OUTER SPACE AS THE PROVICE OF MANKIND – AN ASSESSMENT OF 40 YEARS OF DEVELOPMENT

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ABSTRACT

Article I stands at the very heart of the provisions of the Outer Space Treaty (OST), the *Magna Charta* of space law that celebrates its fortieth anniversary this year. Article I OST not only enshrines the fundamental principle of freedom of exploration and use of outer space by all states (paragraph 2), but it also contains an important limitation to such exploration and use in its paragraph 1. Over the past forty years, the exact scope and content of this latter provision has given cause to much debate, however. Against the background of the developments during forty years of the Outer Space Treaty's existence, this paper shall first examine the original concept of the wording "province of all mankind". It then examines in how far outer space can be perceived as the "province of all mankind" in an era of privatisation and commercialisation of space activities. Finally, it shall evaluate what follows from this perception for the exploration and use of outer space.

INTRODUCTION

Article I para. 1 of the OST has a quite vivid history. Rooted in the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space[1] its incorporation into the Outer Space Treaty did not resolve doubts about its legally binding nature altogether. To some extent, its broad wording accounted for these doubts, the broadness of which has moreover given room to various interpretations of its exact content.

At the beginning, the objective was clearly to require states to internationally co-operate in their space ventures, by calling attention to the essential needs of mankind.[2] What remained unclear, however, was the obligation resulting thereof. Due to the different interests at stake, there were and are obvious tensions between the developing countries' contentions that Article I para. 1 contained concrete obligations of international cooperation to the advantage of the developing world and the space-faring nations' negation of such an obligation. These contentions have at their core that although Article I para. 1 OST may contain a general obligation to co-operate it does not contain any specific obligations. In this perspective, parallels can be drawn to the coming into existence of the concept of Common Heritage of Mankind.[3] While developing countries had been active in promoting their interests especially in the years leading up to the Space Benefits Declaration of 1996[4], the final shape of this Declaration that somewhat can be understood as an authoritative interpretation of Art. I para. 1 OST suggests that specific obligations require explicit further co-operation of developed nations, based upon their free will.

In the following, particularly in the first paragraph the conception of Article I para. 1 of the Outer Space Treaty will be laid down as was anticipated when the Outer Space Treaty was drafted and put into place in the 1960s. Then, this theoretical framework will be measured against the state practice of the past 40 years. In different fields like launching services, telecommunications, particularly with the positioning of satellites in the Geostationary Orbit, or remote sensing of the Earth, or satellite navigation, one will come to an assessment as to the importance of this key provision of outer space legislation. Moreover, this overview will be mirrored in the 1996 United Nations General Assembly Resolution on the current legal value of the provision before some remarks as to the future importance of Article I para. 1 will be made. This shall finally allow for an overall assessment on whether or not and in what respects outer space can be considered the common province of all mankind.

I. THE CONCEPTION OF ARTICLE I PARA. 1 OF THE OUTER SPACE TREATY

Without any doubt, the mankind provision in Article I para. 1 of the Outer Space Treaty of 1967 is the key provision of outer space legislation.[5] It is not only the key provision of the Outer Space Treaty – it symbolises also a certain philosophy, not only of the Outer Space Treaty, but of general outer space legislation and of general international law. Therefore, the attempt will be made to make an assessment of the development of this provision during the past 40 years. This should also shed light on the current and future direction of outer space legislation against the background of some state practice.

According to Article 31 of the Vienna Convention on the Law of Treaties[6] any interpretation of the Outer Space Treaty has to start to start with the wording. The designation of the exploration and use of outer space as "province of all mankind" makes it clear that already from the wording, the province concept seems to be some kind of a counter-balance to the principle of freedom of the exploration and use. The Outer Space Treaty does thus not grant unlimited freedom of exploration and use. Freedom is guaranteed only to the extent that such exploration and use is carried out for all mankind. It is more or less uncontested and undisputed that the freedom of exploration and use is an important part of outer space legislation.[7] This freedom is, for example, severely limited by the designation of outer space and the celestial bodies not to be subject to any claim of national sovereignty or to other means of national appropriation in Art. II OST. Properly understood that means that no state on Earth may extend its sovereignty over celestial bodies or parts of outer space.[8] Moreover, outer space, according to Article IV of the Outer Space Treaty, shall be used solely for peaceful purposes, shall be used in an ecologically somewhat not harmful manner (Article IX), and be, again, the "province of all mankind". Thereby, the Outer Space Treaty in its Article I para. 1 specifies this notion to the effect that the exploration and use of outer space and of the celestial bodies shall be carried out for the benefit and in the interest of all countries irrespective of their degree of economic or scientific development. To be the province of all mankind has thus something to do with the existing gap of scientific and economic development of states. The provision insists on the irrelevance of any difference on the basis of the stage of development for the use of outer space.[9] Art. I para. 1 OST has a very distinct normative value because it gives a description clearly different from the factual economic status of the states in 1967. The situation of 1967 was characterised by the existence of only two space powers – the United States and the USSR – and of only governmental space activities. The aim of the common province conception is thus to achieve a totally equal use of outer space by all states although the reality did and does not meet this parameter.[10] Since outer space and the celestial bodies are

considered to be the province of all mankind, the Outer Space Treaty abstains from economic and technological facts and refers to a (different) normative reality that aims at bridging the gap of development between non-space-faring and space-faring nations.[11] By transcending the prohibition of appropriation of outer space and the celestial bodies any monopoly in using outer space or any use of outer space that is oriented at purely national interests and thus tries to impede any accession of new states to the close circle of users of outer space is the aim of the common province conception.[12] Thus, the Outer Space Treaty tries to implement a conception that aims at material equality rather than formal equality and consequently negates the existing formal inequality of states. It thus contains several demands: On the one hand, non-space-faring nations shall participate in the use of outer space and, on the other hand, if that is impossible they shall be enabled to do so through the aid of developed nations.[13]

Taking into account as an additional means of interpretation according to Article 32 of the Vienna Convention on the Law of Treaties that the situation since the launch of the first artificial satellite Sputnik 1 in 1957 was characterised by the search for a compromise between the superpowers[14], it was in the interest of those powers and third states not to allow the use and exploration of outer space solely in the interest of the dominating space powers. The early phase of the United Nations negotiations on the peaceful uses of outer space that led to the inception of the United Nations Committee on the Peaceful Uses of Outer Space with its two sub-committees – the Legal and the Scientific Sub-Committee[15] – was characterised by the conviction to come to limited agreements in order to impede an unlimited arms race in outer space.[16] Early declarations of the US as well as of the USSR of 1962 and 1963 already incorporated the idea of the use in the interest of all mankind which later on found its expression in Principle 1 of the Outer Space Declaration of 1963.[17] During the negotiations in the Outer Space Committee, particularly the developing countries focused of course on Article I para. 1 as being arguably sympathetic to their interest of changing the international economic order.[18] But also the representative of the United States of America expressed the opinion that the Outer Space Treaty would give an expression of a "spirit of compromise shown by the space powers and the other powers (which) had produced a treaty which established a fair balance between the interests and obligations of all concerned, including the countries which had as yet undertaken no space activities".[19] In the view of the American representative, Article I para. 1 OST was considered as a "strong safeguard for those states which at present had no space program of their own".[20]

In sum, this clearly indicates that Article I para. 1 OST had as its aim an approach that disregards national interests and takes up the interests of all mankind. Outer space shall not be used in the interest of nation states alone, but shall be used and explored in the interest of all humankind.[21]

Moreover, it has to be very clearly pointed out that Article I para. 1 OST is a provision of legally binding character that arguably contains an obligation to cooperate.[22]

The consequences derived from such a provision are, however, controversial. The clause in itself does not give any hint as to its legal consequences. Is because of the mankind-orientedness of outer space, any profit-oriented use and exploration of outer space totally prohibited? One should certainly not go so far, but understand Article I para. 1 of the Outer Space Treaty as specific part of the *iustitia distributiva* (distributive justice). Thus, the following consequences can be derived from the common province clause of Article I para. 1[23]:

- the necessity to grant participatory rights for outer space activities of all states,
- the granting of conditions for a totally free use outer space resources,
- the participation of all states in the use of these resources,
- the participation of all states in the usages of outer space,
- the enabling of non-space-faring nations to enact outer space activities on their own.[24]

Thus, in sum, Article I para. 1 of the Outer Space Treaty contains next to the prohibition of the appropriation another important restriction of the freedom of use of outer space. It orientates the use of outer space towards the common benefit of all mankind and thus negates the guarantee of such use being oriented towards national interests of states. It thus anticipates the later formula of "common heritage of mankind" as a limitation of the freedom of the use of the international commons.[25]

II. STATE PRACTICE CONCERNING ARTICLE I PARA. 1 OF THE OUTER SPACE TREATY

Against this theoretical background, the practice of states – relevant according to Art. 31 para. 3 lit. b of the Vienna Convention on the Law of Treaties - has to be observed in order to gain an understanding whether and how the main ideas as contained in Article I para. 1 of the Outer Space Treaty have been implemented in practice as well.

1. State Practice

1.1 Launching Services

Regarding launching services, the eternal duopol between the United States and the Soviet Union has been enlarged. Since 1973, Europe has become the third space power merging its efforts into the European Launching Development Organisation (ELDO) and later the European Space Research Organization (ESRO) that was instrumental to install the Ariane Programme.[26] Under the successor organisation, the European Space Agency ESA, the Ariane Programme belongs to the mandatory programmes of the Agency.[27] ESA thus has 17 member states and therefore a great number of European states being engaged in launching activities. Moreover, India, Pakistan, and most recently the People's Republic of China have established their launching capacity, a fact that, on the one hand, is important under military aspects, but also for non-military activities. Therefore, one can speak of an enlargement of the launching states. Since recently Japan belongs also to this group. In sum this enlargement certainly still does not have the effect that a large number of states of the international society is involved in these activities.

1.2. Satellite Communications

With regard to satellite communications, the foundation of the International Telecommunications Satellite Organisation INTELSAT in 1971 was an originally not for profit oriented organisation of about 140 member states that was rather representative for the entire international community.[28] However, in the year 2000, both INTELSAT and the International Maritime Satellite Organisation INMARSAT went into privatisation. This privatisation has been observed as being "contrary" to Article I of the Outer Space Treaty".[29]

Moreover, with regard to the access to radio frequencies and positions on the geostationary satellite orbit we can find in the more recent past the expression of the new idea of "common province" in the form of a replacing of the "first come, first served" approach by a different approach to distributive justice. Access to the most often used radio frequencies and orbital locations in outer space was traditionally essentially based on a "first come, first served" practice. This practice had been reconsidered mostly at the demand of developing countries. Although Article 44 para. 2 of the ITU Constitution now recognises that frequencies and orbital positions are limited natural resources

and the provision imposes an obligation on ITU member states to use this scarce resource efficiently and economically, in order to ensure an equitable access by all countries there is no definition of such equitable access. Equitable access in practice has so far only to a limited extent been affected by two allotment plans for the broadcasting satellite services operating in the 12 GHz band and the associated feeder links and the six satellite services operating in 6/4 GHz and 14/11 GHz bands. Several mainly developed countries started to register also so-called "paper satellites" by reserving orbital positions and frequency bands for possible future use or for commercial resale to another user at a later date. According to the ITU in 2002, the backlog of satellite systems awaiting full registration stood at around 1200. When ITU was regularly receiving between 400 to 500 requests for new systems each year only around 1/10 of such "systems" would ever be launched. In order to address the problem of "paper satellites", the ITU has recently adopted several legal rules and procedures governing the use of radio frequencies and the Geostationary Orbit to certain positions. The possibility of cancellation of the registered satellite positions if not used within the allowed time period, the charging of registration application processing fees, the imposition of due diligence procedures as administrative means for the notification to ITU, and the limitation of time for bringing into use the satellite systems registered with the ITU are measures that have been implemented by ITU in order to get rid of the problem of "paper satellites". But in sum one must say that only to a limited extent the "first come, first served" approach has been really changed.[30]

1.3. Satellite Remote Sensing

To cut a long story short: the current remote sensing satellite policy that is characterised by the privatisation of e.g. the United States Remote Sensing Satellite Systems[31] would require the conclusion of an international legally binding agreement supplementing the UN Resolution on Remote Sensing of 1986. Such new code is necessary in order to ensure the ready and non-discriminatory access to satellite imagery in all forms for civilian, commercial and peace-keeping purposes and to prohibit the use of force against all remote sensing satellites that are operating in accordance with international law. Thus, an understanding of the common province clause of Article I of the Outer Space Treaty to the effect that all countries should have access to and profit from satellite imagery is still not the reality.[32]

2. Evaluation

These three examples may suffice. The state practice is more or less reflected by the above mentioned resolution of the United Nations General Assembly of 1996 entitled "Declaration on international cooperation in the exploration and use of outer space for the benefit and in the interest of all states, taking into particular account the needs of developing countries."[33] This was the significant attempt of developing countries to come to a comprehensive and mandatory conclusion as to the current status of interpretation of Article I para. 1 of the Outer Space Treaty. And it is significant that the two crucial paragraphs of this resolution are on the one hand the granting of complete freedom of states to determine the way and the scope of their cooperation in the exploration and use of outer space and of the celestial bodies (para. 2). Moreover the declaration determines that any kind of international cooperation should be pursued in a most effective way that is adequate for the participating states (paras. 5 and 6).

This development shows a remarkable coherence with the new state of affairs since the end of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) in 1994.[34] The final document of the GATT Uruguay Round was proof of the fact that the developing countries had changed their attitude, abstained from their previous confrontation with developed states and had embarked into a rather cooperative

attitude with them by showing an interest for an improved market access for their products by way of a lowering of the customs and an abolishing or transferring of non-tariff barriers. Thus, in essence, the UNGA Resolution 51/122 of the General Assembly of 13 December 1996 reflected the attitude that is more and more sceptical towards any kind of cooperation implemented by law and tries to grant freedom of access to states be they economically strong or weak.

IV. SOME REMARKS AS TO THE FUTURE IMPORTANCE OF A COMMON PROVINCE PROVISION

One can thus speak of a narrowing-down of any previous attitudes towards international cooperation with the aim of bridging the economic and technological gaps between the developed and the developing world. As kind of a preliminary résumé, two ideas must be closely considered: How will the law-making principle of consensus decision-making in the United Nations Committee on the Peaceful Uses of Outer Space and the General Assembly influence the future development of international space law in particular with regard to its Article I para 1? Moreover, it is questionable how the gradual and increasing privatisation of outer space commercial activities will influence the general interpretation of Article I para. 1 of the Outer Space Treaty.

As to the method of decision-making in the respective UN fora, one must clearly state that the consensus decision-making principle impedes any quick reaction of the international community towards important developments.[35] Rather, by way of searching for a compromise by all participating states, the progress of law-making or law-preparing is rather slow. It may thus be doubted whether the international community under the rule of the consensus decision-making concept might be capable in the foreseeable future to come even to conclusive results with regard to a further strengthening of the province of all mankind conception behind Article I para. 1 of the Outer Space Treaty. Ironically enough, the principle of consensus that initially was to preserve certain interests of developing countries could be one of the most serious impediments for a real progress with regard to an interpretation of Article I para. 1 that preserves the interests of developing countries.

Moreover, new activities particularly in the field of space tourism that could develop into a flourishing industry in which it may become possible to go into outer space for around 200,000 US $ per flight and person[36] might bring in a new factor of assessment with regard to outer space activities to be carried out for the benefit and in the interest of the international community as a province of all mankind. Such activities will most probably for the first time strengthen the position of private enterprises to the effect that their interests may be somewhat reconciled with the common interests as envisaged by Article I para. 1 of the Outer Space Treaty. As we have noticed, Article I para. 1 of the Outer Space Treaty does not prohibit at all to undertake (profitable) space activities, but again enables those enterprises that possess the respective technology to achieve such commercial results. And this will be more or less the enterprises from the most highly developed states. Taking this development into account, there might be a necessity to interpret Article I para. 1 of the Outer Space Treaty into a direction which has already been laid down by Resolution 51/122 of 13 December 1996. It may affect the attitude of each member state – as can be expressed in their national space legislation[37] - how much freedom to act it may grant to its enterprises and in how far a liberal environment will be created for each enterprise to go for profitable space activities.

Thus, the minimum contents of the common province idea currently seems to be that by way of the progressive engagement of private actors in outer space activities, the only profit all mankind might have from these activities is that some progress is made in the

common understanding and use of outer space. It is thus the typically utilitarian paradigm of allowing others to somewhat profit from the individual progress.[38] That would in fact mean that the entire inspiration of Article I para. 1 of the Outer Space Treaty of painting the basic layout of distributive justice for outer space activities would be entirely reduced with a legal result that is indicated by the quoted UNGA Resolution 51/122 of 1996.

CONCLUSION

What can be concluded from the history of the common province clause of Article I para. 1 over the past 40 years? What does it mean today that the exploration and use of outer space and the celestial bodies are the province of all mankind?

Having a look into the original conception and the later implementation of the concept in the practice of the various states as well as into the most recent developments, one must realistically conclude that any idea of distributive justice in the sense that had been originally included in Article I para. 1 of the Outer Space Treaty has been totally abandoned. Rather, the main philosophy of the exploration and use of outer space as being the province of all mankind is today to enable states to explore and exploit outer space resources in order to make sure that through the significant progress of individual countries the progress of the entire mankind is guaranteed. It thus reflects a picture of the globalised world that more than anything else is determined by the rationale of the market, i.e. of profitable (space) activities. This may be the new conceptual idea that could also be transferred to other fields of international activities and the respective accompanying international law. It would mean that after the first change of international (space) law from a law of coexistence towards a law of cooperation,[39] the third stage of development, the law of globalisation is characterised by an entirely utilitarian outlook.[40]

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[1] UNGA Res. 1962 (XVIII) of 1963.
[2] See Hobe, Die rechtlichen Rahmenbedingungen der wirtschaftlichen Nutzung des Weltraums (The legal framework for commercial space activities), 1992, 92 et seq., 93 et seq.
[3] On the development of the common heritage of mankind concept, see Baslar, The concept of the common heritage of mankind in international law, 1998, 1 et seq.; Hobe, Was bleibt vom gemeinsamen Erbe der Menschheit, Liber Amicorum Jost Delbrück, 2005, 329 et seq.
[4] UNGA Res. 51/122 of 13 December 1996 „Declaration on International Cooperation in the Exploration and Use of Outer Space for the Development and in the Interest of all States, Taking into Particular Account the Needs of Developing Countries".
[5] This opinion is shared by Hobe, note 2, 62 et seq.; Wolfrum, Die Internationalisierung staatsfreier Räume, 1984, 278 et seq.; Jakhu, Legal issues relating to the global public interest in outer space, JSpaceL 32 (2006), 31, 37 et seq.
[6] UNTS Vol. 1155, 331.
[7] Hobe, note 2, 62 et seq. with further references.
[8] Hobe, Adequacy of the Current Legal and Regulatory Framework Relating to the Extraction and Appropriation of Natural Resources, Annals of Air and Space Law (2007), 115 et seq.
[9] See Hobe, note 2, 94 et seq.
[10] Hobe, note 2, 95; Wolfrum, note 5, 285; Jakhu, note 5, 48.
[11] Wolfrum; note 5, 284, 284; Hobe, note 2, 94, 95.
[12] See Wolfrum, note 5, 285, 286; Jakhu, Developing countries and the fundamental principles of international space law, Liber Amicoum Wolfgang Abendroth, 1982, 351, 364; Hobe, note 2, 96.
[13] See Hobe, note 2, 96, 97; Wolfrum, note 5, 286.
[14] See W. McDougall, The Heavens and the Earth, 1990, 41 et seq.
[15] See on this, Dembling in: Jasentuliyana/ Lee (eds.), Manual on Space Law, 1979, 1 et seq.
[16] USSR: UN Doc. A/C.1/SR 1492, 429 paras. 13, 14; USA: UN Doc. A/C.1/SR 1492, para. 6; see Hobe, note 2, 100 et seq.
[17] See Christol, Modern International Law of Outer Space, 1982, 36 et seq.
[18] On the close link to ideas of the new international economic order see Hobe, note

2, with further references with regard to the negotiations.
[19] UN Doc. A/C.1/SR. 1492, para. 6.
[20] UN Doc. A/C.1/SR. 1492, para. 6.
[21] Jakhu, note 5, 47-49.
[22] Jakhu, note 5, 49 et seq.
[23] See only Jakhu, note 5, 107-110; Hobe, note 2, 104-113 (108-110).
[24] See on the problem of a specific promotional obligation Hobe, note 2, 108.
[25] Hobe, note, 2, 112 et seq.
[26] See the Arrangement between certain European Governments and the ESRO concerning the Execution of the Ariane Launcher Programme of 21 September 1973 in: ESA Basic Documents, Vol. II, Section G 2 a, 1977, reprinted in: Böckstiegel/Benkö/Hobe (eds.), Basic Legal Documents, D.II.1.2.
[27] See on the history and the organisation of the Agency Spude, Integrierte Zusammenarbeit: Die europäische Weltraumorganisation ESA, in: Böckstiegel (ed.), Handbuch des Weltraumrechts, 1991, 667 et seq. and at 722 et seq. on voluntary programmes like the Ariane Programme.
[28] Colino, International Telecommunication Satellites Organization (INTELSAT) in Jasentuliyana/Lee (eds.), Manual on Space Law, Vol. I, 1979, 363 et seq.
[29] Lyall, On the privatisation of INTELSAT, JSpaceL 28 (2000), 109-119; Polley, INTELSAT, 2002.
[30] Jakhu, note 5, 72 et seq., 75.
[31] Licensing of private land remote sensing systems, 15 CFR § 960.1-960.15 (2006).
[32] See Hettling, Satellite Imagery for Verification and Enforcement of Public International Law, to be published in 2007.
[33] See supra note 4; see also Jasentuliyana, Review of Recent Discussions Relating to Aspects of Art. I of the Outer Space Treaty, in: IISL Proceedings of the 32nd Colloquium on the Law of Outer Space, 1989, 7 et seq; on the negotiating history see also Schrogl, in: Benkö/Schrogl (eds.), International Space Law in the Making, 1993, 195 et seq.
[34] Hobe, Liber Amicorum Delbrück, note 3, 339.
[35] See the critical remarks by Hobe, Space Law in its First Half Century, IISL Proceedings of the 49th Colloquium on the Law of Outer Space, Valencia 2006 (to appear), quoted from manuscript, p. 4.
[36] See for an account of the problems Hobe/Goh/Neumann, Space Tourism Activities – Emerging Challenges to Air and Space Law, JSpaceL 2007, passim (to appear); Hobe, Current Problems of Space Tourism, Nebraska Law Journal 2007, passim (to appear).
[37] On the imposition of national space legislation, see Gerhard, Nationale Weltraumgesetzgebung, Cologne Studies on Air and Space Law Vol. 19, 2002.
[38] Typical for the utilitarian approach to justice is the classical book of Jeremy Bentham, "Fragment on Government", 1776 and his "Introduction to the principles of morals and legislation", 1789. Utilitarism characterises an important branch of macro-economic thinking, e.g. the writings of Adam Smith and David Ricardo.
[39] See for a description of this development Friedman, The changing structure of international law, 1964, 60 et seq.
[40] See Hobe/Kimminich, Einführung in das Völkerrecht (Introduction to public international law), 8th ed. 2004, 57 et seq.