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

Author: Dr. Sergey Lysyy Russian Space Systems, Russian Federation, lysser@yandex.ru

Prof. Valery Menshikov

Space Systems Research Institute - Branch of Khrunichev Space Center, Russian Federation, valmensh@vandex.ru

Dr. Sergey Pushkarsky

Space Systems Research Institute - Branch of Khrunichev Space Center, Russian Federation,

niiks@khrunichev.com

Dr. Aleksandr Rad'kov

Space Systems Research Institute - Branch of Khrunichev Space Center, Russian Federation, niiks@khrunichev.com

INTERNATIONAL AEROSPACE SYSTEM FOR MONITORING OF GLOBAL PHENOMENA: PROSPECT OF CREATION AND PROGRESS OF WORK

Abstract

In 2007 at the 1st International Conference "Advanced Space Technologies for Humankind Prosperity" idea of creation of the International Aerospace System for Monitoring of Global Phenomena (IGMASS) was proposed for the first time. This system must provide authorities of the interested countries with timely information about imminent natural and man-caused disasters to weak their negative consequences at nature, industry infrastructure and people.

Creation of this system directs at realization of principle confirmed by life "Alerting of natural and mancaused disasters, weakening of their consequences and readiness for preventing actions is more economically sound than responding to their consequences".

In 2008 proposals concerning creation of IGMASS were presented at the 1st IAA-RACTs conference "Space for Humanity" (Korolev, Moscow Region, Russia), "Advanced Space Technologies and Their Application (Shanghai, China), 1st Mediterranean Astronautical Conference (Tunisia, Tunis). Proposals were also discussed at round table and IAA Scientific Activities Committee meeting during IAA Academy Day in Glasgow, Scotland.

As a result of this presentations and discussions IAA Study Group was organized. Members of this Study Group are representatives from Belorussia, France, Germany, India, Italy, Japan, Russia, Tunisia, USA, Ukraine

Overall goal of Study Group is to give proposals concerning creation of IGMASS for monitoring of global geophysical phenomena and forecasting of natural and man-caused disasters on the base of efficient development and sharing use of aerospace capability, advanced technologies in the field of the Earth lithosphere, atmosphere and ionosphere monitoring, data processing methods and instruments to provide global operative and short-term forecast of natural and man-caused disasters in the interesting of decreasing of the dangerous and negative consequences of global geophysical phenomena, natural and man-caused disasters.

Result of Study Group work is to prepare address on behalf of IAA to UN (UNEP – United Nations Environment Programme, UNOOSA – United Nations Office for Outer Space Affairs) with proposals on project of creation of IGMAS and starting of its realization.

In paper main directions and stages of IGMASS project promotion are reviewed.