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## ASSESSMENT OF DEMAND OF NATIONAL MARKET FOR INFORMATION ON EARTH REMOTE SENSING

The work aim is to analyze the feasibility of the tasks of economic activities in Ukraine through the Earth remote sensing data with spatial resolution of 5 m and more. The potential of the national market of the Earth remote sensing data is assessed in the form of costs. When comparing similar assessments made by the authors back 15 years the trend of reducing the total cost of activities for assessing the state of the environment in Ukraine is demonstrated. Basically, this trend results from a decrease in costs of satellite photography and the capability of making free satellite photographs from the Sich-2-1, NOAA, TERRA, AQUA spacecraft.

**Keywords:** Earth remote sensing, market for information, spatial resolution, frequency band.

- Assessment of demand of national market for information on Earth remote sensing (in Russian) / V. N. Astapenko, Ye. I. Bushuev, V. P. Zubko, P. P. Khorolsky // Kosmichna Nauka i Tekhnologia. – 1999. – Vol. 5, No 4. – P. 31 – 40.
- Concept of Development of the Russian Space System for Earth Remote Sensing in the Period to 2025. Moscow, FSA, 2006 – 72 p. www.gisa.ru/file/file766.doc
- 3. Radiometric compatibility of optical data on Earth observation for GEOSS (in Russian) / A. S. Panfilov, A. A. Burdakin, V. I. Ivanov et al. // Issledovanie Zemli iz Kosmosa. 2010. No 5. P. 87 94.
- 4. TVIS Company is the First Supermarket for Satellite Photographs. <a href="http://www.tvis.com.ua">http://www.tvis.com.ua</a>.
- 5. Pixel Solutions. -http://www.pixelsolutions.com.ua.
- 6. Geoinformation Agency INNOTER initiates work of its branch in Ukraine. http://aa-magellan.com.ua/news/24 gia-innoter-soobschaet-ob-otkrytii-svoego-filiala-v-ukraine.html.
- Fedorov O. P. Space activities of Ukraine: approaches to strategy (in Russian)/ O. P. Fedorov, L. N. Kolos // Kosmichna Nauka i Tekhnologia. – 2011. – Vol. 17, No 1. – P. 3 – 11.
- 8. State Program for Environmental Protection and Recreation of Azov and Black Seas (in Ukrainian) (Vidomosti Verkhovnoi Rady (VVR), 2001, No 28, Art. 135).
- 9. National Program for Environmental Protection of the Dnieper River Basin and Improvements in Potable Water Quality (*in Ukrainian*) (Vidomosti Verkhovnoi Rady (VVR), 1997, No 41, Art. 279, 1997, No 42).
- 10. State Target-Oriented Ecological Program for Environmental Monitoring (*in Ukrainian*) (Decision of Cabinet of Ministers of Ukraine # 1376 accepted 5 December, 2007).
- State Target-Oriented Ecological Program for the Crimea Development (Environmental Safety of the Crimea) from 2011 to 2015 (in Ukrainian) ((Decision of Cabinet of Ministers of Ukraine # 539 accepted 25 May, 2011).
- 12. State Program for Formation of National Ecological Network of Ukraine in the Period 2000 2015 (in *Ukrainian*) (Vidomosti Verkhovnoi Rady (VVR), 2000, No 47, Art. 405).
- 13. Prospects for Market of Earth Remote Sensing over the Next 10 Years www.gisa.ru/file/file174.doc
- 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
- 15. Lyalko V. I. State and prospects for aerospace Earth research in Ukraine (in Ukrainian) / V. I. Lyalko // Kosmochna Nauka i Tekhnologia. 2002. Vol. 8, No 2/3. P. 29 35.
- National Report on the Ukraine's Environmental State in 2012 (Ministry of Ecology and Natural Resources of Ukraine). http://www.menr.gov.ua/index.php/dopovidi
- 17. Catalogue of satellite missions http://www.eohandbook.com/eohb05/ceos/part3\_3.html.
- 18. Requirements of Ukraine's State Committee for Hydrometeorology for Space Data (in Russian) (# K-2/148 dated February 9, 1998)
- CEOS EO HANDBOOK CATALOGUE OF SATELLITE INSTRUMENTS http://www.eohandbook.com/eohb2008/ earth\_sat\_instruments.html
- 20. Internet Space Photography http://geo.web.ru/db/msg.html
- 21. Price List for the Remotely Sensed Data Processing http://www.scanex.ru/en/data/default.asp?submenu =processing&id=prices.
- 22. Radarsat-2 Satellite Photography Geoprofile <a href="http://internetgeo.ru/innoter/radarsat2">http://internetgeo.ru/innoter/radarsat2</a>