V. N. ASTAPENKO, V. T. MARCHENKO, N. P. SAZINA, P. P. KHOROLSKY

ANALYSIS OF CAPABILITIES OF NATIONAL INFORMATION MARKET FOR REMOTE SENSING AT HIGH RESOLUTION AS TO 2015

The study aim is to analyze the capability of the Ukrainian information market for remote earth sensing at high resolution, and to assess this volume in money terms. Comparison with the similar evaluations conducted by the authors in 2002 showed that for the period under review the space-based systems have been evolved with the optical and radar equipment at resolution of 1 m and more. The tendency for cost cutting the assessment and forecast of the environment in Ukraine with the necessary quality is demonstrated. Essentially, this is due to cost cutting the satellite images and a possibility to make free images on the Sentinel - 1A and Sentinel - 1B satellites to resolve non-operational tasks.

Keywords: remote earth sensing, market for information, resolution, frequency range.

 Assessment of national information market for remote earth sensing at high resolution (*in Russian*) / V. N. Astapenko, Ye. I. Bushuev, V. P. Zubko, V. I. Ivanov, P. P. Khorolsky // Kosmichna Nauka i Tekhnologiya. – 2002. – Vol. 8, No 1. – P. 15 – 22.

2. GeoEye.http://www.gisa.ru/info_see.php?id=1869

- 3. Concept of Development of the Russian Space system for Remote Earth Sensing in the Period prior to 2025. http://www.gisa.ru/file/file766.doc.
- 4. Providing radiometric compatibility of optical Earth-observation data in GEOOS (*in Russian*) / A. S. Panfilov, A. A. Burdakin, V. S. Ivanov et al. // Issledovanie Zemli iz Kosmosa. 2010. No 5. P. 87 94.
- 5. Ukrainian Law on National Program of Informatization (in Ukrainian) // Vidomosti Verkhovnoi Rady Ukrainy. 1998. No 27 28. 181 p.
- Kobernichenko V. G. Interferometry processing data of radiolocation space high imaging (in Russian) / V. G. Kobernichenko, A. V. Sosnovsky // Fizika Volnovykh Protsessov i Radiotekhnicheskie Sistemy. – 2012. – Vol. 15, No 3. – P. 75 - 83
- 7. National Report on Man- Made and Environmental Situation in Ukraine in 2014 (in Ukrainian) (State Service of Ukraine for Extreme Situations): http://www.mns.gov.ua/files/prognoz/report/2014/ND_2014.pdf.
- 8. National Report on Environmental Situation in Ukraine in 2012 (in Ukraine) (Ministry of Ecology and Mineral Resources of Ukraine) http://www.menr.gov.ua/index.php/dopovidi.
- 9. Satellites for RES. SkySAt-1, 2, 3 (in Russian) http:// mapgroup.com.ua/kosmocheskie-apparaty
- 10. Global Environmental Monitoring Sentinel Satellite Constellation (in Russian) http://mapexpert.com.ua/index_ru.php?id=98&table=news.
- National Land Imaging Requirements (NLIR) Pilot Project Summary Report Summary of Moderate Resolution Imaging User Requirements: http://pubs.usgs.gov/of/2014/1107/pdf/ofr2014-1107.pdf.
- 12. CEOS EO HANDBOOK CATALOGUE OF SATELLITE INSTRUMENTS: http://www.eohandbook.com/eohb2008/ earth_sat_instruments.html.