Space Activities and the United Nations Programme on Space Applications

*TAKAO DOI*

1. United Nations Office for Outer Space Affairs

Space exploration fires people’s imaginations. Since the first human spaceflight in 1961, over 500 explorers from different nations have ventured into space, motivated by curiosity, the drive for knowledge, and the belief that space exploration could benefit people on Earth. The involvement of a growing number of countries means that space exploration and the use of outer space are now truly global undertakings. Given the great importance of international cooperation in the peaceful exploration and use of outer space, the Committee on the Peaceful Uses of Outer Space (COPUOS) fills the need for an intergovernmental platform at the global level in this regard.

The United Nations Programme on Space Applications was established in 1971 and has made substantial progress in fostering knowledge of and experience related to space applications around the world. The activities of the Programme are carried out by the Office for Outer Space Affairs, with the annual endorsement of COPUOS. The mission of the Programme is to enhance the understanding and subsequent use of space technology for peaceful purposes in general, and for national development in particular, in response to expressed needs in different geographic regions of the world.

The overall strategy of the Programme is to focus on selected areas that are critical for developing countries. Those priority areas of the Programme are: (a) environmental monitoring; (b) natural resource management; (c) satellite communications for tele-education and telemedicine applications; (d) disaster risk reduction; (e) development of capabilities in the use of global navigation satellite systems; (f) the Basic Space Science Initiative, including the International Space Weather Initiative; (g) climate change; (h) the Basic Space Technology Initiative; (i) the Human Space Technology Initiative; and (j) biodiversity and ecosystems.

The docking of the Apollo and Soyuz spacecraft in 1975 was the first international human space mission. Since 2000, a multinational permanent human presence in outer space has been maintained onboard the International Space Station (ISS). Since the beginning of the construction of the ISS, the Programme has invited experts to address topics such as the utilization of the ISS to provide benefits on Earth, and to discuss opportunities for developing countries to participate in research activities conducted on the ISS.

In addition, the need for capacity-building in space science and technology and their applications has increased in many non-spacefaring countries. In response to the interest expressed by many countries, the Programme considered activities related to human space flight and exploration, which led to the launch of the Human Space Technology Initiative (HSTI) in 2010.

HSTI is aimed at raising awareness among countries of the benefits of utilizing human space technology and its applications and at involving more countries in activities related to human space exploration through international cooperation, to make space exploration a truly international effort. The role of HSTI in these efforts consists of providing a platform to exchange information, to foster collaboration between partners from spacefaring and non-spacefaring countries and to encourage emerging and developing countries to take part in space research and to benefit from space applications.

Keywords: Space Activities, United Nations Programme on Space Applications, International Space Station