The Current State and Prospects of the Positioning & Timing and Navigation System in Ukraine

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Positioning & Timing and Navigation System of Ukraine

The State Positioning & Timing and Navigation System of Ukraine (PTNSU) is aimed:

- to monitor the quality of radio-navigation fields of GPS, GLONASS, GALLILEO and other GNSS;

- to serve as an augmentation system for all GNSS and to provide customers with differential corrections;

- to monitor the quality of SBAS and GBAS services which are active in Ukraine.
PTNSU as a Regional Element of Galileo
Positioning & Timing and Navigation System of Ukraine (in 2013)

26 stations:
- SSAU (15)
- «System.net» (3)
- «Europromservice» (2)
- ZakPos (4)
- TNT (1)
- NAU (1)
Broadcasting of the wide area differential corrections PTNSU (in 2013)
Broadcasting of PTNSU differential corrections for zones (in 2013)
Positioning & Timing and Navigation System for Transportation
Positioning & Timing and Navigation System of Ukraine (present)
Joined National GNSS Network (JNGN) = 120 GNSS Reference Stations of (SSAU + NASU + System.Solutions) networks

We have 1-2 cm precision in RTK there where the JNGN is available!
Ukraine’s EGNOS and Galileo activities
Our Proposals to Expand EGNOS to Ukraine’s territory
From September, 2004 to April, 2005, Reference Station (Kharkiv) operated continuously as part of the EGNOS System Test Bed Reference Stations Ground Network. The performed activities included testing of the transfer of the Reference Station data to the ESTB system center.
Technical Pads of National Space Facilities Control and Test Center for RIMS EGNOS stations deploying

What will be guaranteed:
- security,
- storage of the equipment,
- maintenance by the prepared personnel,
- power supply,
- communication channels for information transfer,
- other necessary conditions
Regional Navigation and Information System

System of high-precision positioning

System of transportation monitoring

GPS
GLONASS
EGNOS
GALILEO
Thank you for your attention!