

PRIMORSKO-GORANSKA COUNTY



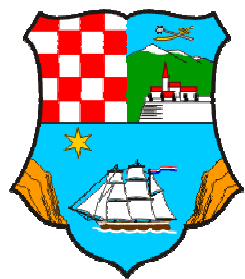
P U B L I C I N S T I T U T I O N

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J A V N A U S T A N O V A



ZAVOD ZA PROSTORNO UREĐENJE

PRIMORSKO-GORANSKE ŽUPANIJE

SPATIAL DATA INFRASTRUCTURE DEVELOPMENT IN PRIMORSKO-GORANSKA COUNTY

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Adam Butigan, geod.eng.

***PI INSTITUTE FOR PHYSICAL PLANNING
OF PRIMORSKO-GORANSKA COUNTY***

2nd Croatian NSDI and INSPIRE day and 6th Conference Cartography and Geoinformation

Opatija 25 – 27 November 2010





PRESENTATION CONTENTS

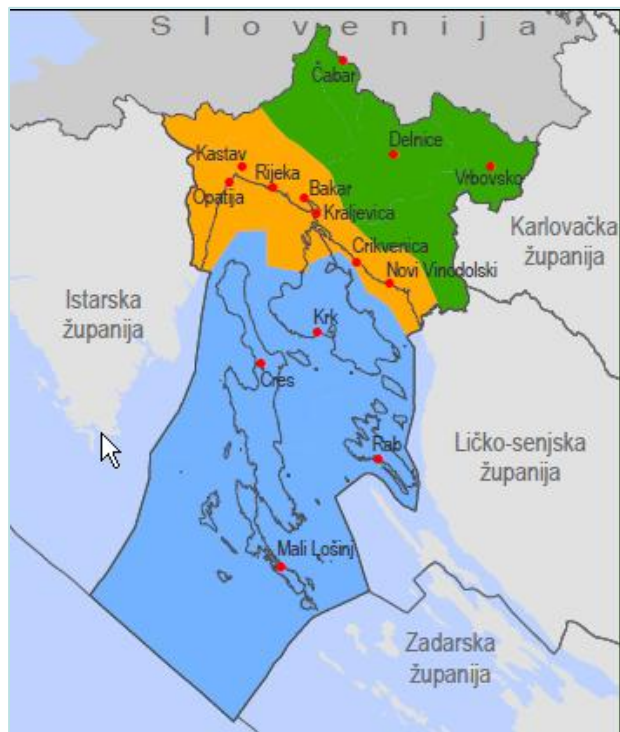
- ✓ *Basic information on the County and Institute for Physical Planning of Primorsko-Goranska County*
- ✓ *Development of GIS and SDI in the county*
- ✓ *Application of realized GIS projects in the county*
- ✓ *Collaboration with State Geodetic Administration*

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ABOUT COUNTY AND INSTITUTE



Land area = 3,587 km²
Sea area = 4,345 km²
Population = 305,505
Population density:
87 inhabitants/km²

- ✓ *From the foundation of the County in 1993 till the end of 2007: Administrative body “County Institute for Physical Planning and Sustainable Development”*
- ✓ *Since 1 Jan. 2008 Public Institution “Institute For Physical Planning of Primorsko-Goranska County” (Physical Planning and Building Act)*

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IMPORTANT PROJECTS ⁽¹⁾

- ✓ *Production of expert bases for the preparation of the NEW Spatial Plan of PGC (Analyses of tourist zones, commercial zones, etc.)*
- ✓ *2nd Amendment to the PGC Spatial Plan*
- ✓ *Spatial-Traffic Study of the Integral Traffic System of Primorsko-Goranska County and City of Rijeka*
- ✓ *County Sports Center Platak*
- ✓ *LNG terminal*
- ✓ *Construction of gas distribution network of PGC*



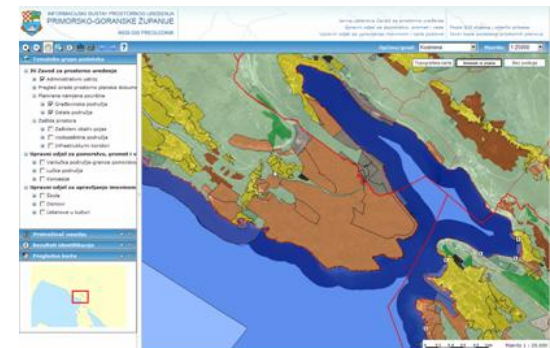
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IMPORTANT PROJECTS (2)

Information systems

- ✓ GIS base of spatial plans of cities, towns and municipalities www.gis.pgz.hr
- ✓ Register of Spatial and Urban Planning Schemes www.zavod.pgz.hr
- ✓ Foundation of the Information-Communication Centre of Adriatic Euroregion Project
- ✓ **Integration of physical planning acts and documents in a single georeferenced system**



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DEVELOPMENT OF GEOGRAPHIC INFORMATION SYSTEM IN PGC ⁽¹⁾

Formal beginning in 1995

“Information on the drafting of the Current Status of County’s Space Report, programme of measures and Spatial Plan of Primorsko-Goranska County” - County Assembly

Defined plan of development of Geographic Information System in Primorsko-Goranska County, as basis for the production of County Spatial Plan.

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DEVELOPMENT OF GIS IN PGC ⁽²⁾

Defining of County's Spatial Data Infrastructure in 2002

“Information on spatial management in regional and local self-government and application of GIS technology in PGC” - County Assembly

- ✓ *collaboration between the Institute and Ministry of Environmental Protection and Physical Planning on the integration of data created while producing spatial plans of counties*
- ✓ *recognized need for the creation of an integral information system of physical planning in RoC*
- ✓ *recommendation to LSUs in the area of PGC to apply GIS technology to monitor the current status in their space and to join the county GIS system.*

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DEVELOPMENT OF GIS IN PGC ⁽³⁾

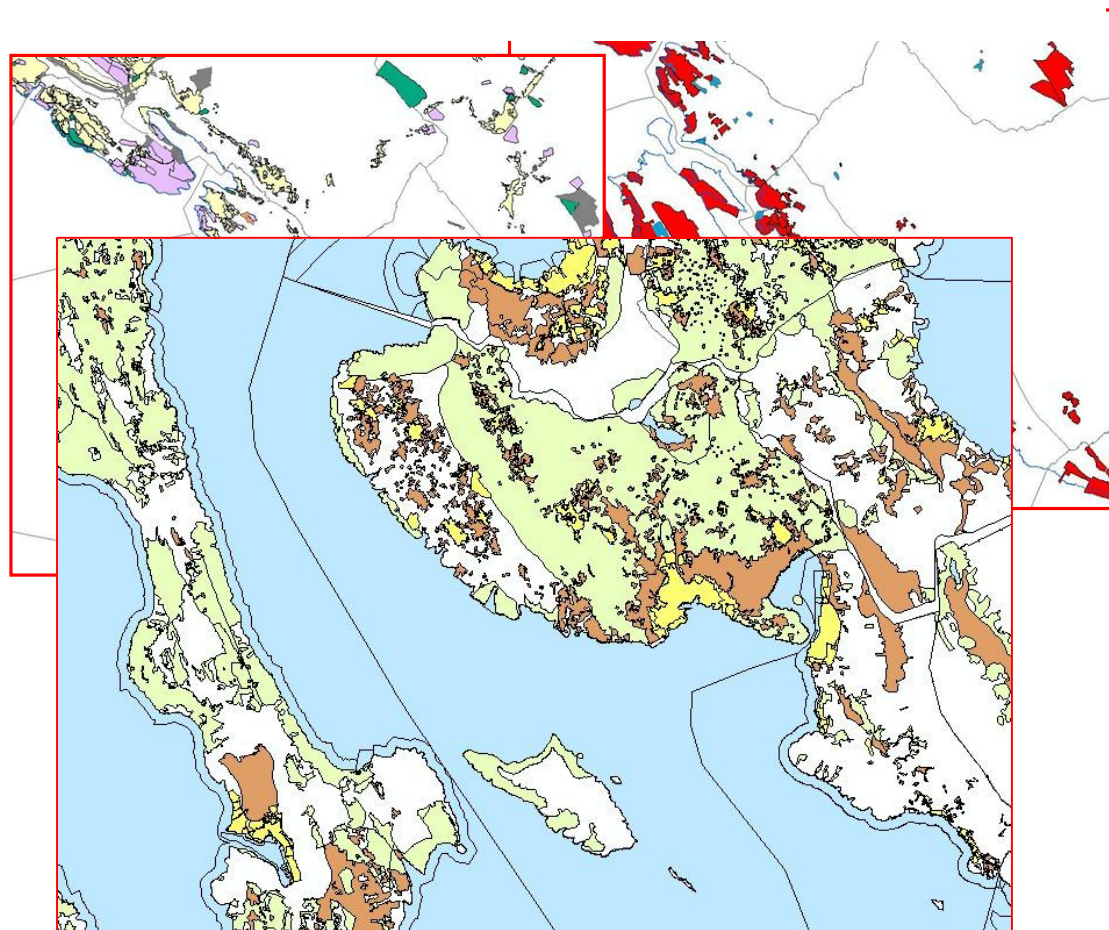
Physical Planning and Building Act was adopted in 2008

- ✓ *Formally defined construction of the Information System of Physical Planning in the Republic of Croatia*
- ✓ ***Defined - objective - participants - content - requirement to deliver and exchange data among participants***
- ✓ *It is necessary to define standards for the production and change of data*



RESULT

CONSTRUCTED PART OF PHYSICAL PLANNING INFORMATION SYSTEM



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GIS DATABASE OVERVIEW

LSU – local self-government unit

EIA - environmental impact assessment study

PCA – protected coastal sea area

Public Institution Institute for Physical Planning of Primorsko-Goranska County							
Data group	Subgroup	Data	Original scale	Data format	Data location	Legal status	Produced/ Updated/ Underway
spatial data	Administrative and statistical divisions	area of PGC, LSU, statistical settlements	1:25000	GIS - gdb	server (locally) + web in PGC	public data	updated
	Documentation	geodetic network of maps, register of spatial and other documentation (EIA), PCA	1:200000 1:100000, 1:25000, 1:5000	GIS - gdb	server (locally) + web in PGC	public data	partially updated
	Environment protection	natural heritage	1:100000	GIS - gdb	server (locally) + web in PGC	public data	2004
		cultural heritage	1:25000	GIS - gdb		public data	2004
		soil: vegetation, geotechnics, pedology	1:50000- 1:100000	GIS - cov			
		sea: submarine flora and sediments	1:50000	GIS - cov	server (locally)		

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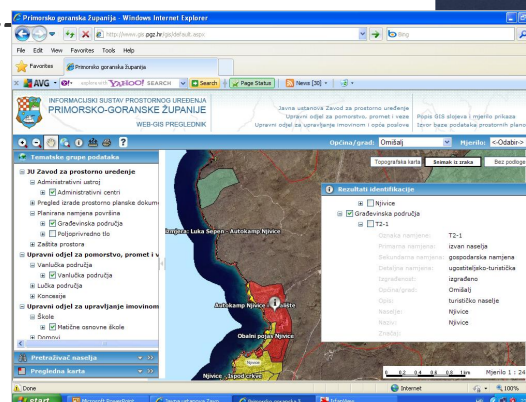
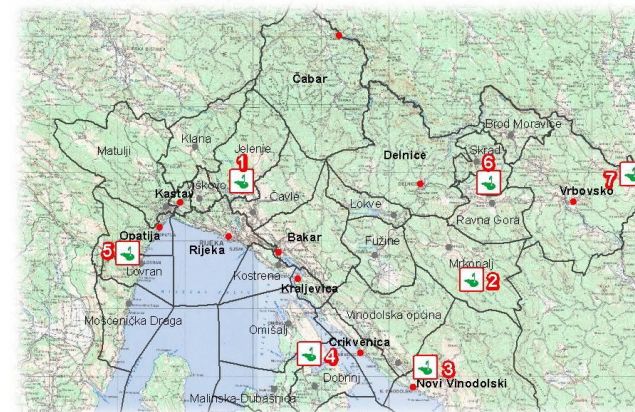


APPLICATION

*Production of physical planning documents
and environmental protection documents
- initial data*

*Production of Current Status of County's
Space Reports,
State of the Environment Reports
- spatial analyses*

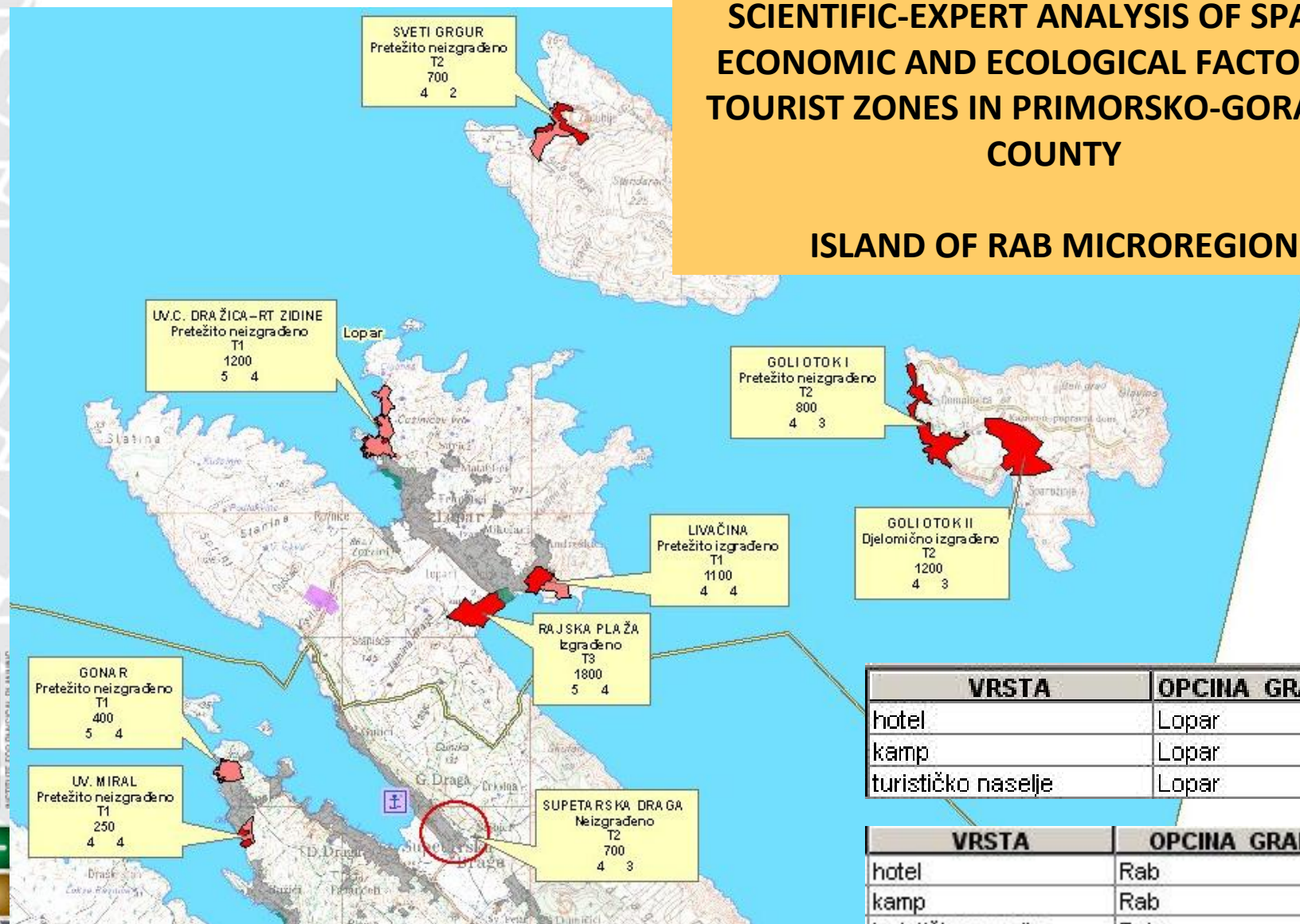
*Provision of information
to the public
- searches, queries*



APPLICATION:

SCIENTIFIC-EXPERT ANALYSIS OF SPATIAL ECONOMIC AND ECOLOGICAL FACTORS OF TOURIST ZONES IN PRIMORSKO-GORANSKA COUNTY

ISLAND OF RAB MICROREGION



VRSTA	OPCINA GRAD	POV ha
hotel	Lopar	59
kamp	Lopar	25
turističko naselje	Lopar	95

VRSTA	OPCINA GRAD	POV ha
hotel	Rab	59
kamp	Rab	25
turističko naselje	Rab	95

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Application:

*PGC Department of
Maritime Affairs,
Transportation and
Communication*

MARITIME DOMAIN BORDER

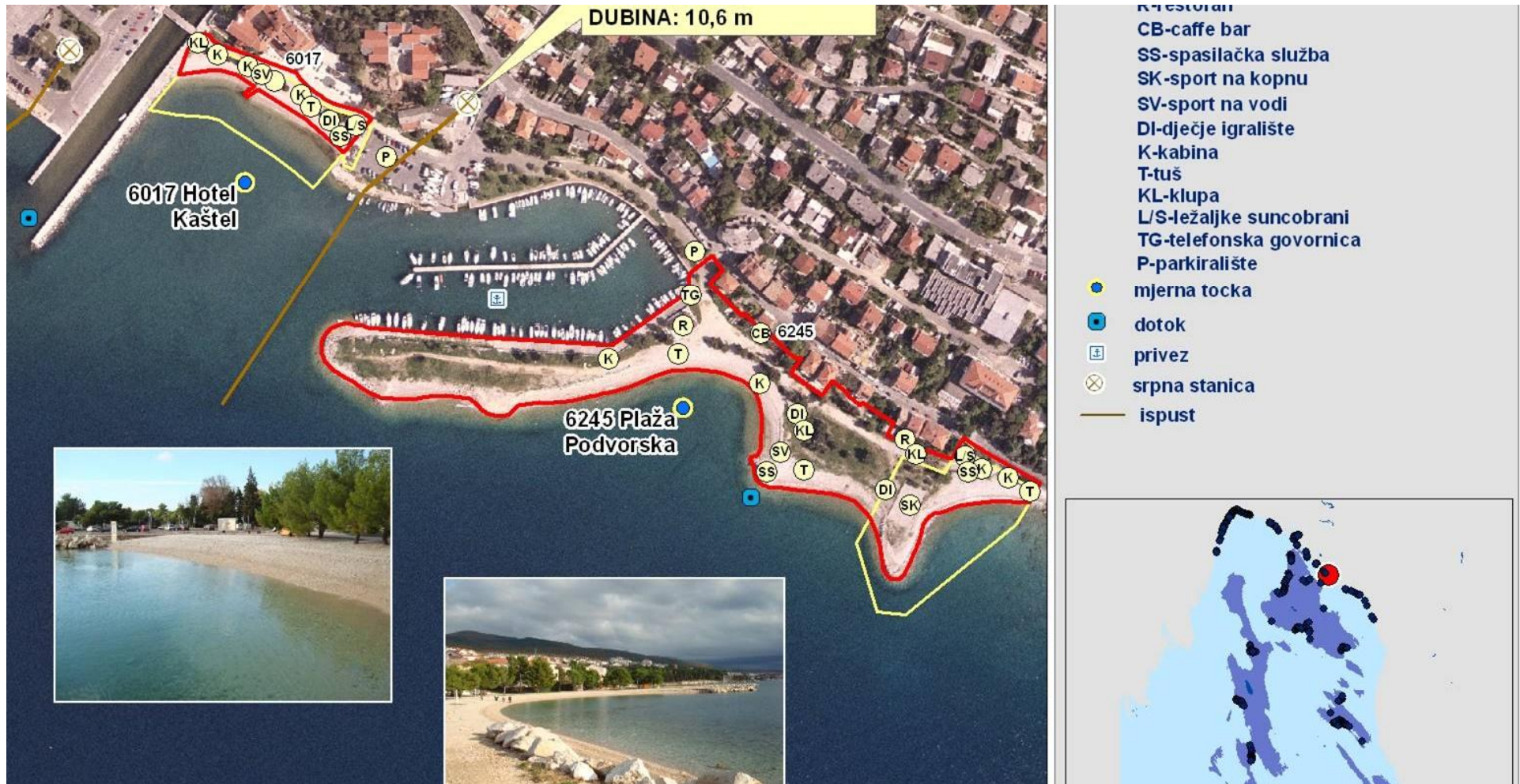
DOF5 base



Application: Data integration

PRODUCTION OF SEA BEACHES PROFILES

(ENVIRONMENTAL PROTECTION ACT, ORDINANCE ON SEA BATHING WATER QUALITY)



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Application: GEOPORTAL

www.zavod.pgz.hr

The screenshot displays the GEOPORTAL application running in a Windows Internet Explorer browser. The browser window title is "Primorsko goranska županija - Windows Internet Explorer". The address bar shows the URL "http://www.gis.pgz.hr/gis/default.aspx". The browser interface includes standard menus (File, Edit, View, Favorites, Tools, Help) and a search bar with "Bing" as the search engine.

The application interface features a sidebar on the left with the following sections:

- Tematske grupe podataka**
 - JU Zavod za prostorno uređenje**
 - ☐ Administrativni ustroj
 - ☒ Administrativni centri
 - ☐ Pregled izrade prostorno planske dokumentacije
 - ☐ Planirana namjena površina
 - ☒ Građevinska područja
 - ☐ Poljoprivredno tlo
 - ☐ Zaštita prostora
 - Upravni odjel za pomorstvo, promet i veze**
 - ☐ Vanlučka područja
 - ☒ Vanlučka područja
 - ☐ Lučka područja
 - ☐ Koncesije
 - Upravni odjel za upravljanje imovinom**
 - ☐ Škole
 - ☒ Matične osnovne škole
 - ☐ Domovi
- Pretraživač naselja** (dropdown menu)
- Pregledna karta** (dropdown menu)

The main map area shows a topographic map of the coastal region. A red area is highlighted, labeled "Autokamp Njivice i alište". Other labels on the map include "Njivice - Ispod crkve", "Obalni pojas Njivice", and "izmjera: Luka Sepen - Autokamp Njivice".

At the top right of the map area, there are controls for "Općina/grad: Omišalj" and "Mjerilo: <-Odabir->". Below these are buttons for "Topografska karta", "Snimak iz zraka", and "Bez podloge".

A "Rezultati identifikacije" (Identification Results) panel is open on the right side of the map, showing the following information:

- ☐ Njivice
- ☒ Građevinska područja
- ☐ T2-1
- Oznaka namjene: T2-1
- Primarna namjena: izvan naselja
- Sekundarna namjena: gospodarska namjena
- Detaljna namjena: ugostiteljsko-turistička
- Izgrađenost: izgrađeno
- Općina/grad: Omišalj
- Opis: turističko naselje
- Naselje: Njivice
- Naziv: Njivice
- Značaj:

The bottom of the browser window shows the Windows taskbar with the "start" button and several open applications: "Microsoft PowerPoint...", "Javna ustanova Zavo...", "Primorsko goranska ž...", and "IrfanView". The system clock shows "HR" and "23:32".



COLLABORATION WITH STATE GEODETIC ADMINISTRATION

- ✓ *2003 – Agreement on Co-financing the Production of Topographic Maps in Scale 1:25000 with 50% of total amount*
- ✓ *2005 – Delivery of data on Protected Coastal Area*
- ✓ *2006 – Contract on Financing the Production of Digital Ortophoto Maps in Scale 1:5000 (DOF5) and Production of Digital Ortophoto Maps in Scale 1:2000 for Part of Protected Coastal Area (DOF2)*
- ✓ *2007 – Contract on Delivery of Croatian Base Map in Scale 1:5000*
- ✓ *2010 – Agreement on Cofinancing the Production and Updating of Official Spatial Base Networks for State Survey and Real Estate Cadastre for the period 2010 –2013*

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Project: **INTEGRATION OF ACTS AND DOCUMENTS ON PHYSICAL PLANNING**

SUSTAV HERA - PREDMETI I KČ

Početna stranica > Katastarske čestice

Drag a column header here to group by that column

MBR_KO	KO	cestica	Nova Izmjera	GIS
324469	BAKAR	147/3	<input checked="" type="checkbox"/>	
324604	KOSTRENA-BARBARA	141/1	<input type="checkbox"/>	
324604	KOSTRENA-BARBARA	154	<input type="checkbox"/>	
324604	KOSTRENA-BARBARA	1770/2	<input type="checkbox"/>	

☒ Uporabna dozvola, Odbijen zahtjev
☒ Rješenje o uvjetima građenja, Usvojen
☒ Rješenje o uvjetima građenja, Odbijen
☒ Ostalo, Odbijen zahtjev
☒ Ostalo, Usvojen zahtjev
☐ Pregled izrade prostorno planske dokumentacije
☒ KATASTAR
☐ PPUO
☐ PPZ
☐ Podloge
☒ DOF5
☐ HOK5

PREGLEDNA KARTA

5463621.408, 5016708.219

REZULTATI

Obrisi sve Odaberi sve Ukloni sve iz odabira

KČ

BROJ ZAPISA: 1

ZAPIS #	RADNJE	OBJECTID_12	OBJECTID	KČ BROJ	KO	OG	NAPOMENA	KO_MBR	NOVA_IZMJERA	SHAPE_LENGTH	AREA
1		12841	28858	141/1	Kostrena-Barbara	Kostrena		324604	0	129.270971984354	275.15396

Local intranet 100%



CONCLUSION

- ✓ *The Institute fully supports the establishment of NSDI at local, regional as well as national level.*
- ✓ *Unfortunately, the establishment of the Information System of Physical Planning, as an NSDI subsystem, is not being carried out as a systematic project.*
- ✓ *Possible reason for that is insufficient human resources and unsystematic planning. In that respect, Primorsko-Goranska County is an exception both by the number of staff and resources invested in the system development.*
- ✓ *The Institute fully supports the State Geodetic Administration in the development of NSDI, alignment with the EU INSPIRE Directive, the basic infrastructure for the development of Information System of Physical Planning in RoC.*