27th SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3) 29th IAA/IISL Scientific-Legal Roundtable: Controlling the Eyes in the Sky: Preventing Abuse of Space Data (5-E7.6)

Author: Prof. Krištof Oštir SPACE-SI, Slovenia, kristof.ostir@space.si

EARTH OBSERVATION – BETWEEN PUBLIC INTEREST AND PRIVACY

Abstract

During the last decades we have seen an exponential increase of Earth observation systems generation huge amounts of data. Many nations and organizations own their own satellites and many – developed and even developing – are joining them. Similar as with the Internet revolution, tremendous success of space technology and remote sensing is outpacing our understanding of regulatory aspects.

In the paper we will focus on the capabilities of the remote sensing imagery and image (information) processing. With todays systems we can get high spatial resolution (below one meter) data, that is capable to detect small objects and its changes due to spectral differences (high spectral resolution) every couple of days (good temporal resolution). The data is being processed automatically, almost in real time, and without human interaction in the stationary or mobile ground stations or close to them. The images and products are immediately served to the public via simple web based applications on desktop or mobile devices.

How much care is or should be given to the security of these systems? Should they be tightly controlled (and who should control it) or completely open? How should we balance between public interest and privacy? We are sure on one side that everyone should be notified about the extent of a natural disaster (fire of flood for example) but no one is willing to be tracked by the "big brother". In the paper several technical and scientific aspects of use and abuse of space data will be discussed to stimulate thinking and discussion of those important topics.