

NATIONAL REPORT

EUREF RELATED ACTIVITIES OF HUNGARY
2007-2008

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OUTLINE

- EUREF/EPN contribution
 - EPN LAC
 - 4 EPN station (PENC, OROS, BUTE, **SPRN**)
 - EPN time series analysis
 - TWG (EUVN_DA management)
- GNSS network development
- Leveling network re-measurement

EUREF/EPN CONTRIBUTION

SGO Local Analysis Centre

- ROUTINE ANALYSIS OF 35 EPN STATIONS ON WEEKLY BASIS
- CONTRIBUTION TO THE EPN RAPID ANALYSIS (DAILY SINEX SUBMISSION)
- ROUTINE **GNSS** ANALYSIS OF 70 GNSSNET.HU AND EPN STATIONS
- DAILY RAPID CUMULATIVE SOLUTION (BERNESE+CATREF) OF THE ABOVE 70 STATIONS

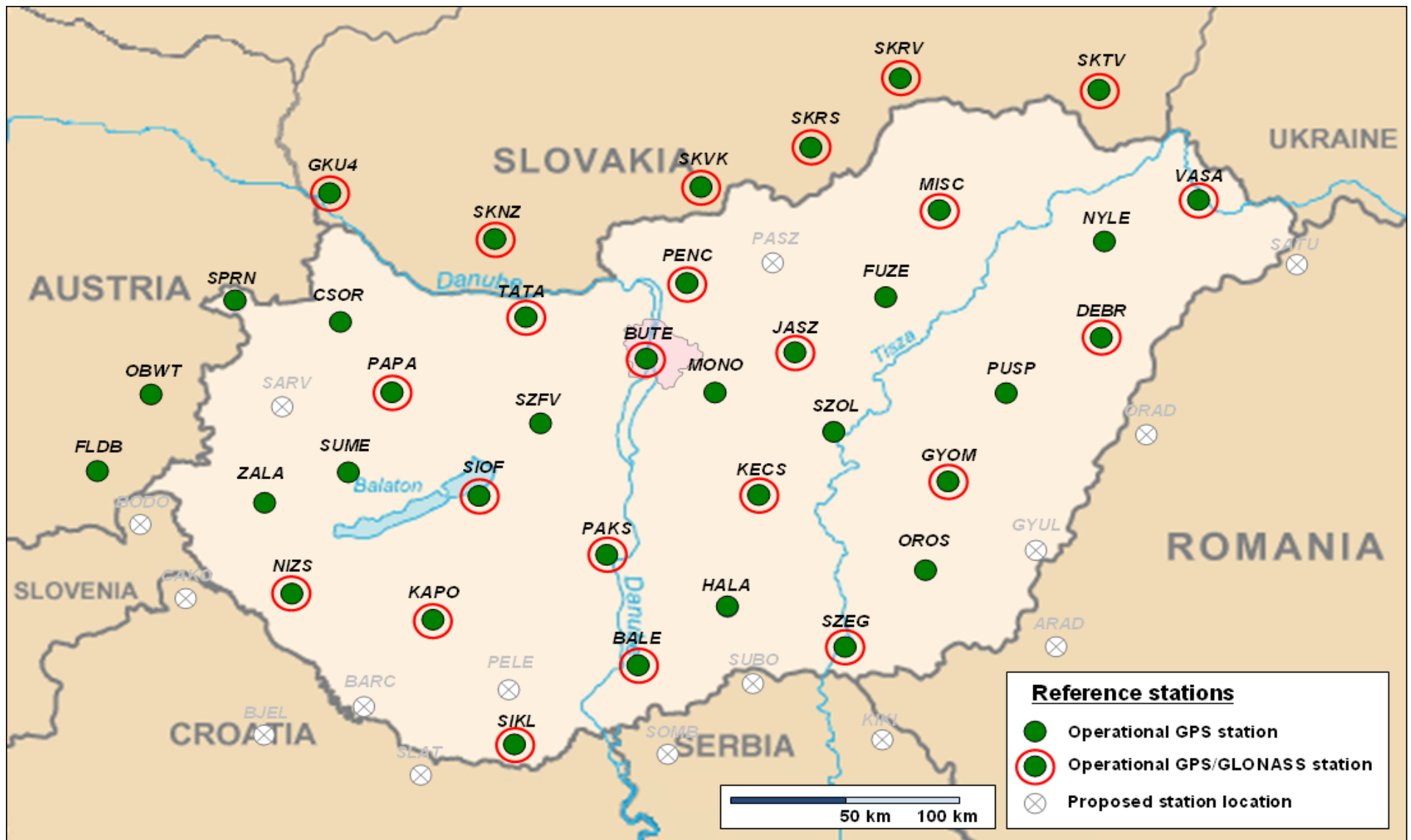
GNSS NETWORK DEVELOPMENT

„CLASSICAL“ EUREF SUBNET

- IN 2003 THE EUREF TWG HAS ACCEPTED THE 'UPGRADE' OF THE OBSOLETE '91 REALIZATION
- PRACTICAL IMPLEMENTATION WAS DELAYED, WAITING FOR THE INTRODUCTION OF THE ABSOLUTE PCVs AND THE NEW ITRF SOLUTION
- THE IMPLEMENTATION WAS FINALLY DONE IN NOVEMBER 2007, BASED ON ITRF2005. THE RESULTS ARE IN THE **ETRF2000 (R05)** FRAME!

GNSS NETWORK DEVELOPMENT

REAL-TIME NETWORK - GNSSNET.HU



GNSS NETWORK DEVELOPMENT

REAL-TIME NETWORK - GNSSNET.HU

- 29 STATIONS (15 LEICA GPS/GLONASS with **INDIVIDUALLY CALIBRATED ABSOLUTE PCV**) + 8 STATIONS FROM AUSTRIA AND SLOVAKIA (NEGOTIATIONS WITH THE ROMANIAN, SLOVENIAN AND SERBIAN COUNTERPARTS ARE UNDERWAY)
- 5 ADDITIONAL LEICA GPS/GLONASS EQUIPMENTS (ALL HAVE INDIVIDUAL ABSOLUTE PCV CALIBRATION) BEING INSTALLED IN 2008 COMPLETING THE NETWORK
- NETWORKED RTK SERVICE / GEO++ GNSMART SOFTWARE

LEVELING NETWORK DEVELOPMENT

- COMPLETE RE-LEVELING OF THE 1ST ORDER HEIGHT NETWORK (EOMA) 2007-2012
- PARALEL GPS MEASUREMENTS (12-36-hour sessions) - EOMA_3D NETWORK (ABOUT 600 HIGH QUALITY GPS/LEVELING SITES)
- **EOMA MODERNIZATION**

EOMA_3D → INTEGRATED NETWORK (GNSS, LEVELING, GRAVIMETRY, PS-InSAR)

TOGETHER WITH GNSSnet.HU THE INTEGRATED NETWORK WILL BE THE MAIN BEARER OF THE GEODETIC REFERENCE IN HUNGARY