Paper ID: 18335 poster

## 26th SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3) Poster Session (P)

Author: Dr. Yevgeniy Zakharchuk Western Scientific Center of National Academy of Sciences of Ukraine, Ukraine

## INTERNATIONAL COOPERATION OF UKRAINE IN THE FIELD OF SPACE EXPLORATION: SOME INNOVATIVE ASPECTS, POSSIBILITIES AND OPPORTUNITIES

## Abstract

Ukrainian governing institutions recognize that the development of space technologies is an important factor in determining a strategic position of the country in the world. However, the real impact of space activities on the socio-economic, scientific-technical and cultural development of society does not correspond to the potential of the space industry. In order to achieve the objective of promoting the progress of the state and participation in the resolution of common problems of mankind the Government of Ukraine developed and in January 2012 approved measures "Concepts of implementation of the government policies in the area of space activity until 2032". Conceptual development was based on the following methods: transfer of space technologies, innovations into the real sector of the state economy, expansion of scientific space exploration and intensification in creation of promising space technology, widening of commercialization of space activities and international cooperation. The main aims of the concepts are as follows: • to establish and improve national space system of Earth observation and geophysical monitoring "Sich", GIS software and emergency monitoring as part of the European program of Global Monitoring for Environment and Security - GMES and Global Earth Observation System of Systems - GEOSS; • to develop a national system of coordinate-time and navigation support using information obtained from systems such as GPS, Galileo, GLONASS used in different countries (U.S., EU, Russia, China); • to conduct a unique international experiment, according to the initiative of Ukrainian scientists, on the study of near-Earth plasma and to search for ionospheric earthquake precursors "Ionosat" (by cooperating with partners in Poland, Russia); • to participate in the exploration of the Moon using domestic spacecrafts; to develop scientific exploration program of Mars and other planets in the solar system; • to create innovative space rocket complexes "Cyclone-4" at the Alcantara Launch Center (Brazil), Taurus-2" (USA), aerospace complex "Air Launch" etc. The further expansion of international activities encounters the need to solve some problems of a systemic nature, regardless of the internationally accepted high quality prototypes of Ukrainian space technology. Implementation of the "Concepts-2032" will enhance the opportunities for international cooperation of Ukraine into exploration of outer space for peaceful purposes, will improve partnership with the European Union, the Russian Federation, the Federal Republic of Brazil, Canada, the United States, the Republic of Kazakhstan and the countries of the Asia-Pacific region, will intensify cooperation with the countries of the Baltic-Black Sea region.