

International Cooperation for Space Exploration (1)
International Cooperation for Space Exploration (3) (3)

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PROBLEMS OF ANTHROPOGENIC POLLUTION OF SPACE

Abstract

Existing intensity of investigation the space and an increase in the number of participants in space activities contribute to a significant increase quantity of Space Pollution. While increasing the rate of pollution, the use of some altitudes will be complicated or will be completely impossible. So, because of the space pollution, in the future, it will not be possible to use geostationary orbit where located space vehicles for various purposes - from communication satellites to systems of early warning of a missile attack. Also is polluting the area of low Earth circular orbits with an altitude of up to 2 thousand km, on which orbital grouping of space vehicles of various purpose and programs are being implemented for manned space flight and in the long term it is planned to organize works on the assembly of interplanetary space complexes. In addition, increasing the probability of termination functioning of existing spacecraft and the threat to safety launching new ones. It should be noted that the damage can made by debris particles up to 1 cm large, and avoid this type of collision practically is impossible due to lack of technology tracking particles of a given size. Serious consequences can have cases fall of large space objects on Earth, in areas of large concentrations of people and on the territory of hazardous industrial facilities. According to experts, in 40-50 years humanity will face the so-called "Debris rain" unauthorized space debris, some of which because of its size cannot completely burn out when passing through dense layers of the atmosphere, from orbits to the Earth. All this affects not only the provision of interests of national security of the states, but also to ensure global security generally, and it leads humanity to understand the need to solve this problem. However, this is possible only with joint efforts of the entire world community. The realities are such that in view of many factors (scientific, technical, legal and financial) no one country cannot solve this problem by oneself. At the international level, work on this problem is mainly going in the two structures – Scientific and Technical Subcommittee of the Committee The United Nations Space Agency and the Inter-Agency Committee on Space Debris. Since the problem of "space debris" affects the interests of all countries involved in space exploration, its solution needs an international legal basis and close cooperation.