Paper ID: 56355 oral

IAF BUSINESS INNOVATION SYMPOSIUM (E6) Innovation: The Academics' Perspectives (3)

Author: Dr. Dmitry Payson Russian Federation

ON PROSPECTS AND ISSUES OF THE EARTH REMOTE SENSING INDUSTRY DRIFT TOWARDS THE PUBLIC GOOD MODEL

Abstract

The paper discusses the prerequisites and potential for considering the Earth remote sensing (ERS) and ERS data as part of the public good domain of the space economy. The public good category addresses very well the present situation with the basic GNSS signals that are free for everybody thus forming the unique global infrastructure that is now critical for a broad number of applications in the fields of security and quality of life. The current developments in the ERS field, and growing emphasis the commercial players put on the value added geoinformation services, rather than providing more or less 'raw' imagery, make the business concentrate on value added segments. On the other hand, the continuous raw data contract buys by the government players builds a stable foundation for the 'hardcore' imagery business making the operators more or less immune to the open geoinformation market peculiarities. The public good category is characterized by the non-excludability and non-rivalry, both qualities being demonstrated very well by the 'basic', 'civilian' GNSS of today (with some reservations concerning the crisis mode service limitation options). The significant amount of the current ERS data is distributed in a public good mode as well, including, to name some, the weather monitoring data directly downloaded to the individual ground stations for free as well as environment monitoring imagery from Copernicus. However, there still is an open question of how the whole ERS value chain would change if all publically available data (as opposite to the government's bulk purchases intended primarily for the security purposes) become a public domain / public good rather than 'just commodity' it basically is for today. The paper discusses the changes in the major types of the ERS data value chains as well as resulting benefits and risks for the space economy in case of the 'all up' industry transition towards the public good mode.