EARTH OBSERVATION SYMPOSIUM (B1) Future Earth Observation Systems (2)

Author: Prof. Talgat A. Musabayev Kazakhstan, musabayev@kazkosmos.kz

Dr. Meirbek Moldabekov Institute of Space Techniques and Technologies, Kazakhstan, moldabekov@kazcosmos.kz Prof. Marat R. Nurguzhin Kazakhstan Gharysh Sapary, Kazakhstan, M.Nurguzhin@gharysh.kz Mr. Simbaj Dyussenev Kazakhstan, s.dyussenev@gharysh.kz Dr. S Murushkin JSC National Company Kazakhstan Gharysh Sapary, Kazakhstan, s.murushkin@gharysh.kz Dr. Bakhytzhan Albazarov Kazakhstan, b.albazarov@gharysh.kz Dr. Vladimir Ten Kazakhstan Gharysh Sapary, Kazakhstan, vladimir.ten@gmail.com

EARTH OBSERVATION SYSTEM OF THE REPUBLIC OF KAZKAHSTAN

Abstract

The Earth observation system of the Republic of Kazakhstan is expected to be fully operational by mid-2014. It will consist of two missions - a high-resolution satellite with GSD of 1 m by Astrium SAS, and a medium-resolution satellite with an optical imager with 6.5 m GSD in 5 multi-spectral channels identical to that used in the RapidEye constellation, along with associated ground segments.

The main purposes of the system and the program in general are to provide the governmental and commercial users in Kazakhstan with regularly updated imagery of the country, and to build the national capability in design and building the satellites and ground segments for future missions through an extensive hands-on know-how technology transfer program. The paper overviews the main performance points as well as architectural and programmatic aspects of the system and the program.