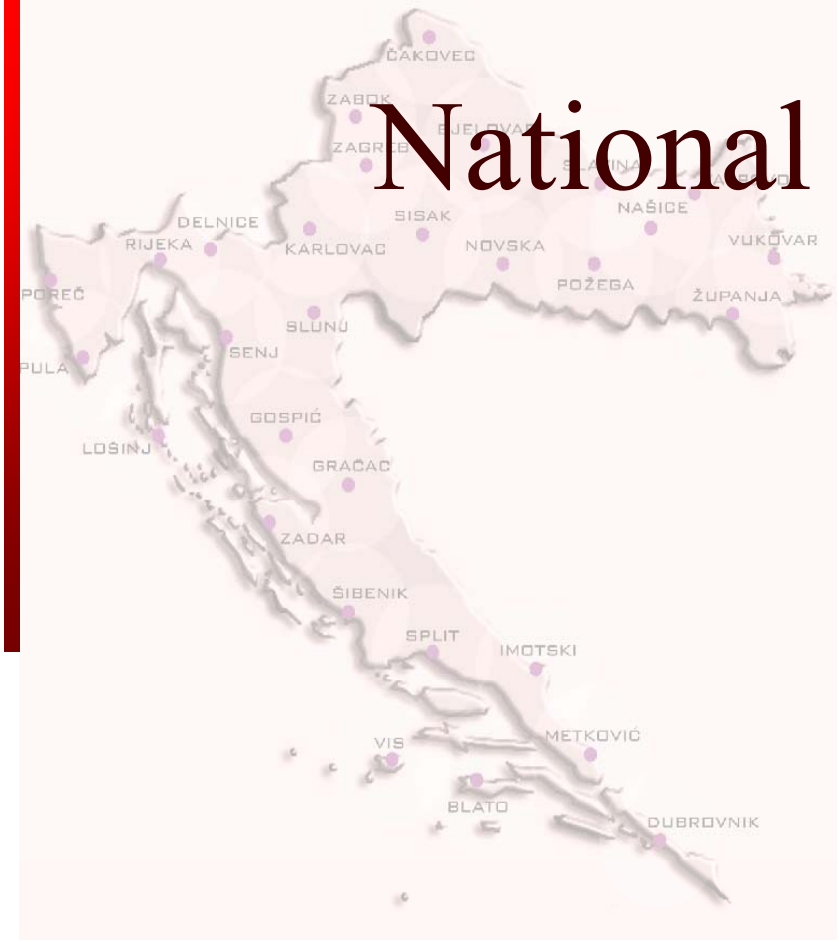

National report of Croatia

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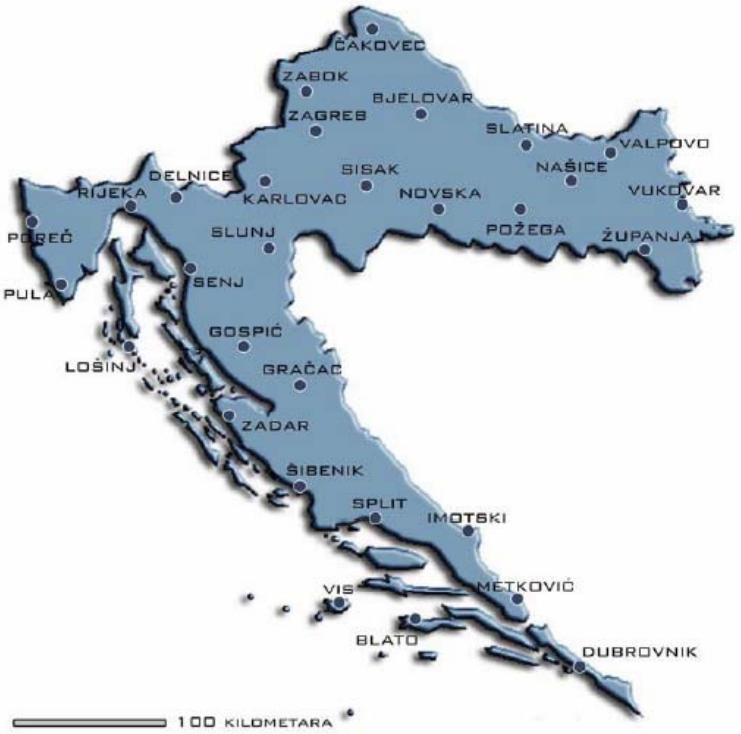
CROPOS – CROatian POsitioning System

- **CROPOS** - launched on **9th of December 2008.** in official usage.
  - enables practical usage of new official Croatian geodetic reference system *HTRS96*
  - ***accuracy of 2 cm positional and 4 cm vertical in real time***
- **over 200 companies - 550 licences**
- State survey, real estate cadastre, engineering geodesy
- GIS, navigation



CROPOS – CROatian POsitioning System

State geodetic administration - establishing the CROPOS system in 2008:

- Instalation of equipment and networking the system – September 2008.
- Testing the system operation in real field conditions – November/December 2008.
- Since Decembre 2008. CROPOS is fully operational.

- Official reference GNSS station coordinates – calculated in ITRF2005, e = 2008.83; transformed in ETRF00 (R05) system – ETRS89.

  - ***ETRS89 system is official system for GNSS measurements with CROPOS.***

- CROPOS system testing measurements on GNSS reference network of 1st and 2nd order

CROPOS – CROatian POsitioning System

- Technical Assistance for Integrated Land Administration System in Croatia:
  - informing the public and users on CROPOS capabilities
- SGA elaborate procedures and regulations for practical usage of CROPOS
- 1st CROPOS conference - Zagreb 8.- 9.June ´09
- contracts for reference station real-time GNSS data exchange with Slovenia, Hungary and Montenegro.

More information on CROPOS: **www.cropos.hr**

Unique transformation model HTRS96/HDKS

- GNSS measurements of trigonometric points using CROPOS

- over 3000 trigonometric points on the entire territory of Croatia

- New grid based transformation model

Croatian State Coordinate System HDKS ↔ Croatian Terrestrial Reference System HTRS96

- uniform, realiable and simple transformation between inherited local and new official geocentric reference system available to all users

Renovation of fundamental geodetic network control points

78 fundamental network control points - foundation for *Croatian Terrestrial Reference System HTRS96*

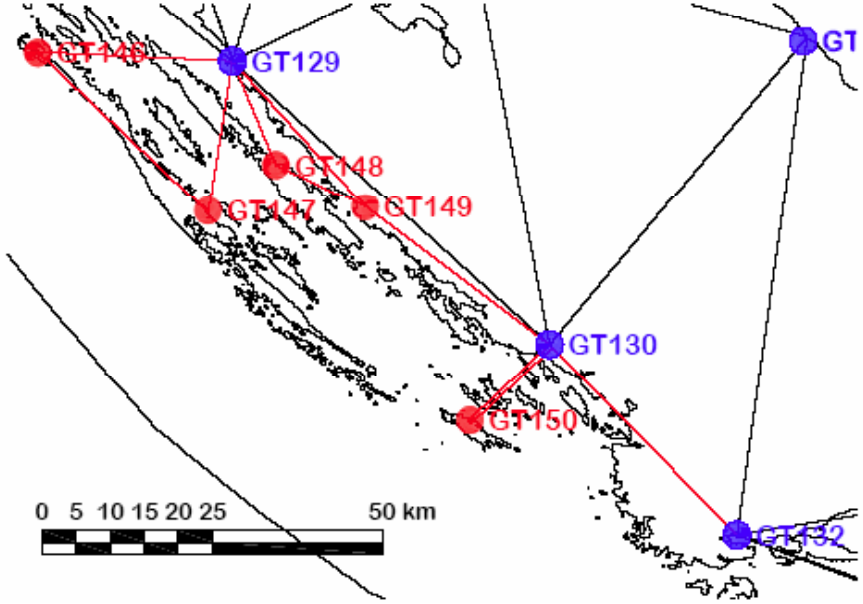
- renovation project : 2006. – 2008. → 31 pillars

SGA plan to renovate new 5 pillars in 2009.

Extension of 1st order gravity network on middle Croatian islands

- Croatian geodetic institute accomplished measurements of gravity network points on middle Croatian islands in 2008:

  - 3 existing gravity points of 1st order
  - 5 new established gravity points of 1st order



- GNSS measurements with CROPOS system
- relative gravity measurements

Further activities: Extension on south Croatian islands

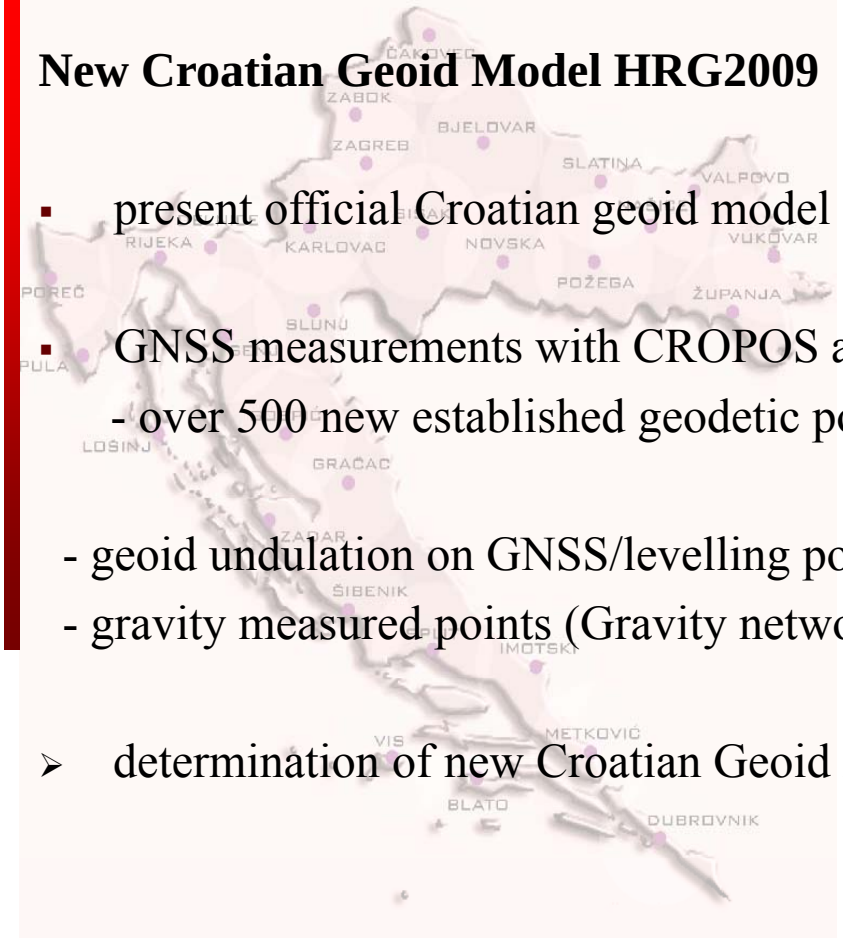
New Croatian Geoid Model HRG2009

- present official Croatian geoid model is HRG2000
- GNSS measurements with CROPOS and levelling measurements

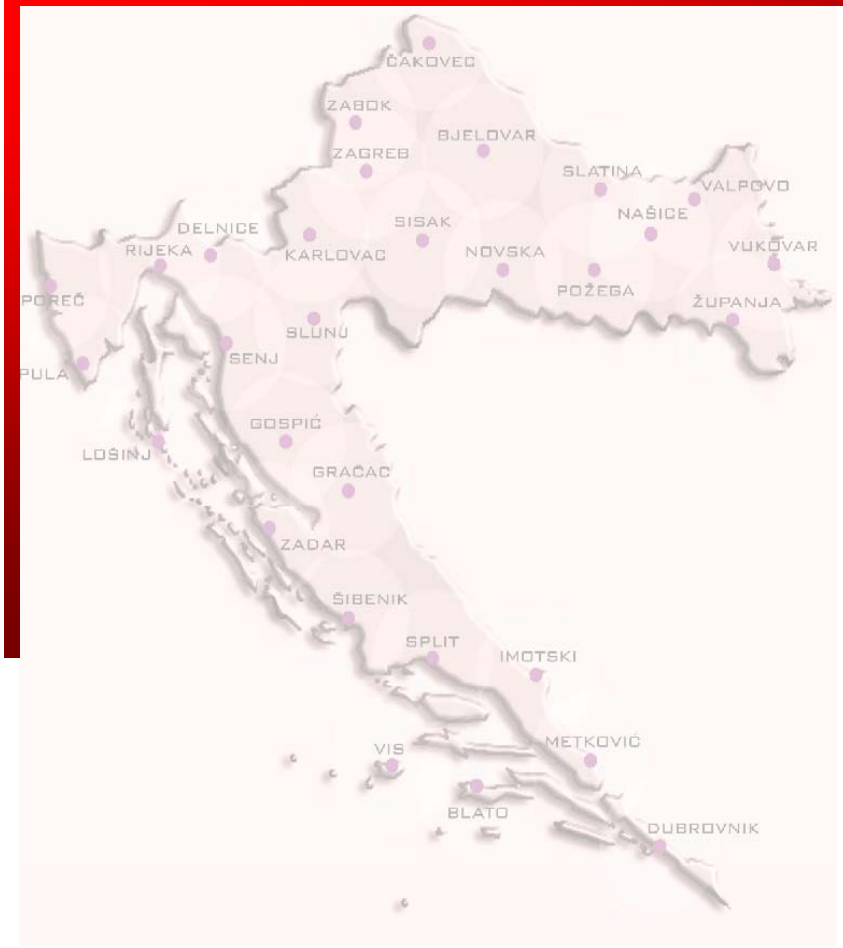
  - over 500 new established geodetic points in raster app. 10x10 km

  - geoid undulation on GNSS/levelling points
  - gravity measured points (Gravity network points of 0, 1, 2 order and EUVN network points)

- determination of new Croatian Geoid Model HRG2009



Information on gravimetry works: **www.cgi.hr**



Thank you for your attention!