

# REVIEW OF ARTICLE I OF THE OUTER SPACE TREATY

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## Abstract

Article I of "The Outer Space Treaty" includes two significant provisions as to sharing benefits from space activities: "for the benefit and in the interests of all countries" and "the province of all mankind". This paper analyzes and re-interprets these two phrases.

Special attention is paid to the ITU Regime named the "Allotment Plan" for geostationary orbits and for radio frequency bands, which was established at WARC-ORB-85, 88. According to this Regime, at least one geostationary orbit and one radio frequency have been distributed to each country.

This Regime may be criticized for creating much "deadwood" in geostationary orbits and radio frequencies; nevertheless, it can be considered a major contribution to international cooperation in sharing benefits from space activities, especially from the viewpoint of equity between present and future generations.

## 1. Introduction

The Legal Subcommittee of the UN-COPUOS adopted in 1988 the new agenda named "Consideration of the legal aspects related to the application of the principle that the exploration and utilization of outer space shall be carried out for the benefit and in the interests of all States, taking into particular account the needs of developing countries"(1). In the negotiations conducted under this new agenda, how to share benefits derived from space activities has become one of the most important topics(2).

This paper therefore analyzes and re-interprets "The Principle of Freedom of Exploration and Use of Outer Space" (hereafter called "the Freedom Principle"), which is included in Article I of "The Outer Space Treaty"(3) (hereafter called the Space Treaty), from the viewpoint of sharing benefits from space activities; how to concretely share the benefits among all countries. This Principle is one of the most important rules in the Space Treaty; nevertheless, it is impossible for many developing countries to explore and use outer space freely and to obtain benefits from such space activities without cooperation with developed countries. In this analysis, attention is paid to two

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phrases in this Principle: "for the benefit and in the interests of all countries" and "the province of all mankind". For they might be related to the sharing of benefits from space activities by all countries.

## **2. The Principle of Freedom of Exploration and Use**

"The Freedom Principle" in Article I of the Space Treaty is generally interpreted to include three rights of states: "freedom of access", "freedom of exploration", and "freedom of use" (4). However, these freedoms have one restriction: "space activities shall be carried out for the benefit and in the interests of all countries, and shall be the province of all mankind". That is to say, this restriction can be considered to lay stress on space activities by all states.

Nevertheless, it is very difficult for many developing countries to employ these freedoms, for they do not have enough scientific skills and economic power. This restriction should therefore lead to international cooperation in space activities among all states. As Prof. Diederiks observes, the legal content of "the province of all mankind" is international cooperation in exploration and use of outer space without discrimination against any state and the duty to take the interests of all other states into account (5).

Concerning international cooperation, the Space Treaty makes the following provisions. Firstly, Article X provides that states parties shall afford an opportunity to observe the flight of space objects launched by other states parties. But such an opportunity for observation shall be determined by agreement between the

states concerned. Secondly, Article XI provides that states parties shall offer information about their space activities to the international community. But this offer is conditioned by a clause, namely "to the greatest extent feasible and practicable". Thirdly, Article XII provides that all stations on the moon and other celestial bodies shall be open to representatives of other states parties. However, it is impossible for representatives of developing countries to visit the said space stations without riding together in space vehicles of other states. Therefore, almost all the rules for international cooperation in the Space Treaty, which includes many conditions, would provide for not active but passive cooperation in space activities between states.

As mentioned above, "the Freedom Principle" offers all states the rights of freedom of access, exploration and use. However, it is only some developed countries which can actually exercise these rights. For many developing countries, international cooperation is needed in order to exercise these rights. Nevertheless, international cooperation under the Space Treaty is not clearly defined, especially to what extent states have to cooperate each other (6).

## **3. Related rules in the Moon Agreement**

Another provision concerning sharing benefits from space activities can be found in Article XI of the Moon Agreement (7): "the common heritage of mankind", the meaning of which is briefly examined (8).

Article XI, Paragraph 1 of the Moon Agreement states that "the moon and its natural resources are the common heritage of mankind", and

Paragraph 5 requires that an international regime to govern the exploitation of these resources shall be established by States Parties. On the occasion of its establishment, an equitable sharing of benefits by all States Parties, whereby the interests and needs of the developing countries, as well as the efforts of the contributing countries, shall be given special consideration according to Paragraph 7(d).

These rules provide for an equitable sharing of benefits by all states, but concrete rules for this sharing are not stipulated in the Moon Agreement; States Parties to the Agreement undertake only to establish the regime till the exploitation of those resources is about to become feasible under Paragraph 5 of the same Article. Therefore, in order to realize an equitable sharing of benefits from the exploitation of these resources, it will be necessary at least to set up a regime similar to the U.N. Seabed Authority under the Law of the Sea Convention(9).

In contrast, Article IV, Paragraph 1 of the Moon Agreement follows two phrases in Article I of the Space Treaty: "the province of all mankind" and "for the benefit and in the interests of all countries". Furthermore, it states that "due regard shall be paid to the interests of present and future generations as well as to the need to promote higher standards of living and conditions of economic and social progress and development" (underlined by author). And Paragraph 2 of the same Article also states that "states parties shall be guided by the principle of cooperation and mutual assistance in all their activities concerning the exploration and use of the moon".

The legal contents of the Moon Agreement are much stricter than those

of the Space Treaty. Because equity between present and future generations is taken into account in the rules of the Moon Agreement, and the principle of cooperation and mutual assistance in space activities is also emphasized by them. The concept of "Intergenerational Equity" can be considered to be unique and significant not only in environmental law(10) but also in space law(11), to which special attention is paid in the following part.

#### 4. The ITU Regime for geostationary orbits and radio frequency bands

In this part, the Regime of the International Telecommunication Union (hereafter ITU) for geostationary orbits (hereafter G-Orbits) and radio frequency bands is examined from the viewpoint of equity between present and future generations, which is mentioned above.

Over the years, one of the main purpose of the ITU has been to avoid interference with radio frequencies. To meet this need, the International Frequency Registration Board (IFRB) has been formed. The duty of the IFRB has been to accept the registrations of radio frequencies by any stations, and to publish them to the international community(12). Through this Registration System, the registered station has obtained a vested right to the specific frequency. In other words, "firstcome, firstserved" has become the principle in this matter. Therefore, many developing countries are worried about the possible exhaustion of radio frequencies by developed countries if this Registration System is also applied to space communications in addition to short- and middle-wave communications.

In 1973, the ITU adopted a new

convention, "The Malaga-Torremolinos Convention"(13), during the preparation of which controversies between developed and developing countries as to G-Orbits and radio frequencies occurred. That is to say, the former insisted that they were "re-usable resources", but the latter insisted that they were "limited natural resources" and that the equitable sharing of them should be open to all countries. In the end, the claim of the developing countries prevailed, and Article 33, Paragraph 2 of the Convention was adopted as follows:

"In using frequency bands for space radio services Members shall bear in mind that radio frequencies and the geostationary satellite orbit are limited natural resources, that they must be used efficiently and economically so that countries or groups of countries may have equitable access to both in conformity with the provisions of the Radio Regulations according to their needs and the technical facilities at their disposal (underlined by author)."

Furthermore, the ITU adopted an amended convention, "The Nairobi Convention"(14), in 1982. In this Convention, the last phrase of Article 33 Paragraph 2, "according to their needs and the technical facilities at their disposal", was deleted and replaced by the phrase "taking into account the special needs of the developing countries and the geographical situation of particular countries". This amendment could be looked at as resulting in a significant change in the meaning of the principle of equitable access. By emphasizing the special needs of the developing countries, this amendment requires that equity be measured not simply in terms of efficiency and economy(15).

Reflecting these amendments, the

World Administrative Radio Conference for the Broadcasting-Satellite Service (WARC-BS), which was held in 1977, has introduced a "Planning" system for frequency bands of 11.7-12.5 GHz. Under this system, at least one frequency band has been distributed to all states, irrespective of their technical abilities(16).

At that time, some developed countries, especially the United States, criticized this system for creating much "deadwood" in the frequency bands for the broadcasting-satellite service, and United States did not agree with such "Planning" in Region 2 (the North and South Americas). But United States finally agreed to it in 1983 in order to avoid interference with the frequencies, because the "Planning" in Region 1 (Africa, Europe, the Middle East, and Russia) and Region 3 (Asia and the Pacific) had already been established.

Moreover, as for G-Orbits, the World Administrative Radio Conferences on the Use of the Geostationary-Satellite Orbit (WARC-ORB-85, 88), which were held in 1985 and 1988 respectively, have established a Regime called the "Allotment Plan". According to this Regime, at least one G-Orbit has been distributed to each country, too.

Therefore, the principle of equitable access to G-Orbits and radio frequency bands by all states has been established instead of the principle of "firstcome, firstserved"(17).

Through this ITU Regime, "the Freedom Principle" in Article I of the Space Treaty has obtained a more positive interpretation: every state has the right to begin space activities at any time when it acquires the technical and economic abilities. In other words, a state which has already started space activities cannot insist upon a vested rights to them, and has

to modify its space activities in order to guarantee opportunities to new states.

Consequently, this interpretation of "the Freedom Principle" is worthy of attention from the viewpoint of equity between generations. For the opportunities of states to participate in the space activities will be guaranteed in the future.

## 5. Conclusion

In the 1996 session of the Legal Subcommittee of the UNCOPUOS, the Chairman of the Working Group submitted a Working Paper for a Draft Resolution called "Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interests of All States, Taking into Particular Account the Needs of Developing Countries" (18).

In this Draft Resolution, international cooperation in space activities is also emphasized. However, as Paragraph 2 states that "States are free to determine all aspects of their participation in cooperation ...", it is not necessarily clear to what extent states have to cooperate each other and how the benefits derived from space activities should be shared.

Therefore, the above-mentioned ITU Regime can be considered a major contribution to international cooperation in sharing benefits from space activities, especially from the viewpoint of equity between present and future generations. Because G-Orbits and radio frequency bands are "limited natural resources" and "re-usable resources" at the same time, International Administration is necessary in order to manage their use not only by all states but also by all gener-

ations.

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