19th EUREF Symposium

National report of Slovenia

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Florence, Italy

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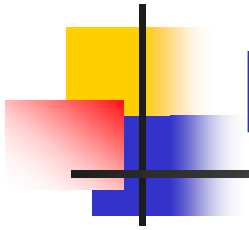
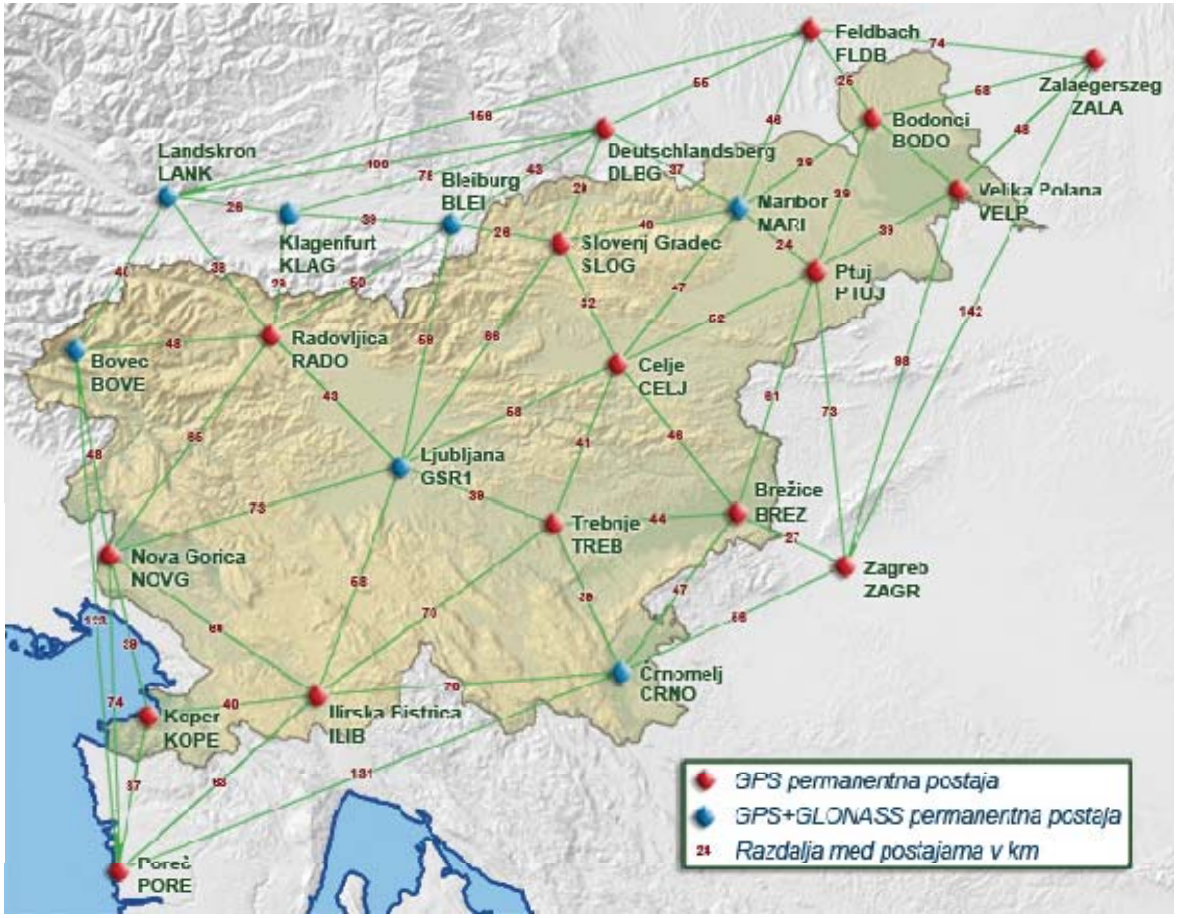


Presentation topics

- Positioning service (SIGNAL)
- Horizontal system
- Height system
- Gravimetric system and geoid
- To the new reference system

SIGNAL positioning service



- 15 stations
- + 5 Austrian
- + 1 Hungarian
- + 2 + 5 Croatian

SIGNAL positioning service

- EPN contribution:
  1 station (Ljubljana)

- ESEAS contribution:
  1 station (Koper) --->

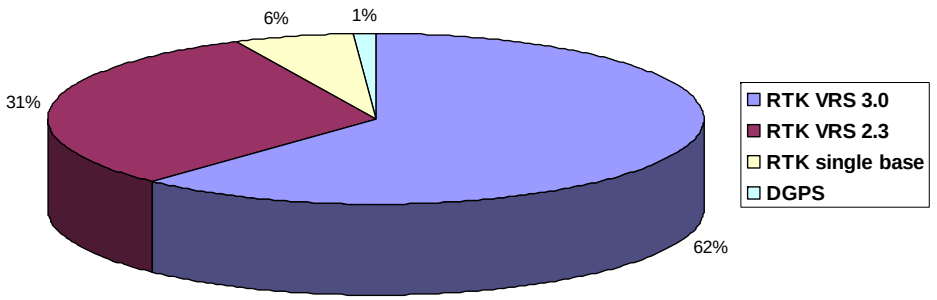
SIGNAL positioning service

- Free service of the Surveying and Mapping Authority of the Republic of Slovenia
- Operational, analytical, and data center at the Geodetic Institute of Slovenia
- Build-up in December 2006
- Users (2008):
  - 500 registred
  - 250 regular (mostly surveyors)
  - 50 different a day (average)

SIGNAL positioning service

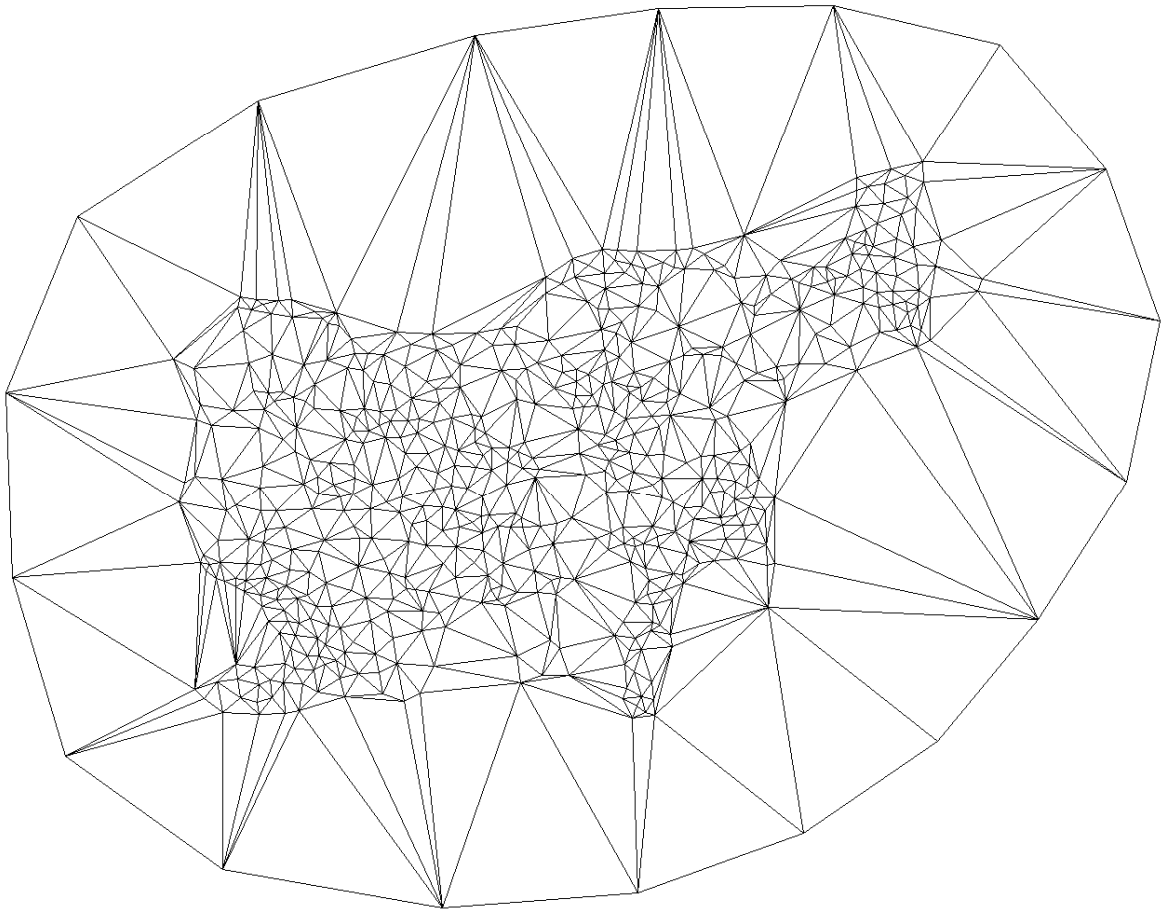
Products:

- DGPS corrections
- RTK corrections
  - single base corrections
  - network corrections (VRS)
- RINEX-data



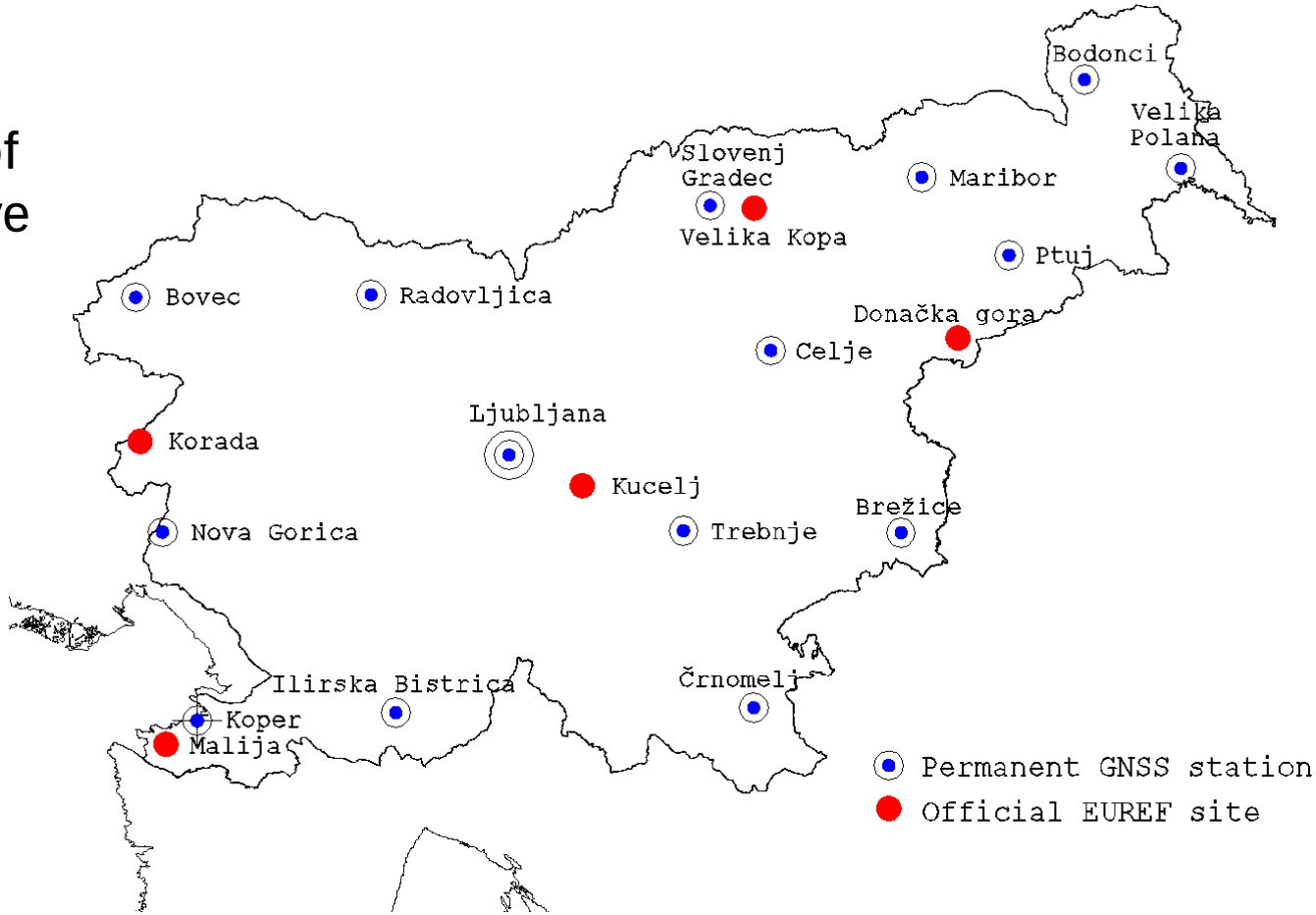
Horizontal reference system

- Further densifications of GNSS-sites
- All together about 2000 sites
- Studies of inhomo-genity of the old reference system
- 560 points selected as representative (tie points between old and new system)



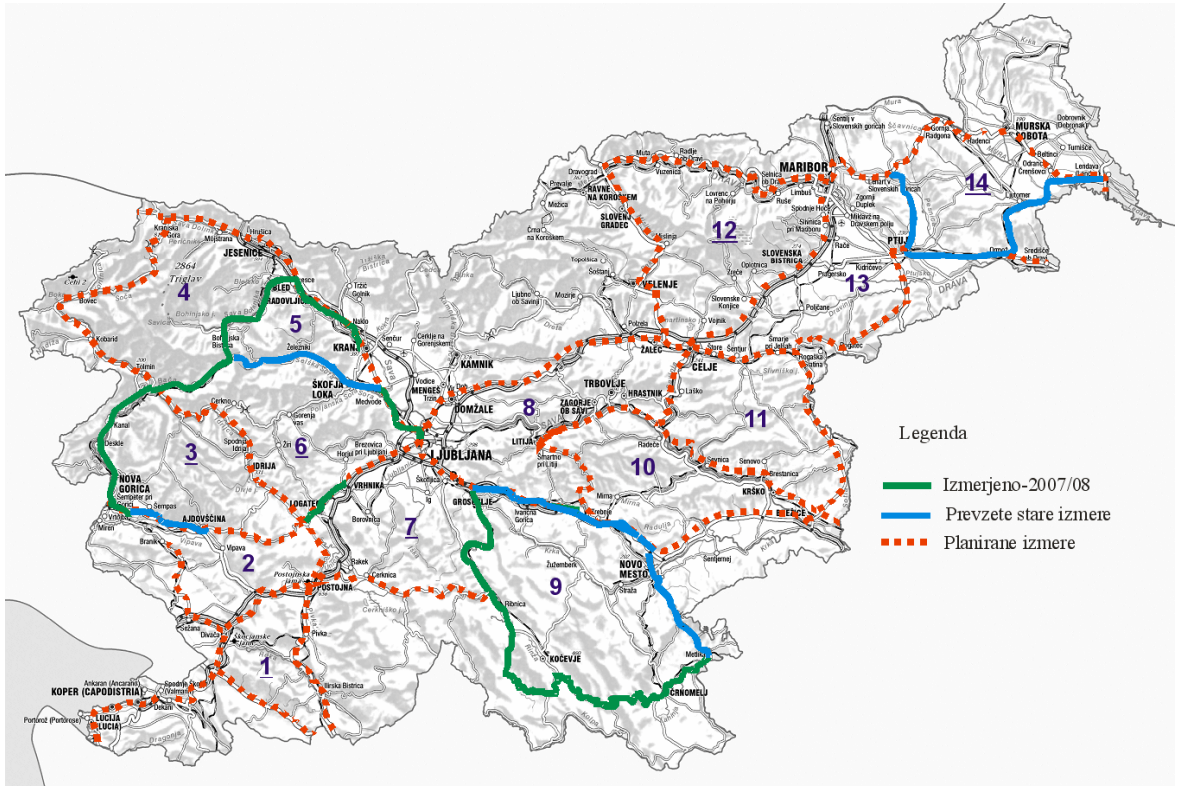
Horizontal reference system

- Studies of ways of harmonizing active and passive networks of Slovenia
- Proposals how to assure the quality of the reference system in long-term



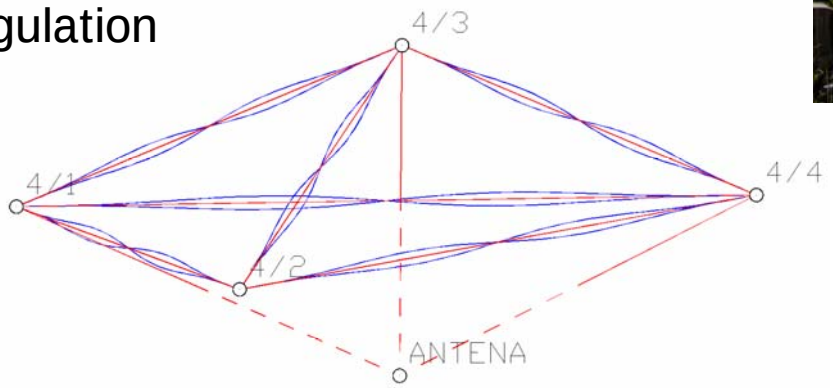
Height system

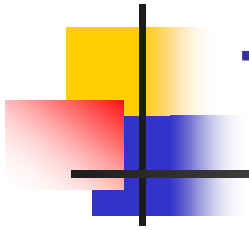
- Levelling
  - 130 km in 2007
  - 150 km in 2008
- Plan up to 2019
  - 120 km/year
- Plan for GNSS-measurement on levelling lines:
  36 hour-measurement
- Guideline for GNSS levelling



Gravimetric system and geoid

- Connection of permanent GNSS-stations with the primary leveling and gravimetric networks:
  - Precise levelling
  - Relative gravimetry
  - Precise microtriangulation
- 1 station (of 15): pilot project
  - Submilimeter accuracy achieved



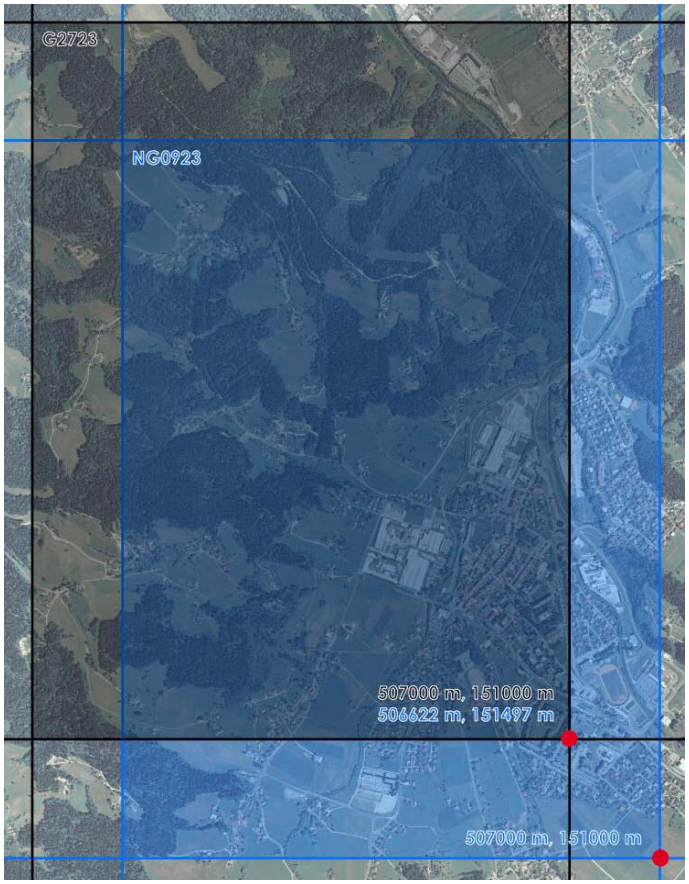


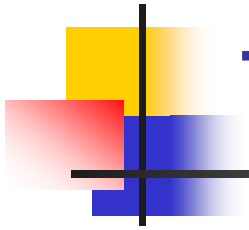
To the new reference system

- Transformation of maps:
  - 1:25000 (raster data)
  - 1:50000 (raster and vector data)
  - Submeter accuracy of transformation

To the new reference system

- New map index system for all basic scale levels:
  - 1:500
  - 1:1000
  - 1:2000
  - 1:2500
  - 1:5000
  - 1:10000





To the new reference system

- Protocol of transforming all spatial data (of the SMA) into the new reference system:
  - Technical solutions
  - Organizational protocol
  - Detailed time-table
  - D-day is 31. 12. 2010, but ...

Thank you for your attention