GIS of the City of Split
A modern system for asset management based on GIS technology

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City of Split – basic info

- Split is a Mediterranean city on the eastern shores of the Adriatic Sea, centered around the ancient Roman Palace of the Emperor Diocletian and its bay and port.
- With a population of 178,192 citizens, and a metropolitan area numbering up to 349,314, Split is by far the largest Dalmatian city and the second-largest city of Croatia.
- Spread over a central peninsula and its surroundings, Split's greater area includes the surrounding seaside towns as well.

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City of Split – detailed info

- 178,192 citizens, live in 705 streets, on 20983 house numbers
- On every house number there is minimum one utility charges bill
- For every bill minimum needed information is Area

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City of Split – detailed info

- City of Split has 69816 parcels
  - Every parcel has at least on owner and one type of land use
- City of Split has 27447 cadastral building
- And thousands of building permits
- That are regulated by dozens of urban plans

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City of Split – detailed info

- Utility infrastructure
  - Public lights
  - Water supply
  - Sewer
  - Pipeline
  - …
- Public lights
  - 14000 street lighting poles

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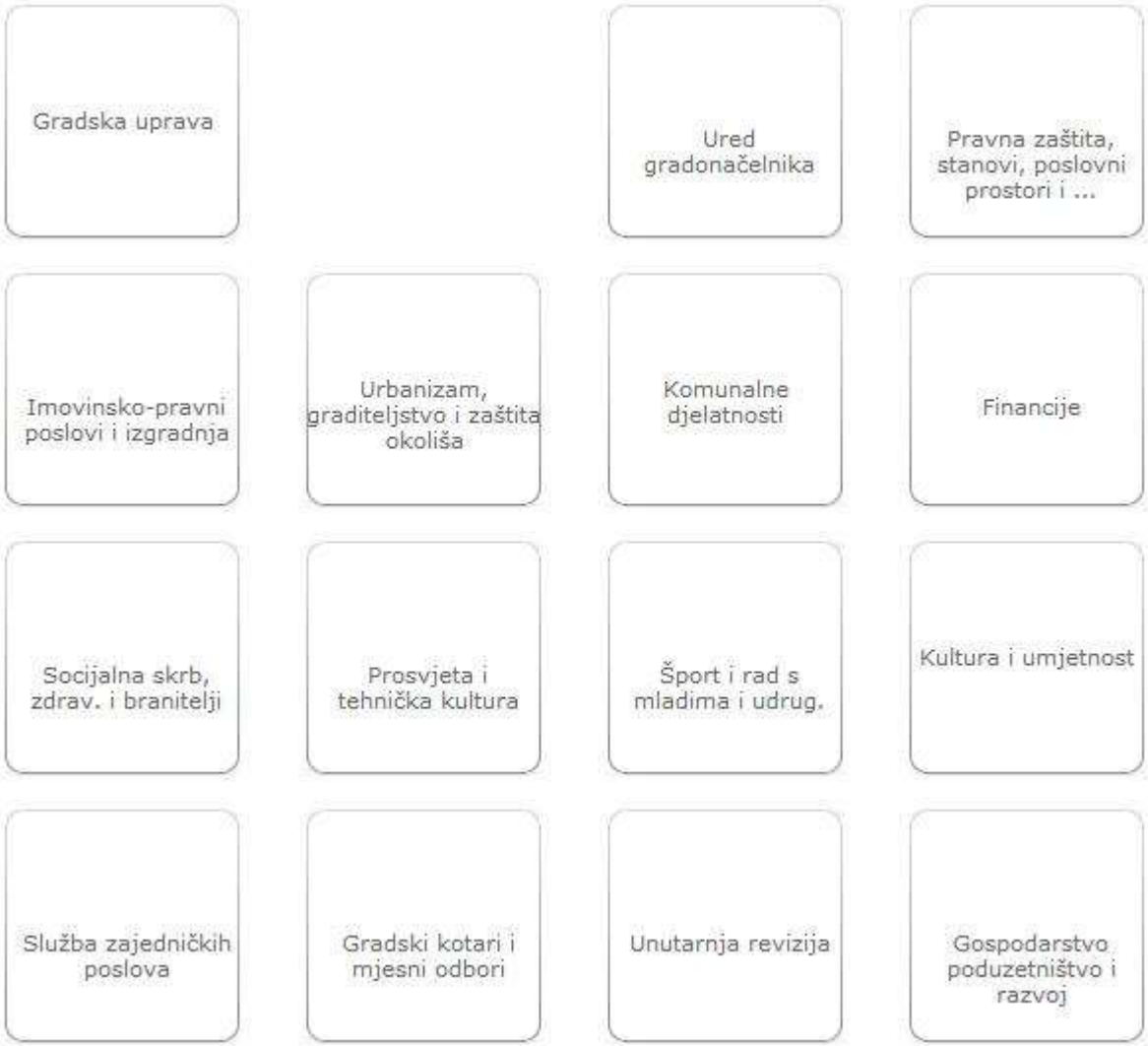
City of Split – detailed info



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City of Split – detailed info

Gradske tvrtke i ustanove		Čistoća	Vodovod i kanalizacija
Stano-uprava	Parkovi i nasadi	Lovrinac	Promet
Luka	Splitska kupališta	Bačvice plaža	Vatrogasna zajednica
Regionalna veletržnica Split	Splitska obala	Split gradnja	Park šuma Marjan

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Baselines

- Collection, preservation, processing, analysis and display of spatial data
- Building unique data structure of GIS Database
- Access to all necessary information in a few steps
- Connect the city offices and departments into a unified whole, which enables the timely exchange of information

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Users

- **The primary user group**
  - City administration officials authorized to maintain and use SUI-ST
  - City administration officials who need access to data SUI-ST system in accordance with their powers

- **Secondary User Group**
  - Companies in majority or majority-owned by the city that provide utility services
  - Independent companies, and other individuals or entities entrusted with the performance of the domain utility activities (concessionaires)
  - State, county, or other institutions that need access to SUI-ST

- **Tertiary user group**
  - Citizens of Split
  - External individuals and businesses that want to be informed through the Internet for information and issues contained in the SUI-ST system.

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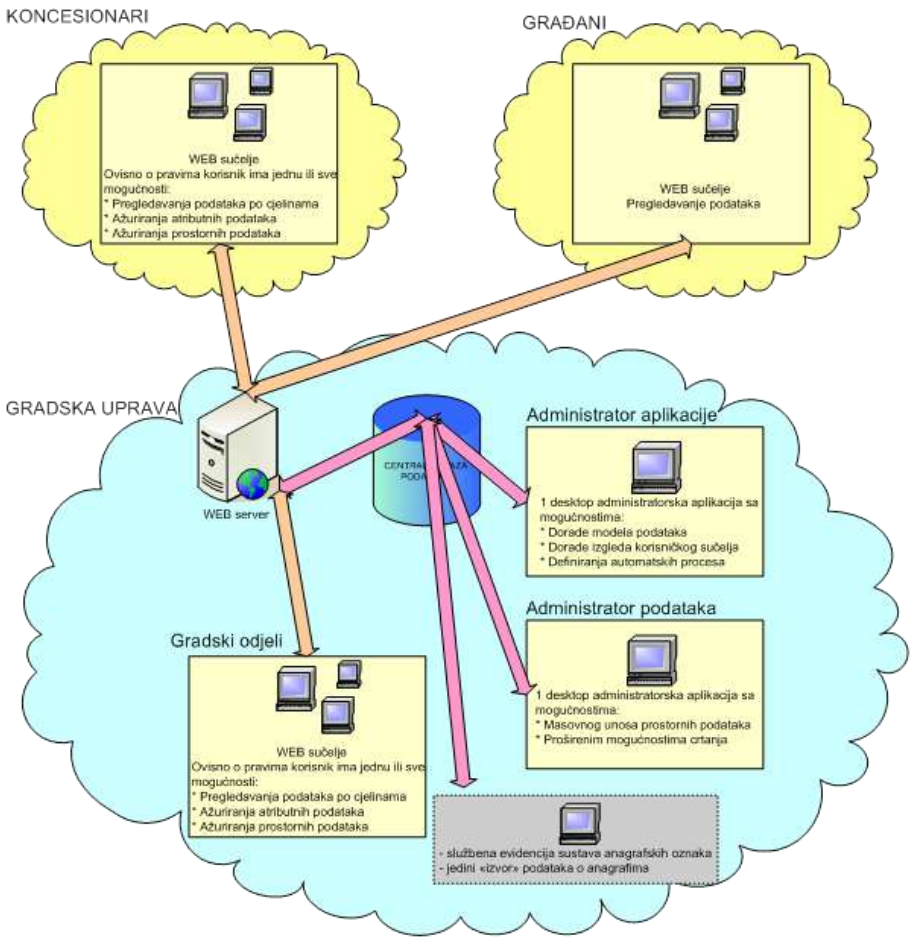
System Architecture



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Fundamental questions

- *How to acquire the necessary information to solve common problems, issues and concerns?*
- *How and where to allow development?*
- *Restrictions must be taken into account?*

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Deliverables

- Collecting, processing, conversion and GIS database structure
- Web Browser for the City Administration (Intranet)
- Web browser for concessionaires of public lighting (Internet)
- Web browser for concessionaires green space (Internet)
- Web browser to the public (Internet)
- Integration with existing business systems
- Interoperable services

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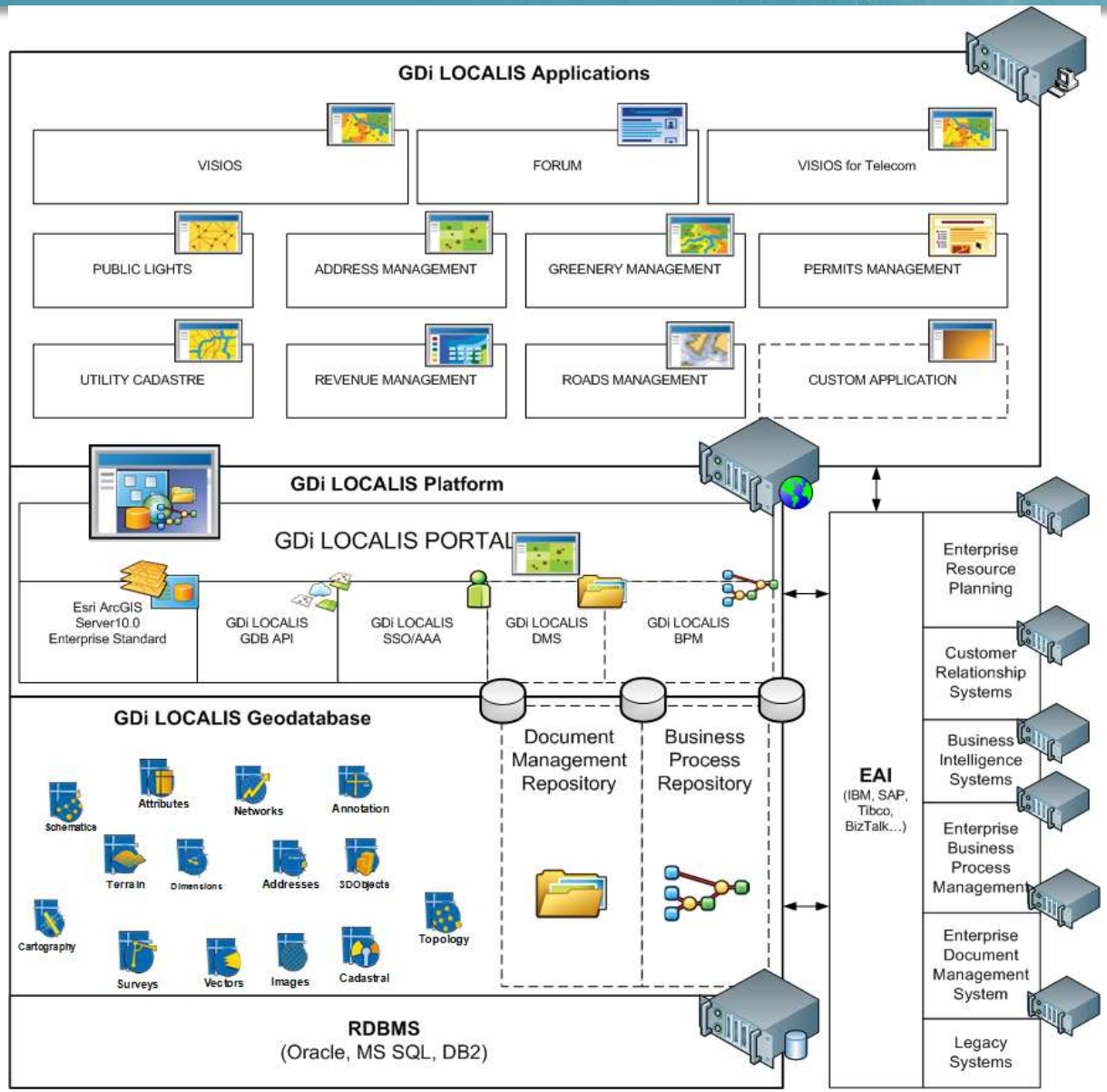
Project implementation process – GDi LOCALIS



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Project implementation process

- The basic elements of GDi LOCALIS software landscape consists of:
- GDi LOCALIS GEODATABASE,
- GDI LOCALIS Platform and
- GDi LOCALIS Applications.

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Geodatabase - basemaps

- Digital Orthophoto Map (DOF)
- Croatian Base Map (HOK)
- Digital Relief Model
- Topographic Map (TK25)
- Data from Graphical Base of Regional Data Register
- Streets and house numbers

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Geodatabase - Landuse

- Cadastral Plans in Digital and Raster Format
- Urban plans
- Utility data
- Connection to existing business apps

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Geodatabase – technical database

- Cadastral database of Public lights
- Cadastral database of Greenery

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Geographic Information System

- Data management
  - GDi LOCALIS Public Lights
  - GDi LOCALIS Greenery
- Administration
  - GDi LOCALIS Platform
- Data sharing
  - GDi LOCALIS Visios Basic (Web GIS Internet) and Standard (Web GIS Intranet)

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Geographic Information System

- Users:
  - Administrators
  - Concessionaire
  - Read only internal users
  - Citizens

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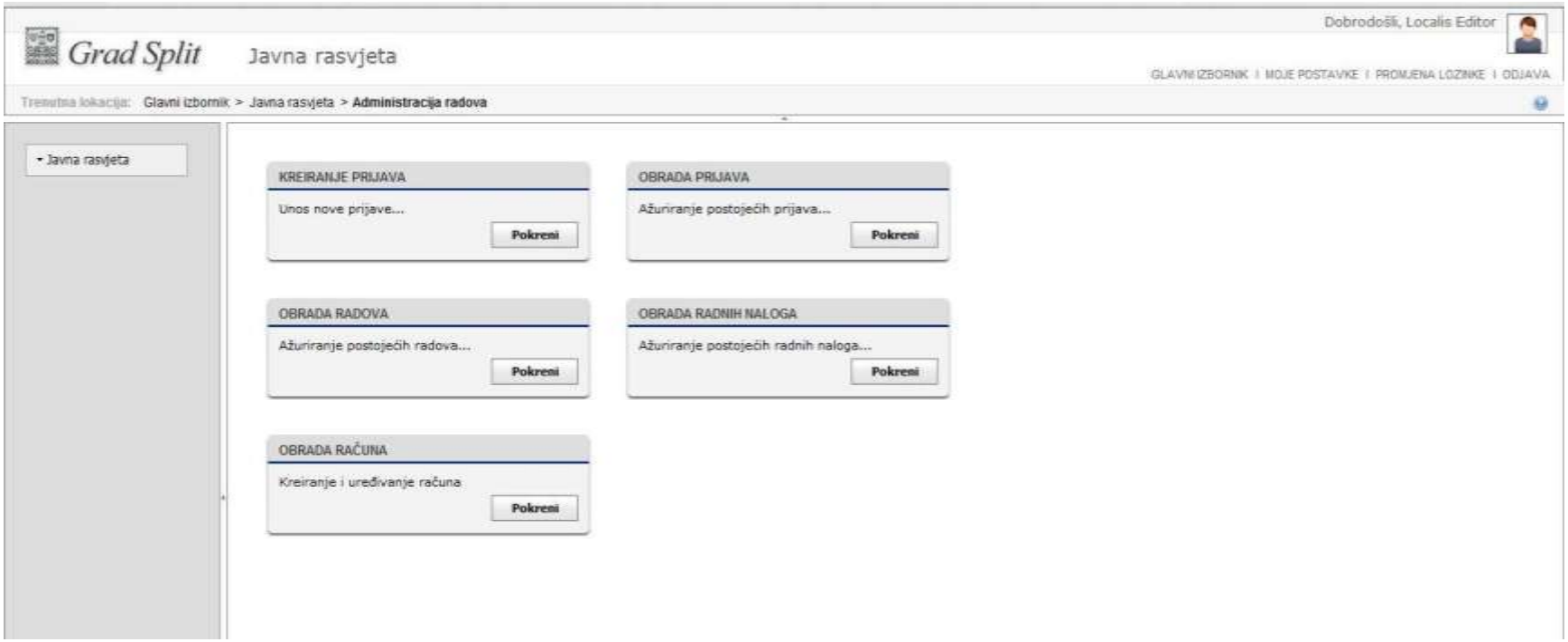
GDi LOCALIS Public Lights



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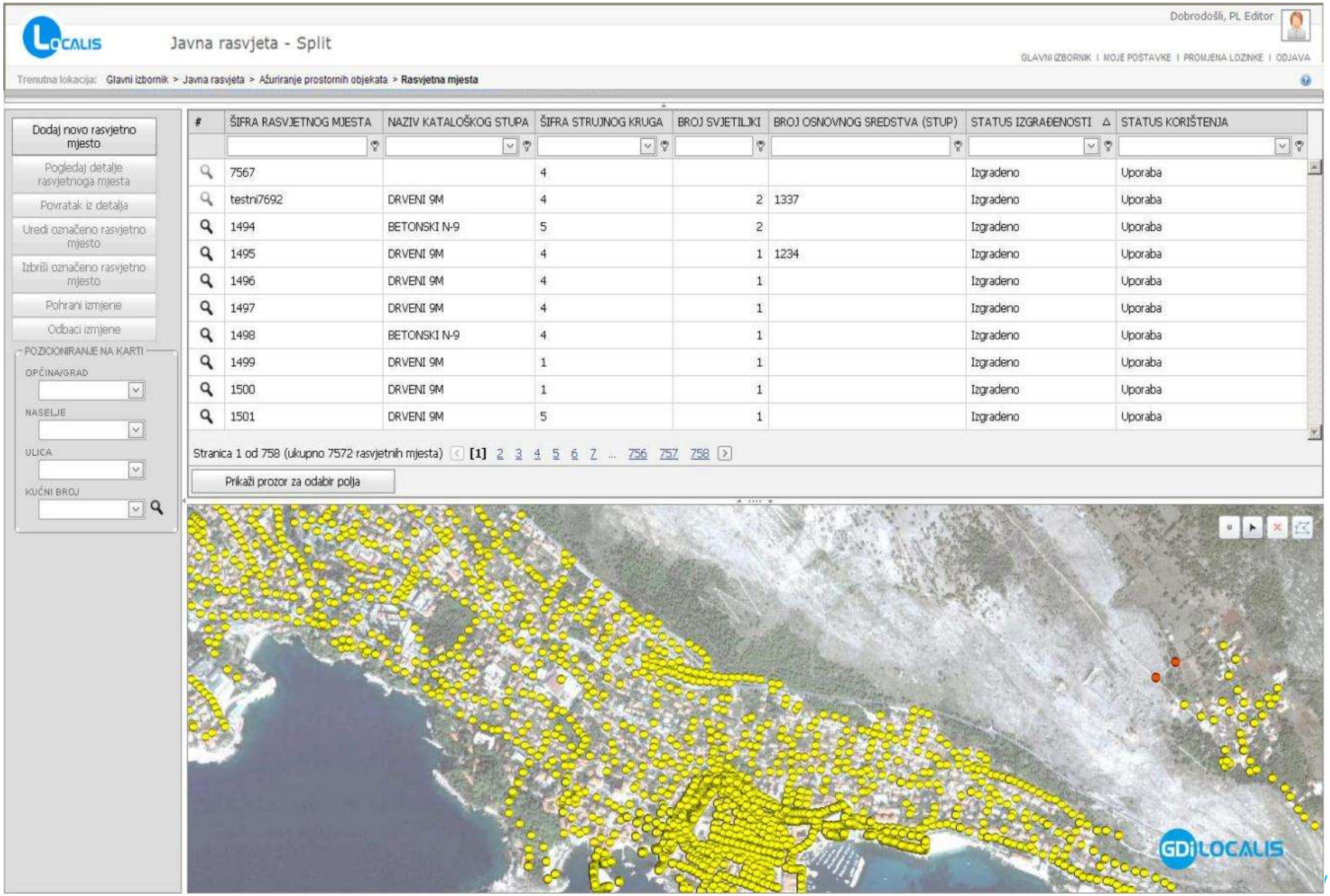
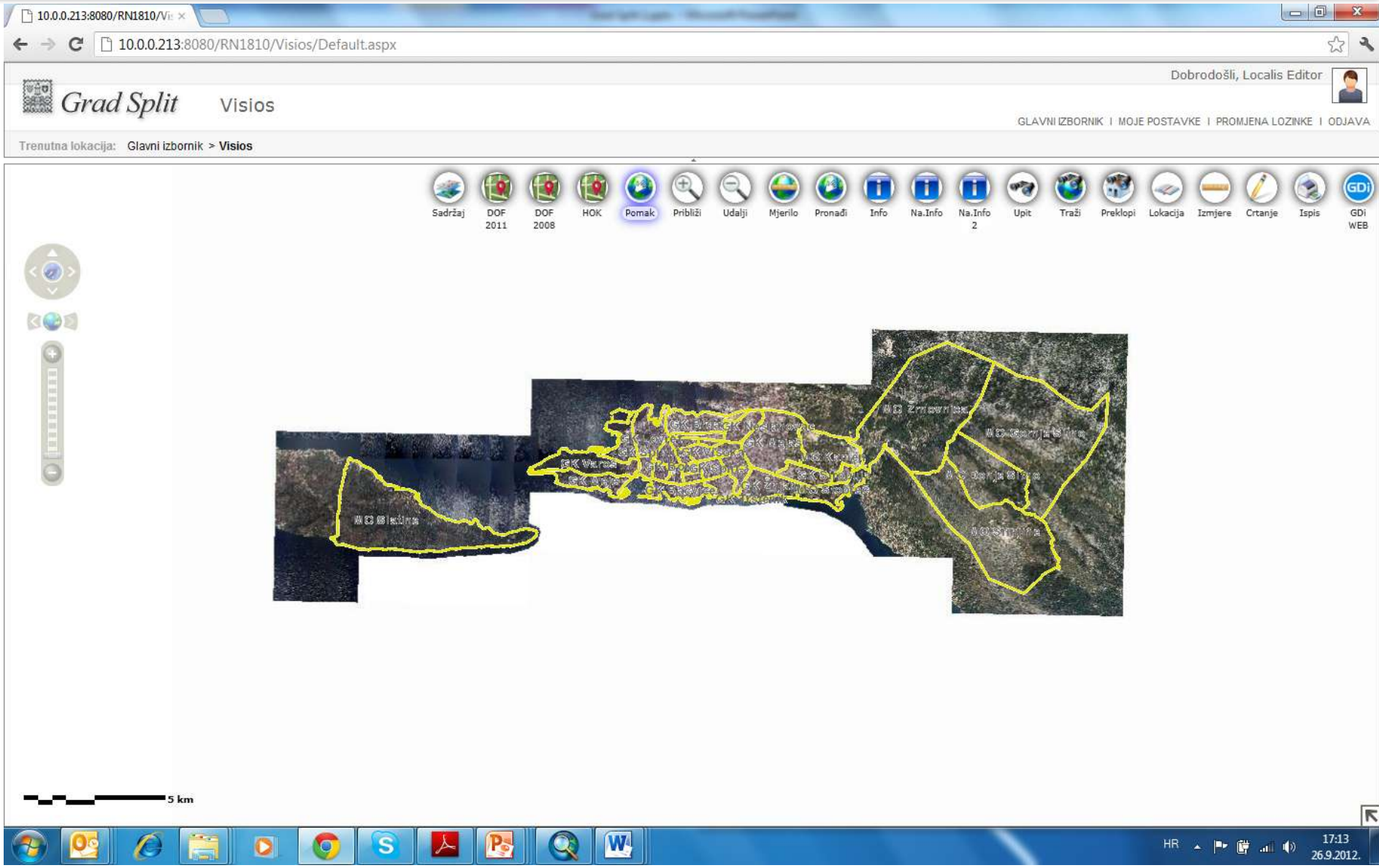
GDi LOCALIS Public Lights



GDi LOCALIS Web GIS Portal - Visios



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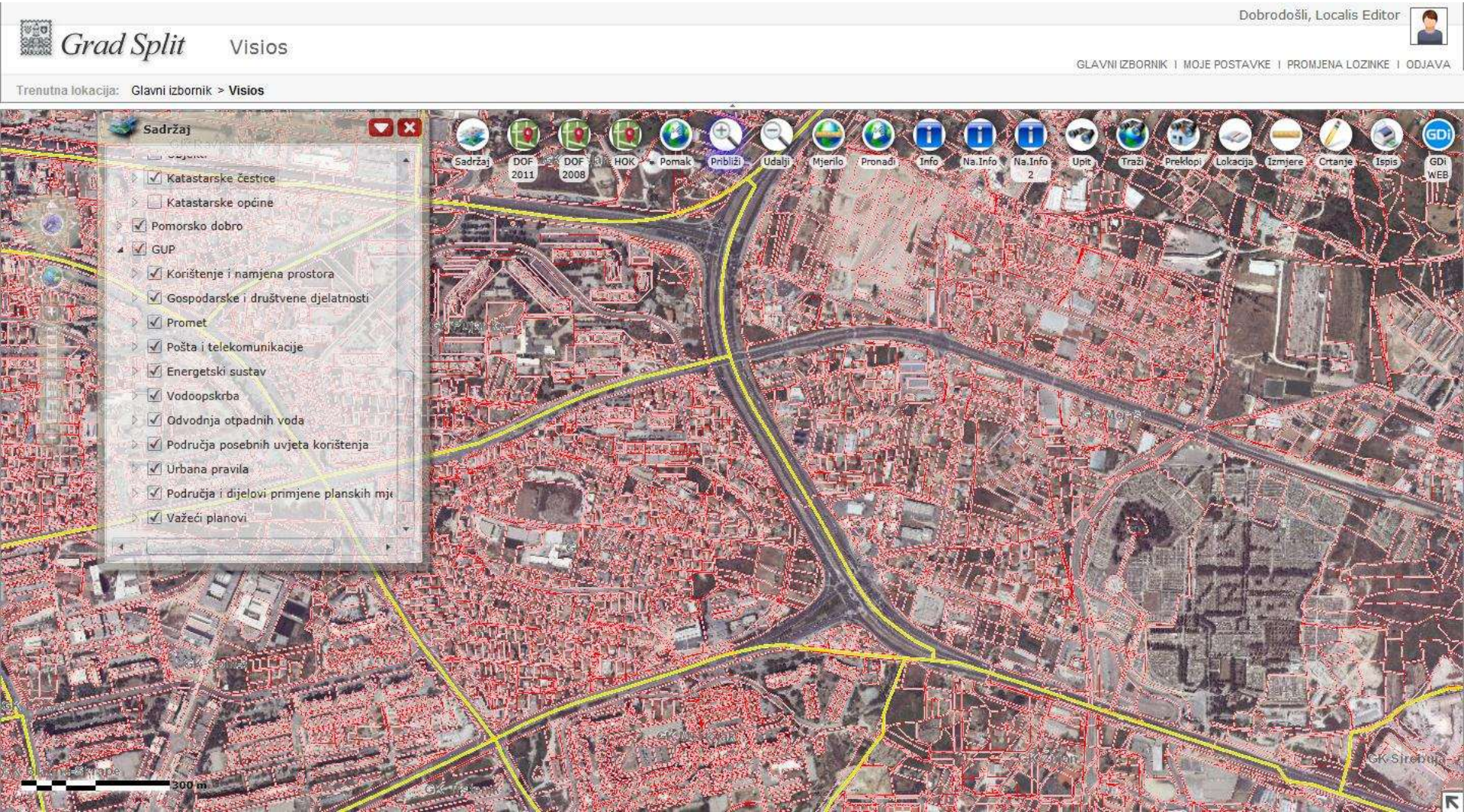

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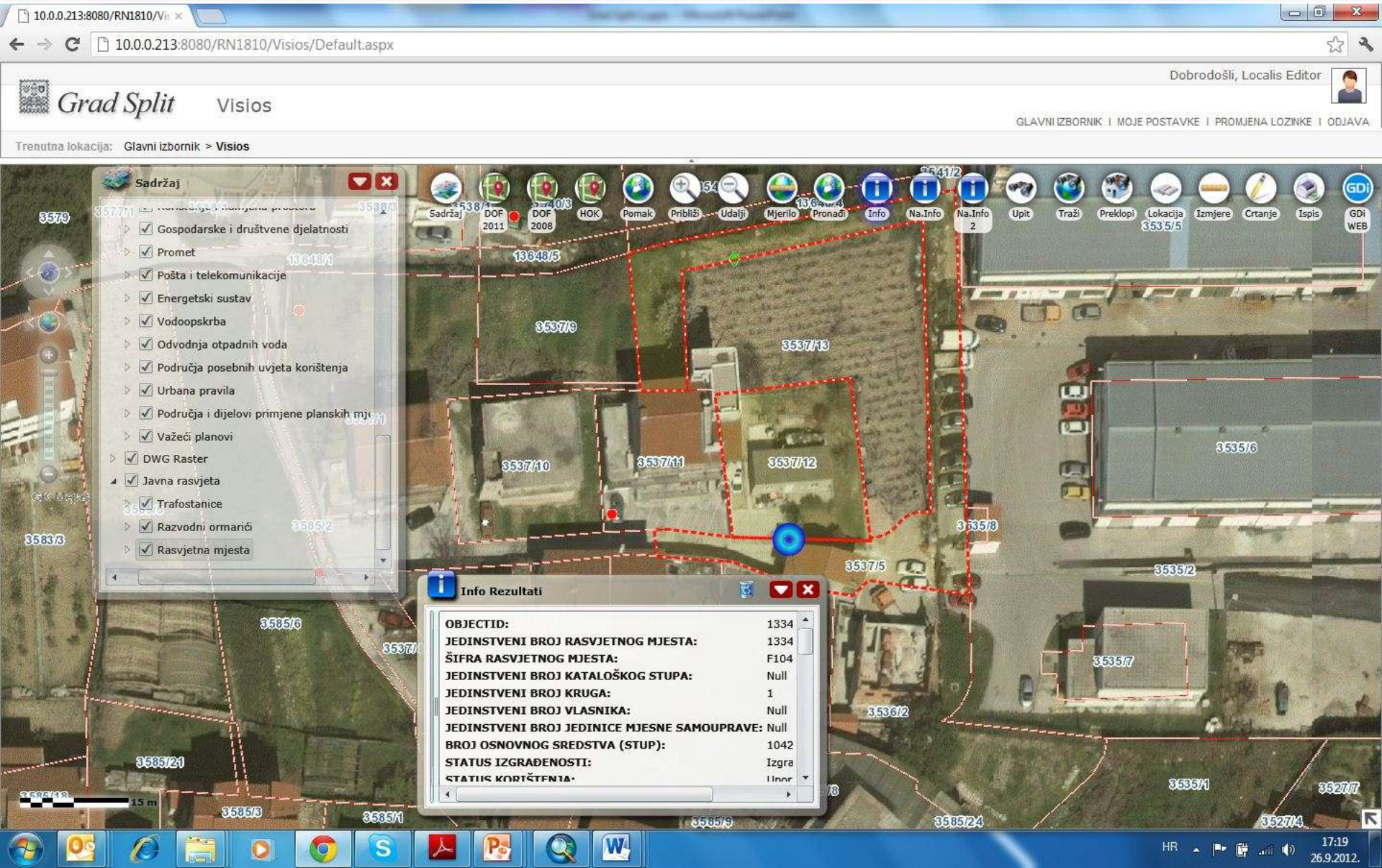
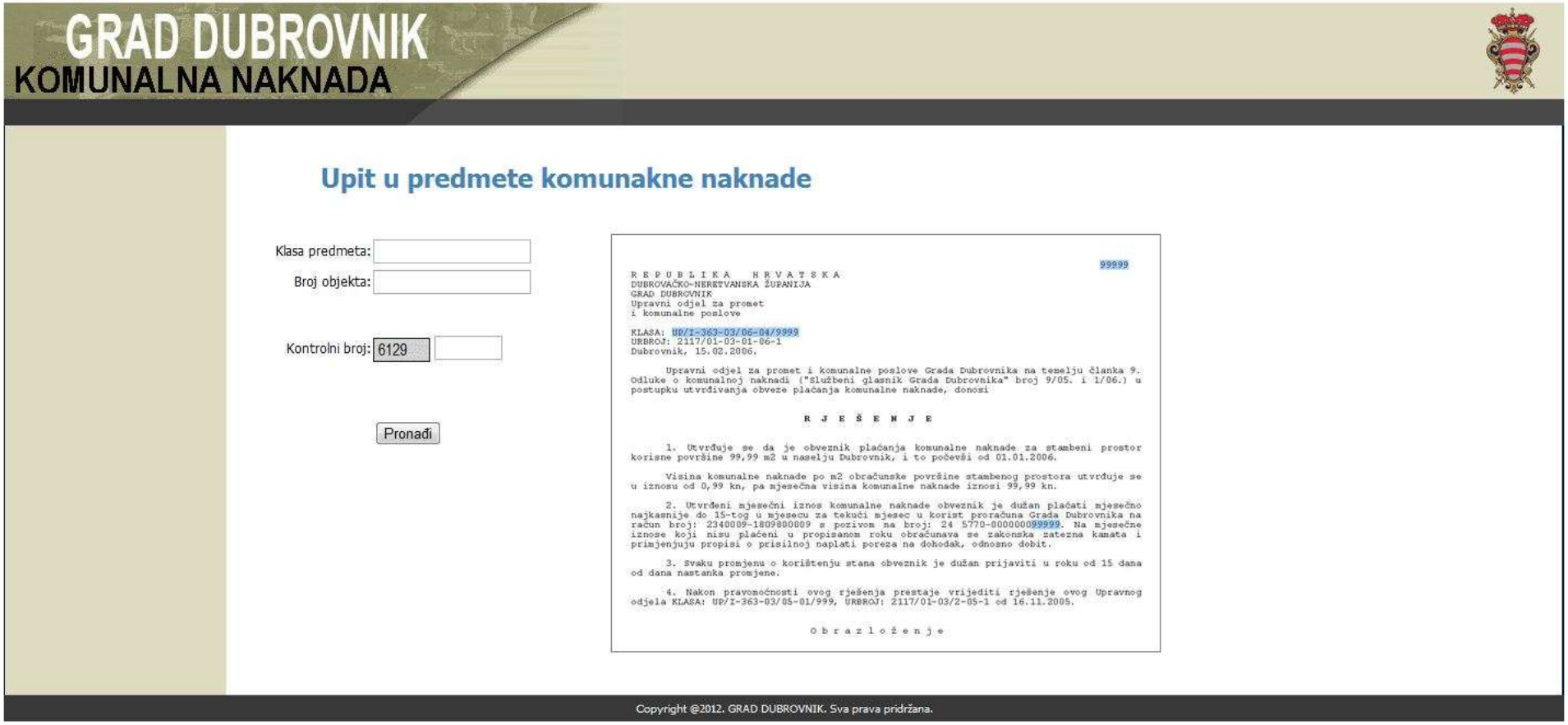
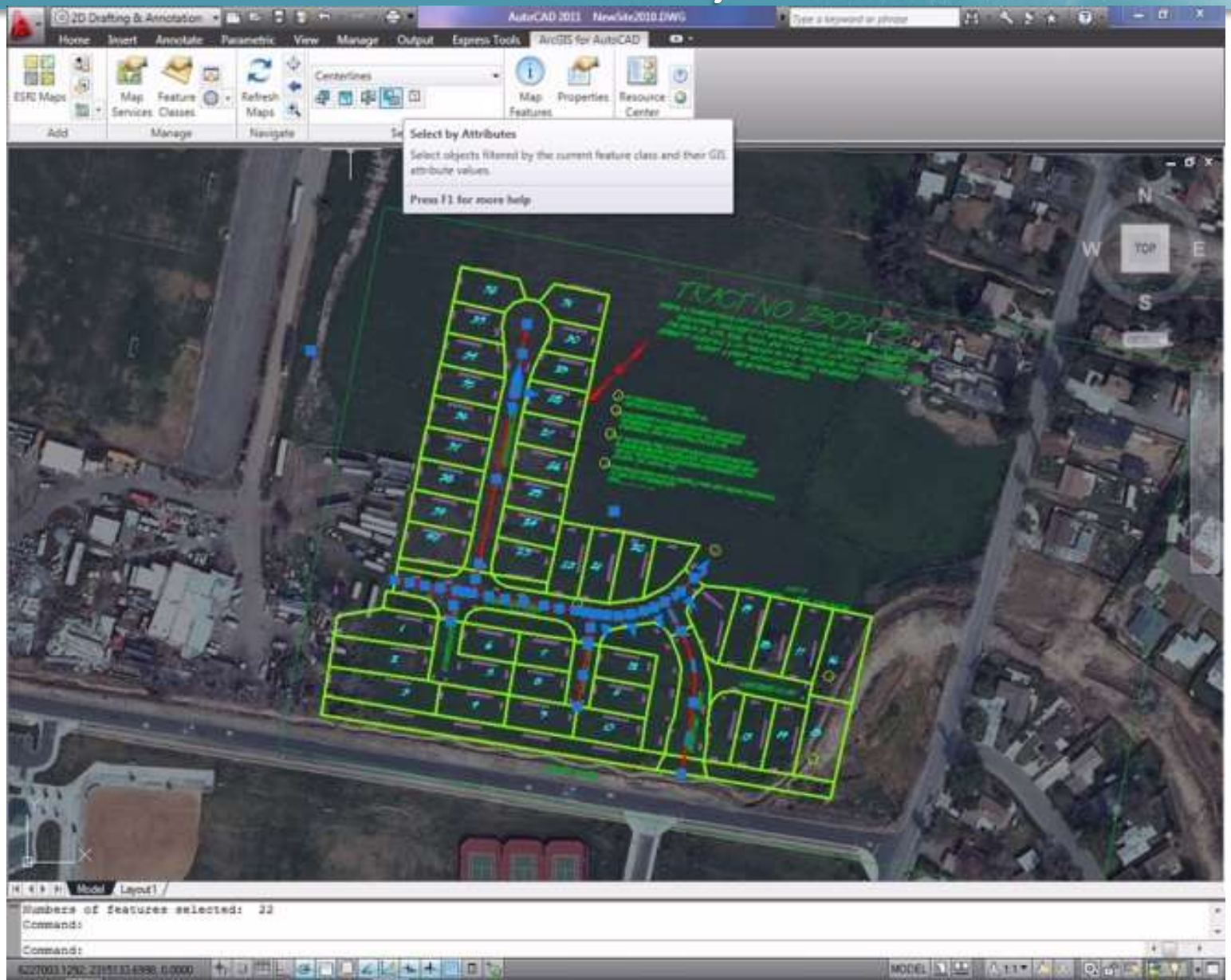


System Interoperability - Web GIS applications



System Interoperability – ArcGIS Server Services SOAP, Rest



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System Interoperability – other Web services

- WMS
- KML
- WFS
- WMTS

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Thank You for your attention!
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