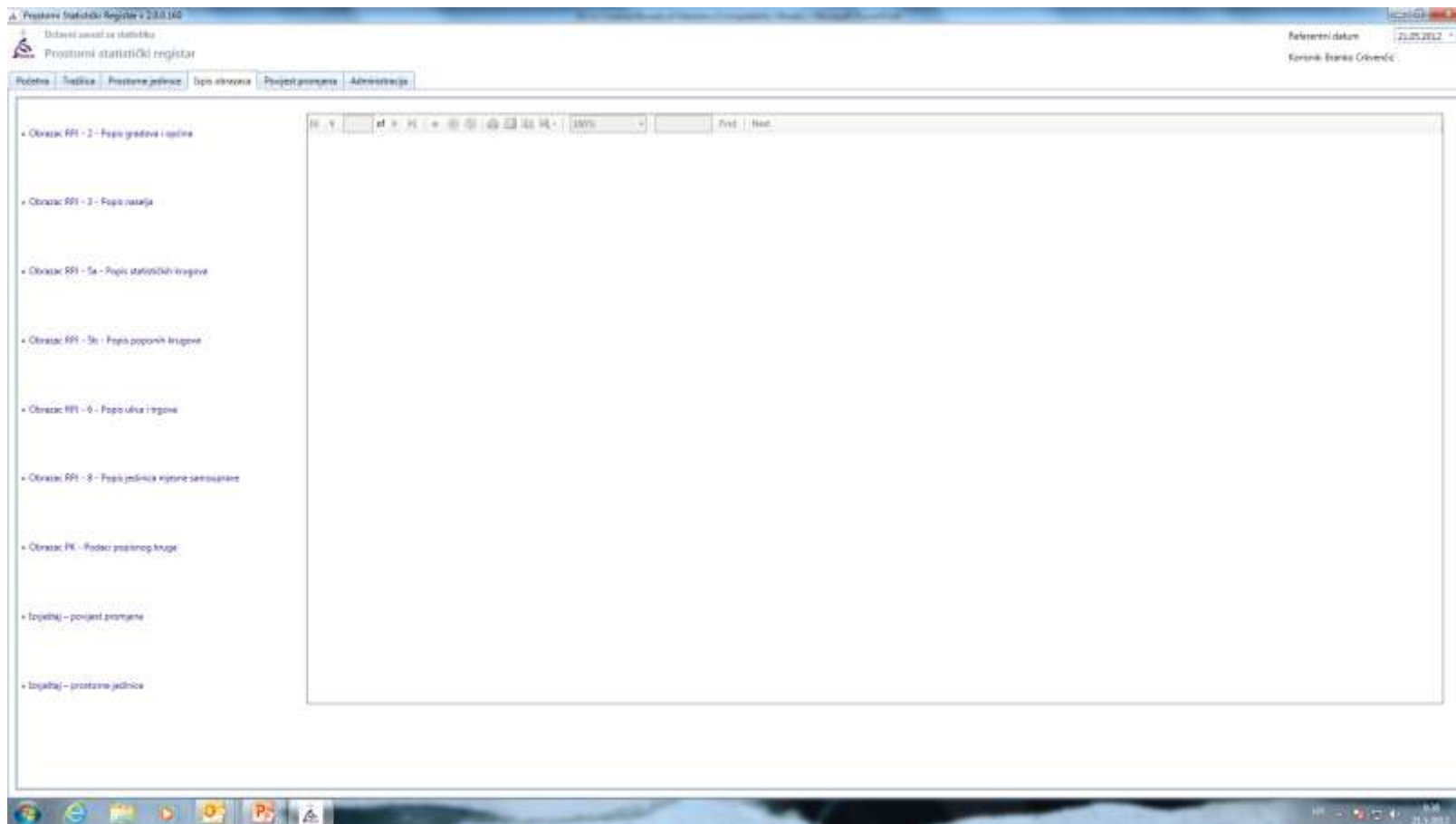
The starting page of the application shows sums for all relevant territorial units



Graphical part of the application has a search engine for all territorial units. It is divided for basic and advanced search



Via application we can print forms for each territorial unit. That was very useful for Census work



# The example of a form:karlovacka county-list of cities and municipalities

The screenshot shows a web application interface for the Croatian Statistical Register. The main content area displays the following information:

Datum popisa: 31.05.2012    Županja: [Za - Karlovačka]    [View Report](#)  
 Status prostorne jedinice: Općina: Grad

REPUBLIKA HRVATSKA    Obrazac RPI - 2  
 DRŽAVNI ZAVOD ZA STATISTIKU    Datum: 31.05.2012  
 PROSTORNI STATISTIČKI REGISTAR    (stanje podataka)

**POPIS GRADOVA I OPĆINA**

Ime županije: Karlovačka

Matični broj	Ime	Spolnost	Status
00990	DRUGA RESA		Grad
01791	KARLOVAC		Grad
02976	OGULIN		Grad
03158	OGALJ		Grad
04006	SLUNJ		Grad
08078	BAEILOVAC		Općina
00102	BOSILJEVO		Općina
00491	ČETINGRAD		Općina
00906	DRAGANIĆ		Općina
01201	GENERALSKI STOL		Općina

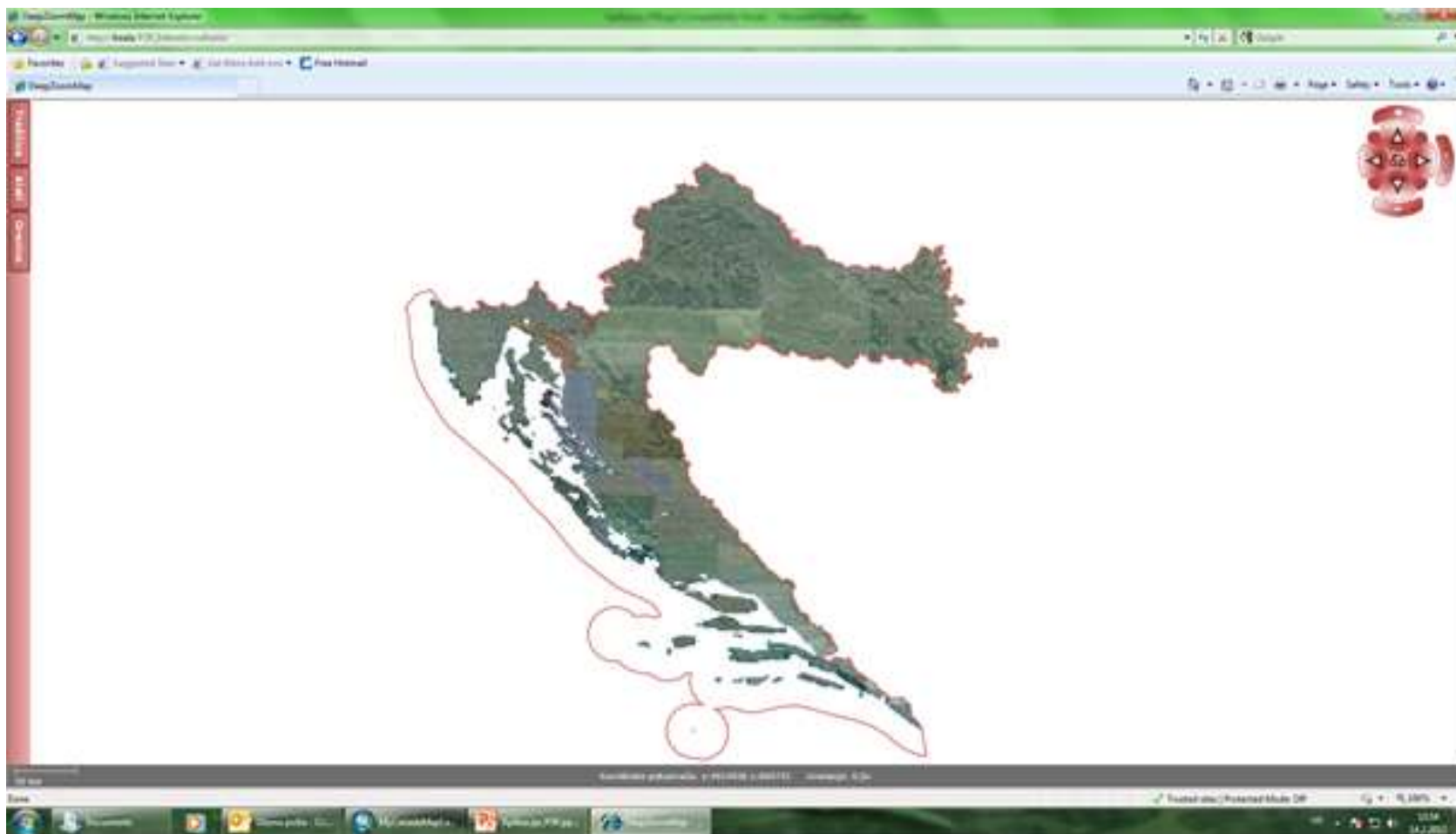


Next few slides show graphical part of the application

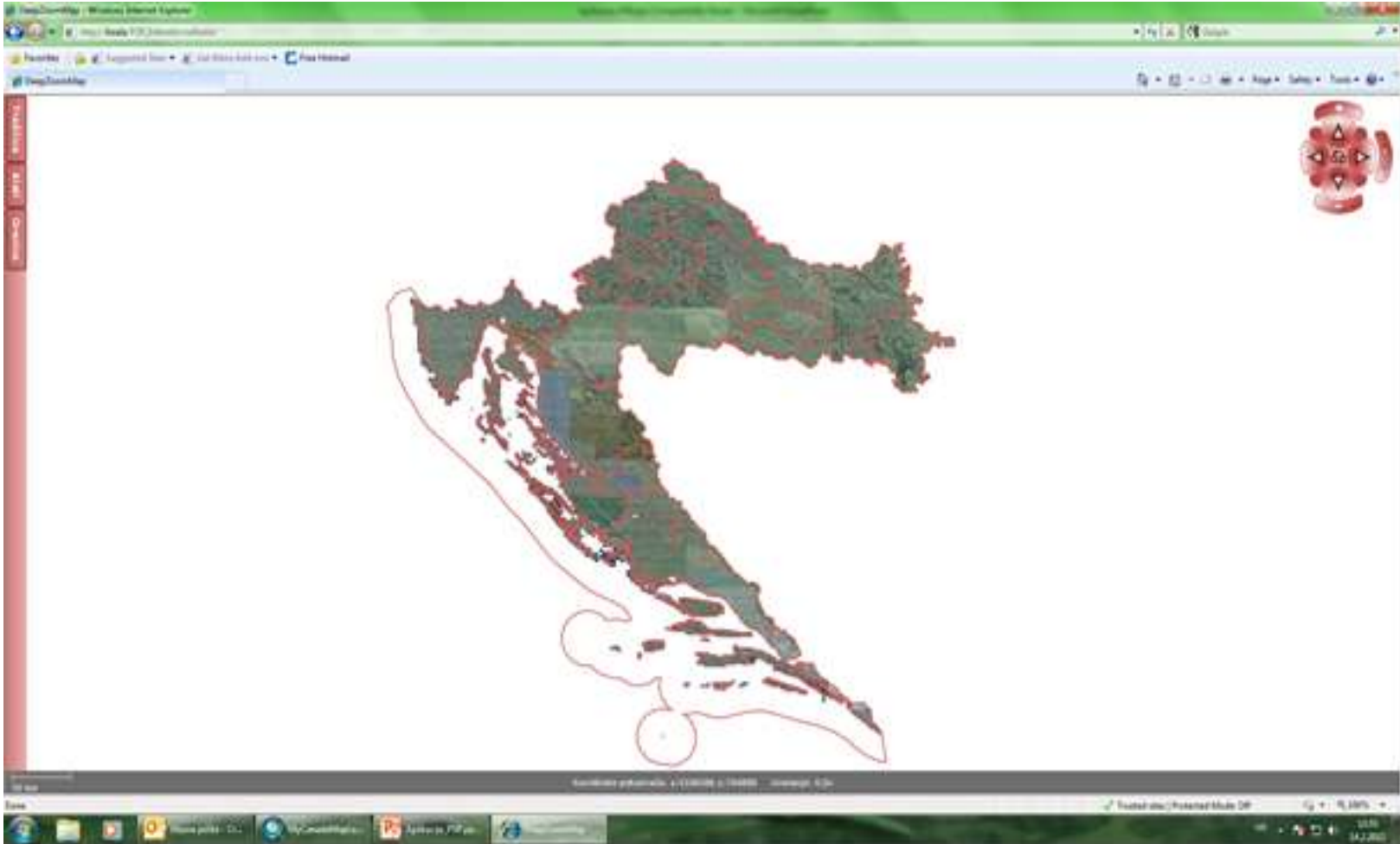
- State level
- County level
- Municipality level
- Settlement level
- Statistical circle level
- Census circle level
- House numbers level



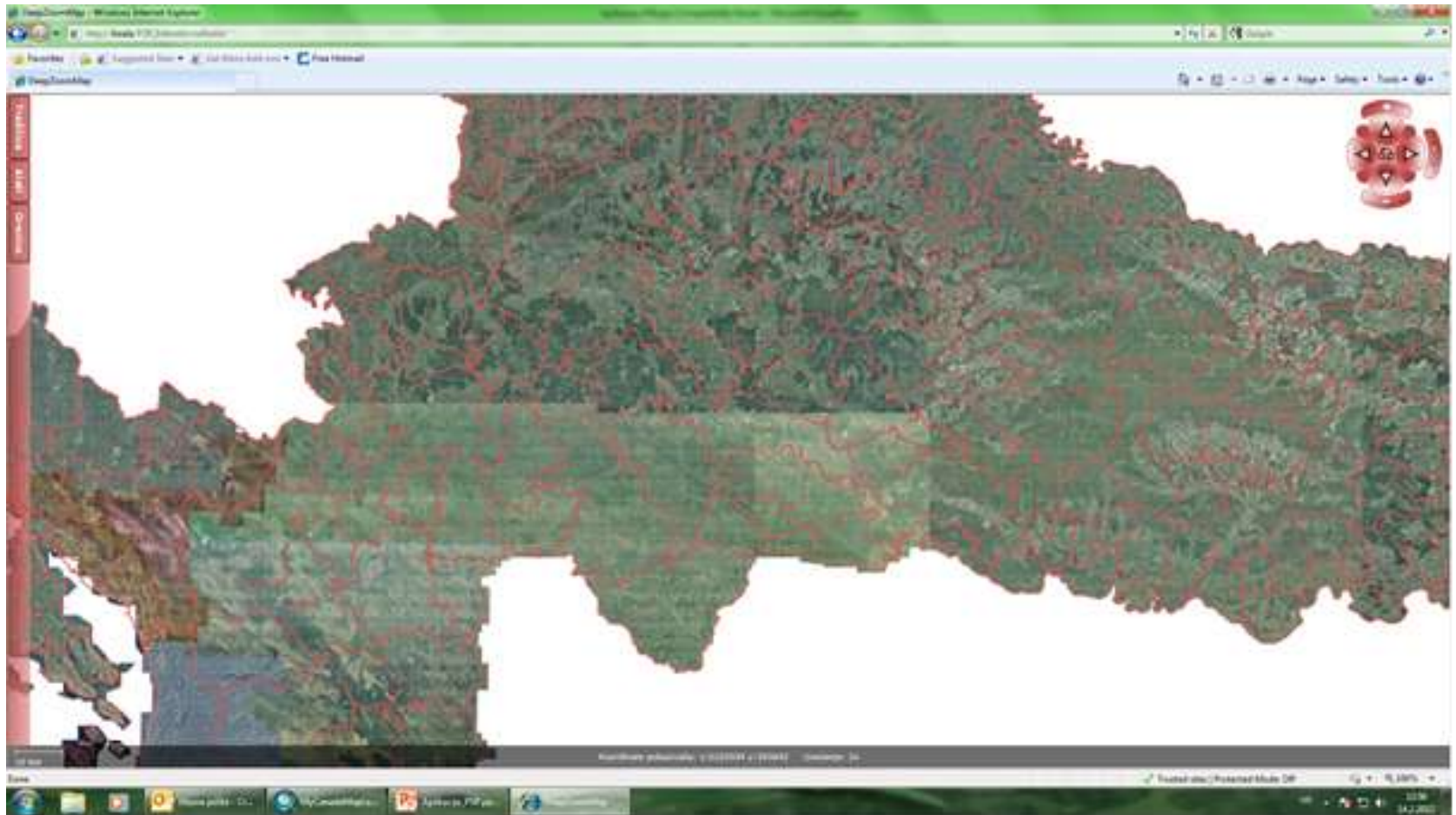
# State level



# County level - 21

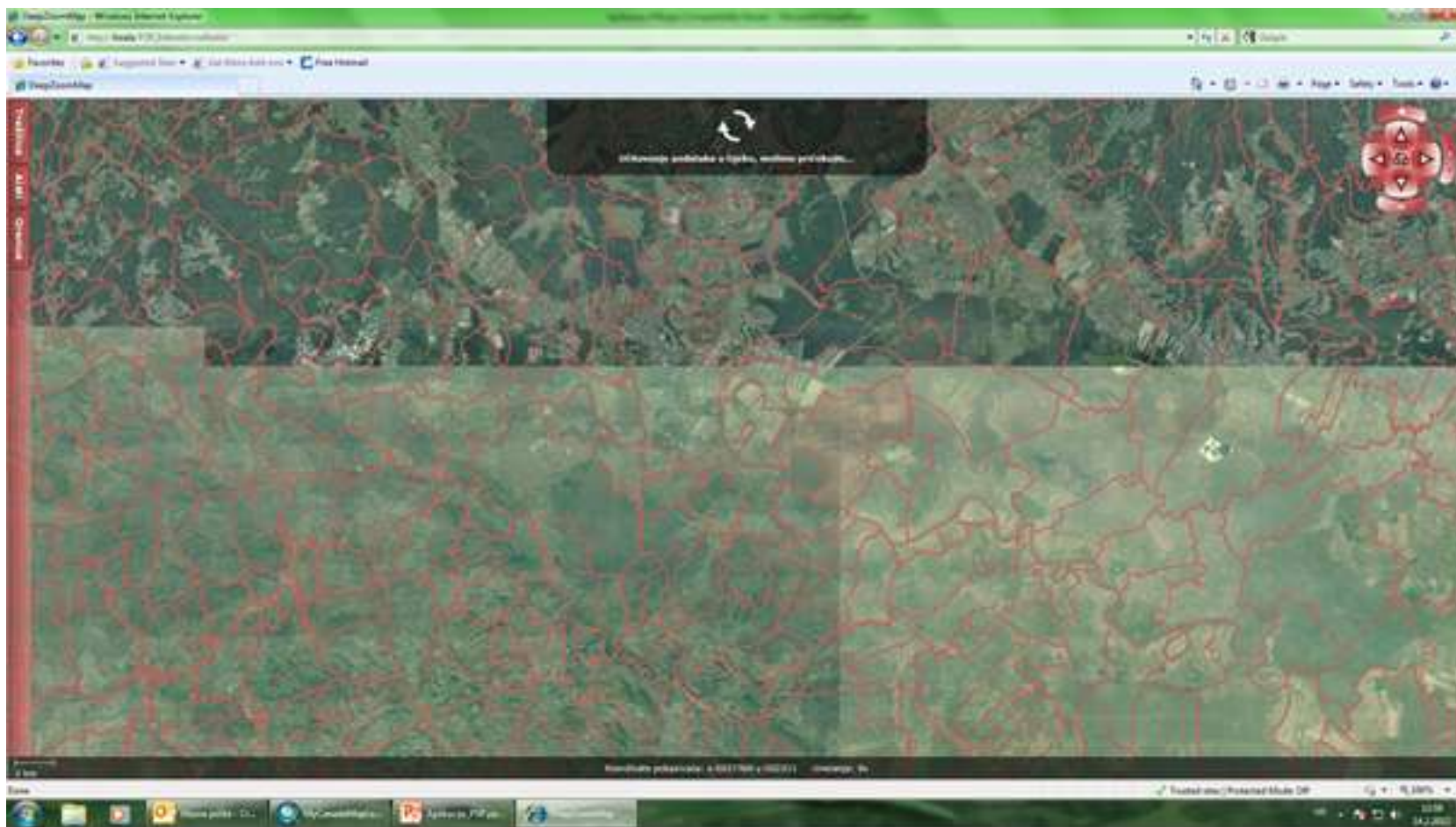


# Municipality level - 429

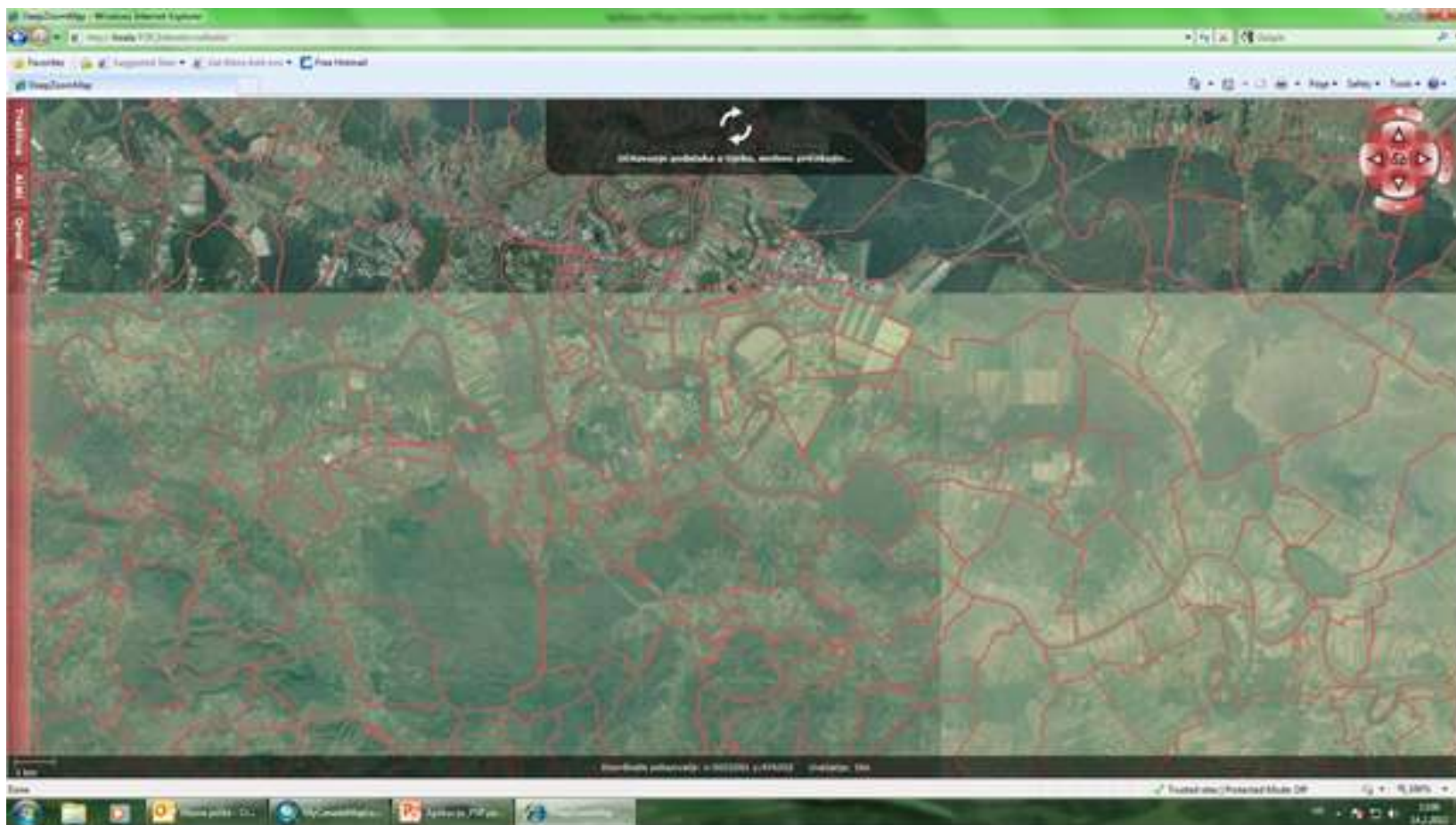




# Settlement level - 6755

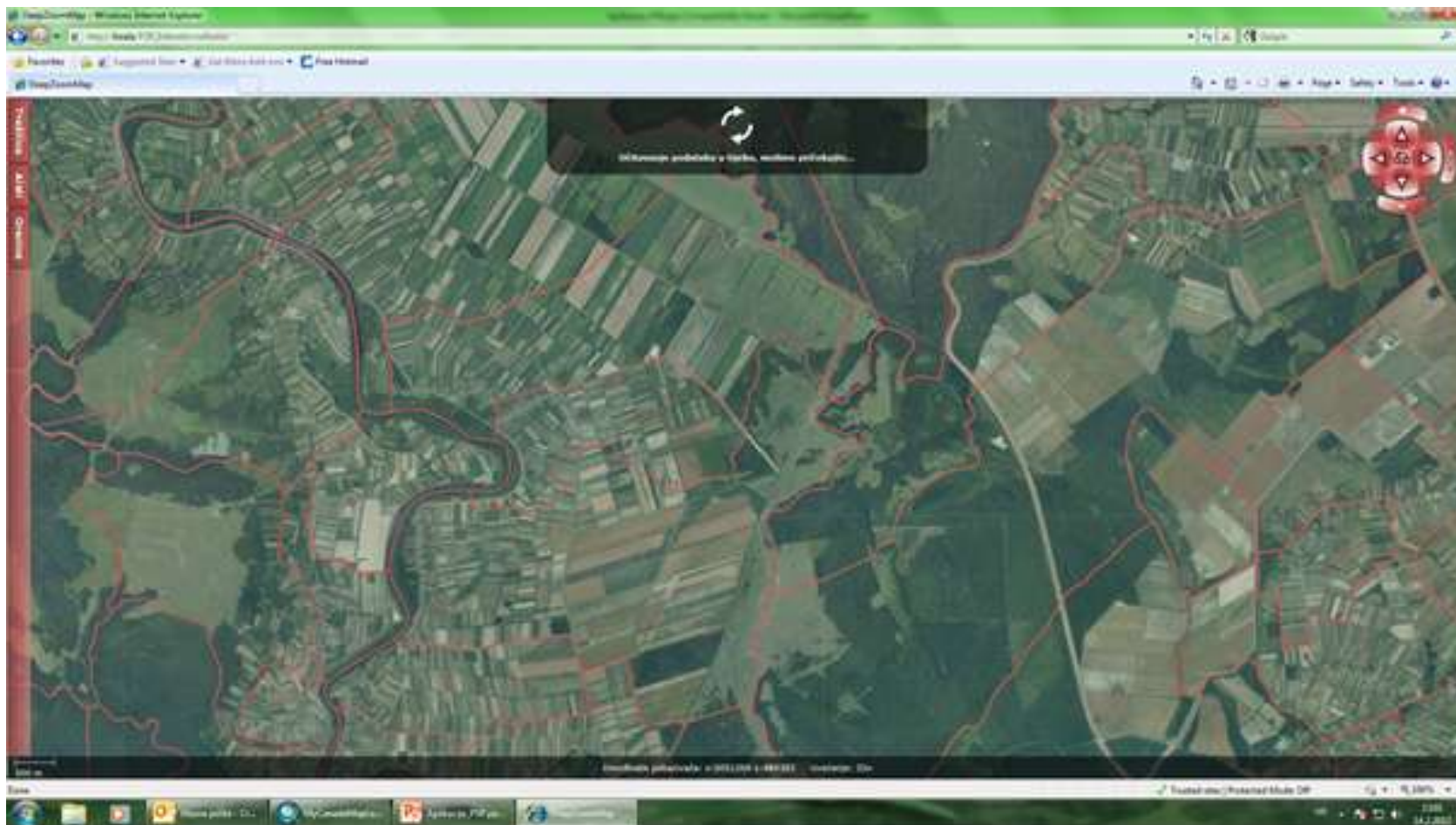


# Statistical circle level - 13406





# Census circle level - 27898



# House number level – 1 578 554

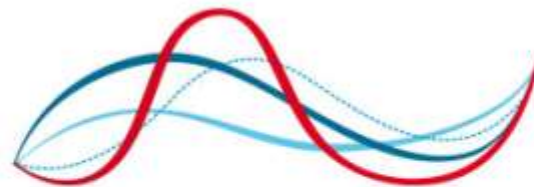




## Future plans

- In CBS we would like to make this application a base for future population register.
- Tracking history of changes for all spatial units in the application should be available in the future.





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**Thank you for your attention**

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