

IISL-00-IISL.302

## THE ROLE OF NATIONAL AND INTERNATIONAL LAW IN THE REGULATION OF SPACE ACTIVITIES\*

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### Abstract

Activities taking place in outer space face an interaction of national and public international law regulating what may be done. To date five treaties embodying public international law define the areas and rules that countries have agreed should regulate space activities. In parallel, however, national laws embodying interests of individual states regulate development of technologies for outer space. A well-established principle of international law holds that the provisions of internal law cannot prevail over those of the treaty, and that contradictory internal laws should change to conform with international law provisions in view of treaty obligations and customary law.<sup>1</sup> This paper will indicate some areas where national regulations do not conform to the obligations undertaken under the outer space treaties and suggest some measures to bring harmony between the national and international principles.

### INTRODUCTION

Outer space and the high seas are considered "res communis" -- areas open to the use of all States on an equal basis.

All the space treaties ratified to date that regulate the activities of States in these realms are based upon principles ensuring that:

a) International Law, including the Charter of the United Nations,

applies to outer space and the celestial bodies;<sup>ii</sup>

b) the exploration and use of outer space shall be carried out for the benefit and in the interests of all countries;

c) outer space shall be the province of all mankind and shall be free for exploration and use by all states without discrimination of any kind, on a basis of equality and in accordance with international law;

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- d) there shall be free access to all areas of celestial bodies and outer space shall be used exclusively for peaceful purposes (precluding military activities); and
- e) activities in outer space should foster the economic and social development of less advanced countries.<sup>iii</sup>

To date, however, only the technologically advanced countries have been able to explore outer space. It has been up to these countries to decide what are considered to be peaceful uses of outer space, and which States may be eligible to benefit from advanced technologies.

A key bottleneck to the commercialization of space on equal basis for all states arises from the dual use of space technologies. The know-how for space launches is almost identical to that used for missiles, and it has been noted that nations may use space development efforts as a cover for long-range missile programs. A Pentagon report from December 1998 concluded that US technology shared with China during a launch failure probe may have violated rules against improving Chinese satellite and missile capability, raising national security concerns and concerns within the 29 nations that comprise the Missile Technology Control Regime (MTCR), an export control pact that bars transfers of certain missile related technology, including space technology that could be applied to missiles. Since the Chinese incident, US controls on export of space technologies has been made more strict, reflecting, of course, the joint policies of the US allies, members of the North Atlantic Treaty Organization (NATO).

## NATIONAL AND INTERNATIONAL REGULATIONS

Creating conditions for economic growth can play a powerful role in establishing conditions for international justice and peace. Technology used in outer space can be an instrument in helping emerging economies to reach this goal. However, access to useful tools has often been foreclosed as a result of unilateral decisions to categorize technologies as strategic rather than commercial.

This problem occurs in a context where States generally recognize an obligation to create conditions for reasonable living standards for their people in a context that does not injure people in other States<sup>iv</sup>. On the other hand, offsetting this interest in cooperation and peaceful commercial exchange, are national security concerns and efforts to use the power of the State to limit competition in key markets.

This clash of interests has been reconciled or ameliorated in the case of some resources and technologies. States have been able to reach a consensus, for example, on how to cooperate in use of atomic energy for peaceful purposes. The International Atomic Energy Agency, established in 1957, works to ensure that atomic energy is not used for military purposes.

In the case of space, however, no comparable international body exists to create foundations for the commercialization of space. The result is that the planet is ill prepared to reap full benefits from the frontier. Some estimates project that within the next 10 years, space industry will have sales

reaching US\$50 billion. A growing range of commercial applications in outer space (telecommunications, meteorology, remote sensing, etc.) may become highly profitable.<sup>v</sup> Much is at stake in controlling this market as well as the tools that can be used in both peace and war.

A central question is: will emerging powers develop and use space technology to become a military or an economic menace to the developed nations?

It is difficult, as a rule, for interested parties provide an impartial answer to this question. The interest of developed nations to maintain the status quo is evident, because they hold valuable technologies, and are not inclined to ask the International Court of Justice to consider this question. There is accordingly no way under the international legal system of reaching any definitive conclusion on the subject that could hold sway.

In response to this impasse, the 39<sup>th</sup> meeting of the Legal Subcommittee of the UNCOPUOS on March 28, 2000 in Vienna, Austria, led to a proposal for the Subcommittee to approach new ideas and bring space law to present reality. The US blocked the initiative, arguing that lawyers have created more damage to the US industries than benefits, when trying to rule "a priori". The impression on the other members of the UNCOPUS was that the action of the US to preclude the inclusion of any new item in the agenda was taken because the "status quo" favors US national interests and therefore should not be altered.<sup>vi</sup>

Major aerospace companies, in fact, have been moving in ways that make the shortcomings of the U.S. position clear. These North American firms have been investing and preparing to launch constellations of satellites to deliver phone, television and other communications services around the globe. Technological breakthroughs have opened new uses for satellites and created a space-age gold rush. However, for these ventures to take off they must be able to get their satellites in space. But a lack of affordable launch vehicle capabilities and options has held back their plans. Market opportunities have brought several companies and countries into the launch business.<sup>vii</sup>

Despite the market demand for new launch capabilities, it has proven very difficult for developing countries to enter this market, because of restrictions imposed by national regulations of the advanced countries. These restrictions, assembled in a far-reaching net of export controls, restrict the participation of countries that are not members of the NATO (North America Treaty Organization) in the international satellite launching market.

For instance the recent bilateral agreement between the US and Brazil signed on April 18, 2000, set forth on "Technology Safeguards associated with US participation in launching from Alcantara Spaceport." The document was a clearly one-sided agreement, with provisions committing Brazil "not to use funds obtained from launch activities for programs for the acquisition, development, production, testing, deployment, or use of rocket or unmanned air vehicle systems (in Brazil or in other country)."

Brazil has abided by all treaties and international regulations of the Missile Technology Control Regime (MCTR) of which treaty it is a signatory. Yet this exemplary record has not won it a level of trust and confidence in the case of this bilateral agreement. Each country has sovereign right to apply its own export rules, as far as it does not oppose the MCTR. Yet the US apparently seeks to impose on Brazil one-sided restrictions that appear designed to serve a protectionist industrial-commercial agenda for space launches. The effect of such a position is to delay the technological development of emerging countries and the provision of affordable commercial launch services benefiting people around the world.<sup>viii</sup>

## CONCLUSIONS

A need exists to break the impasse between public international law and national regulations that now restricts the development of space in a global basis. A body of high-qualified nongovernmental authorities from many nations may hold a portion of the answer. Assembling a monitoring group of unimpeachable integrity and reputation, as well as outstanding technical capabilities, could provide a new global means for inspecting national launch facilities to assure that military uses are not being undertaken.

In keeping with the liberalization of trade in services under the World Trade Organization, space industries should be able to negotiate the launching of satellites under this new monitoring system without the approval of national governments. Creation of new regional or international launch facilities, open to

peaceful users under a depoliticized international inspection system, should be promoted.

If outer space is to be used for peaceful purposes, by all nations, nationalistic programs that seek military predominance should be banned along with the state-sanctioned monopolies and cartels formed to defend the spacefaring interests of industrialized nations. As stated in our previous paper<sup>ix</sup>, global launching facilities could be placed under the rule of international law, with depoliticized audits and arbitration systems as the chosen method to resolve any dispute arising from launching at the sites. Revenues from global chartering and registration of corporations can generate funds for such a global system and spacecraft launched from international launch sites. As a condition of global chartering, spacecraft and companies could be expected to apply success-sharing codes of conduct that gave a portion of their equity to fund nongovernmental education, remote sensing, and other initiatives to apply the benefits of space technologies to people around the world.

As recently stated by World Bank President James Wolfensohn in the Global Finance meeting in Prague, "Our challenge is to make globalization an instrument of opportunity and inclusion-not fear."<sup>x</sup> Promoting international cooperation and economic development of emerging countries requires removal of restrictive national regulations and actions by civil society to ensure that commercial launch initiatives conform to the non-militaristic principles of international law.

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<sup>i</sup> Brownlie, Ian, "Principles of Public International Law, Clarendon Press, Oxford, 1973, Chapter II, "The Relation of Municipal and International Law", pages 33 to 58.

<sup>ii</sup> UN Resolution 1721 (XVI) adopted on 20/12/1961.

<sup>iii</sup> Treaty on Principles governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and other Celestial Bodies. Outer space and celestial bodies are not susceptible of appropriation by States (UN Resolution of 13/12/63).

<sup>iv</sup> Res.1316 XIII of the UN General Assembly, 12/12/1956, which refers to article 56 of the Charter.

<sup>v</sup> See Parcerias Estrategicas, X, 99, number 7, Considerations on the Strategic Nature of the Space Activities.).

<sup>vi</sup> Jose Monserrat, Jornal do Brasil, June 13, 2000.

<sup>vii</sup> Abrahms, Doug, Washington Times, "Rockets not always a blast", February 10, 1997.

<sup>viii</sup> Santos, Reginaldo dos, Major Brigadier, "O Programa Nacional de Atividades Espaciais frente aos Embargos Tecnológicos", Parcerias Estratégicas, X, 1999, numero 7, page 117.

<sup>ix</sup> Leister, Valnora and Frazier, Mark, "International Cooperation in Launching Facilities", IISL-99-IISL.404.

<sup>x</sup> Wolfenshon, James D," The New York Times, "Protests Distract Global Finance Meeting, September 27, 2000.