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# CODE OF CONDUCT FOR SPACE ACTIVITIES: EVOLUTION OR REGRESSION?

### José Monserrat Filho

Brazilian Association of Air and Space Law (SBDA) Brazilian Society for the Advancement of Science (SBPC) Rio de Janeiro, RJ, Brazil <u>monserrat@mct.gov.br</u>

#### **ABSTRACT**

The draft code of conduct for outer space activities proposed by the European Union to space-faring States for discussion in December 2008 must be evaluated in relation to the 1967 Outer Space Treaty, which is the *Magna Carta* of international space law in force today.

The draft code is, after all, a political proposal, not yet a legal one. Nevertheless, it offers alternatives to the current international legal framework on the military uses of outer space aiming at preventing an arms race. The initiative is clearly of a political nature, although it seems to have ultimately a certain legal objective, but does not amount to a binding mechanism. The draft opens a opportunity examine great to the relationship between the political and the legal initiatives and tendencies in strategic fields in present world context.

We have before us an evident option for voluntary political solution rather than legal one. The legal option would have the benefits of certainty, predictability and security. What are the reasons for the voluntary preference? Why does the European Union not submit the draft code of conduct to discussion by the United Nations Committee for Peaceful Uses of Outer Space (COPUOS)? Is it an evolution or a regression if we compare this to the reality of the sixties and seventies, when all five-space treaties were elaborated and adopted, together with other relevant instruments involving space activities? These are the major questions this paper intends to answer.

#### **INTRODUCTION**

In February 2009, a private-owned U.S. communication satellite collided with a defunct Russian satellite in space above Siberia, shooting out a pair of massive debris clouds. Two days after this event, the representative of the European Union, Czech Ambassador Ivan Conference Pinte. during the on Disarmament, held in Geneva, stated that an international code of conduct is needed to ensure safety and security of all outer space activities. He also said that the European Union had already approved, in December 2008, a draft proposal for such an international code. According to him, the main objective of the code is to strengthen the safety, security and predictability of all space activities, civil or military.<sup>1</sup> If ever put into practice, this perhaps spur greater Code could

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cooperation to avoid such mishaps in the future.

The collision between the North American and Russian satellites was just one more event to justify the European's Union initiative of elaborating a Code of Conduct for space activities.

A previous remarkable event happened in January 2007, when China carried out a test of an anti-satellite missile. China shot down one of its own aging weather satellites, in a kind of target practice in low Earth orbit.

Scientists say hitting a satellite from the ground takes fairly sophisticated technology. The satellite was 500 miles above the Earth's surface and the explosion created a cloud of debris in space adding to the amount of "space junk" circling the Earth.

Some governments, such as Australia, Britain, Japan and United States voiced concern over China's test of an anti-satellite missile<sup>2</sup>.

The well-known North American project "Stars War" may also have motivated the European Union members' countries to discuss a Code of Conduct for Space Activities. If arms will be placed in the Earth's orbit, outer space will become a battlefield.

Therefore, there is an imminent risk, which is reinforced by the increasing peaceful space activities. The USA space program has spent over US\$ 62 billion in 2008, and such expenditure may reach the amount of US\$ 70 billion in 2012. On 19 December 2008. Euroconsult. а prestigious European company that carries out research on space market, states that the market for launching satellites will increase 8% in the next ten years. So, to take care of space safety means to assure big business.

Taking into account the importance of the space safety, the United Nations General Assembly through its Resolution # 63/68 issued on December 2<sup>nd</sup> 2008, proposes measures to assure transparency and confidence-building in outer space activities. The great majority of States, 180 precisely, supported this Resolution, which clearly reveals world concerns. Israel abstained from voting and only the United States voted against the Resolution. The United States' position is coherent with the one they have been defending in the Conference on Disarmament, in Geneva, where China and the Russian Federation presented, in February 2009, a project forbidding the installation of any kind of weapons, as well as the use of force in outer space.

# PRELIMINARY QUESTIONS

In our view it is undeniable the importance of discussing a Code of Conduct for space activities. However, this proposal raises some preliminary questions, such as:

1) Does the proposal mean that the 1967 Outer Space Treaty is no longer able to deal with current matters?

2) Why does not the European Union propose amendments to the 1967 Outer Space Treaty instead of creating a new Code?

3) Why does not the European Union propose a discussion of a new Treaty, as it was usual in the 60's and 70's, the first decades of space era?

4) What is the difference between a Code of Conduct and a Treaty?

These questions have to be answered before analyzing the Code's provisions in order to verify if it is really a short cut or even the best solution. The answers are not easy, but an attempt to solve them can be presented as follows:

1) Yes. The 1967 Outer Space Treaty is definitely not able to solve current space matters. There is a legal vacuum to be filled. The 1967 Outer Space Treaty should be renewed, but its basic principles should remain, such as the clause of "*res commune*", free-access, non-appropriation, prohibition of nuclear weapons, and States responsibility.

The challenge is: how to break political barriers imposed by developed nations that avoid the treaty's update, or even the elaboration of new treaties?

2) The amendment of the 1967 Outer Space Treaty would not be supported by some developed countries; because they do not accept to discuss the Treaty, although they cannot ignore that it is outmoded in many aspects. Developed nations are not interested in an open debate that could shake current space order, which is fully suitable for them.

3) The European Union does not propose the discussion of a new Treaty for the same reasons presented above.

4) The system for implementing a Code of Conduct is completely different from those required for implementing a Treaty.

The Code proposed by the European Union is devoted exclusively to space-faring Nations and therefore not worldwide in scope. A limited number of countries (Brazil including) were invited to present their views on the draft Code.

# **OTHER EXAMPLES**

It is important to remember some other experiences regarding the regulation of conduct for space activities.

There is, for instance, a Code of Conduct for International Space Station Crew. Mr. A. Farand, from the Department of Legal Affairs of the European Space Agency, reports:

"On 15 September 2000 in Washington DC, the Multilateral Coordination Board (MCB), the highestlevel cooperative body established by the Memoranda of Understanding (MOUs) pertaining to the International Space Station (ISS) Program signed early in 1998 by NASA and each of the Cooperating Agencies designated by the other ISS Partners (i.e. the Russian Space Agency, ESA, the Government of Japan and the Canadian Space Agency), approved the Code of Conduct for International Space Station Crews. This document contains a set of standards agreed by all Partners to govern the conduct of ISS crewmembers, starting with the first expedition crew launched from Baikonur in Kazakhstan on 31 October 2000. These standards had been developed over the previous six months by teams of Agency officials, working in close consultation with the competent

authorities of the Partner States".3

Similarly to the Code proposed by the European Union, experts from the United States have drafted a "Model Code of Conduct for the Prevention of Incidents and Dangerous Military Practices in Outer Space". Michael Krepon and Michael Heller<sup>4</sup> advocate the implementation of such a Code based on the following reasons:

"The flight testing and prospective deployment of anti-satellite (ASAT) and space weapons would have other significantly adverse consequences for national security, global commerce, and scientific endeavor. If the United States took the lead in such efforts, other nations would surely respond in kind. Similarly, the flight-testing and deployment of space weapons by other countries would prompt a vigorous response by the United States. A situation in which satellites orbiting the earth are trailed by objects designed to destroy or disable them is inherently destabilizing, given the vulnerability of satellites and the ease with which they could be harmed. Potential adversaries in

space would be faced with the dilemma of shooting first or risking the loss of critical satellites. The quest to secure dominion over space would therefore elevate into the heavens the hair-trigger postures that plagued humankind during the Cold War".

Krepon and Heller concluded:

"If we are to choose space assurance instead of space weapons, space-faring nations might well consider negotiating a code of conduct that allows everyone to continue to reap the national security, civil, commercial and scientific benefits that space now provides".<sup>5</sup>

These two codes are a positive reference for us in the appreciation of the current European proposal.

# **CODE'S OVERVIEW**

According the European to Union's draft Code, signatory states should maintain freedom of access and use of outer space for peaceful purposes without interference, fully respecting the security, safety and integrity of space objects in orbit. The Code should be signed on a voluntary basis, and it is open to all space-faring States. It is stated in the Code's preamble that *"a* comprehensive approach to safety and security in outer space should be guided by the following principles: (i) freedom of access to space for all for peaceful purposes, (ii) preservation of the security and integrity of space objects in orbit, (iii) due consideration for the legitimate defense interests of States".

The draft Code does not openly and directly prevent the placement of weapons in space, but it endorses the "initiative aiming at promoting a peaceful, safe and secure outer space environment, through international cooperation". Keeping with the theme of avoiding space debris, the Code notes mitigation guidelines on space debris prepared by the United Nations Committee for the Peaceful Uses of Outer Space. These guidelines have been endorsed by a UN General Assembly resolution but do not have the same status of the treaties and conventions adopted for outer space activities.

Gerry Oberst, in his article "Rules of the Road for Space"<sup>6</sup> emphasizes that:

"The code, if adopted, could raise the avoidance of space debris to a higher level of priority within the international order. A set of general measures laid out in the code calls on countries to establish and implement policies to minimize accidents in space, to refrain from action that could bring about destruction of outer space objects, and to adopt into their national law the UN guidelines. The code also would have to be adopted by European countries, because it has no legal binding force".

It is quite relevant to have in mind the precise terms of the draft code's four general principles, namely:

"(i) the freedom of access to, exploration and use of outer space and exploitation of space objects for peaceful purposes without interference, fully respecting the security, safety and integrity of space objects in orbit;

(ii) the inherent right of individual or collective self-defense in accordance with the United Nations Charter (Art. 51);

(iii) the responsibility of States to take all the appropriate measures and cooperate in good faith to prevent harmful interference in outer space activities; and

(iv) the responsibility of States, in the conduct of scientific, commercial and military activities, to promote the peaceful exploration and use of outer space and take all the adequate measures to prevent outer space from becoming an area of conflict.

There is a contradiction in <u>item</u> <u>3.1</u> of the draft, because, firstly, it reaffirms its commitment to the existing legal framework, however, the 1979 Moon Agreement, as well as the 1986 Remote Sensing Principles are not mentioned among those instruments presented in the draft.

# THE CODE AND THE USA SPACE POLICY

The principles just referred hardly could be compatible with the United States Space Policy, from 31 August 2006, especially when such official document states that the United States will "preserve its rights, capabilities, and freedom of action in space; dissuade or deter others from either impeding those rights or developing capabilities intended to do so; take those actions necessary to protect its space capabilities; respond to interference; and deny, if necessary, adversaries the use of space capabilities hostile to U.S. national interests".

This policy reflects a legal position according to which a State has the right to act in outer space unilaterally, not taking into due account the principles and norms of international legislation in force. In contrast, the European draft Code enhances the principle of freedom of access to space for all States for peaceful purposes and admits military actions exclusively for the legitimate defense interests of States.

Even in the United States there is a lot of criticism about the mentioned National Space Policy. The American Academy of Arts & Science has proposed a project called "Reconsidering the Rules of Space", supported by the Carnegie Corporation of New York<sup>7</sup>, based on the following reasons:

"Societies rely increasingly on satellites for vital communication services, environmental monitoring, navigation, weather prediction, and scientific research. This largely beneficial trend is expected to intensify as more countries develop satellite technology and utilize the services derived from it.

These technological trends have also inspired the development of military capabilities in space that go far beyond the traditional intelligence and early warning missions of the Cold War period. Protecting and enhancing US military capability in space has emerged as an important focus of military planning. Recent official documents have proposed. for example, various anti-satellite and space-based weapons to protect and augment US capabilities in space. Serious public discussion of military space plans has not vet occurred in the United States. though important questions of policy, planning and budgeting loom.

The development of space affects a range of government, commercial, and scientific interests around the world, and US leaders have yet to propose a policy framework that adequately balances these interests. The American Academy initiated the Reconsidering the Rules of Space project to examine the implications of US policy in space, and to consider the international rules and principles needed to maintain a balanced use of space over the long term".

The American Academy called upon two scholars to evaluate both the feasibility and desirability of U.S. military plans in space.

Nancy Gallagher<sup>8</sup> and John D. Steinbruner<sup>9</sup> (both of the Center for International Security Studies at Maryland) provide a comprehensive review of U.S. military plans for space, arguing that the current goal of establishing decisive military space "dominance" is no more feasible or desirable in a globalizing world where the United States is first among many countries with space capabilities than it was during the Cold War competition between two roughly equal space superpowers.

In their report "Reconsidering the Rules for Space Security", Gallagher and Steinbruner argue that the United States will not be able to "outspend and outinnovate all potential rivals in space."

Moreover, they contend that the "costs of using military means to protect U.S. and friendly space systems against asymmetrical attacks" will outweigh the "benefits of seeking full-spectrum space dominance."

For this reason, the authors urge the United States to abandon its current policies and to support international negotiations to build on the Outer Space Treaty by developing new rules that explicitly address the central problems of space security. These negotiated legal protections would prohibit deliberate interference with legitimate space assets, outlaw the deployment of weapons in space and other dedicated anti-satellite weapons, and define the legitimate limits of space-based support for military missions.

Gallagher and Steinbruner conclude by highlighting some practical steps necessary for successful negotiations, including strategies for ensuring the equitable distribution of the costs of verifying compliance with these legal prohibitions.

Surely, it is expected that the new USA Government changes the current National Space Policy, in order to avoid an arms race in outer space.

### **BRAZIL'S POSITION**

Brazil was invited by the European Union to present its considerations about the Code of Conduct for Space Activities' draft.

Taking into account its active participation in the discussion regarding the peaceful exploration of outer space, Brazil should support the European Union's initiative, since these debates take place in the Legal Subcommittee of the United Nations Committee for the Peaceful Use of Outer Space (COPUOS).

Brazil has been reiterating the need for enhancing the role of COPUOS, as an appropriate forum to deliberate about space affairs.

Although it has not yet adhered to the 1979 Moon Agreement, Brazil should indicate the need for including this among those that are instrument mentioned in item 3.1 of the draft, as well as the 1986 Principles on Remote Sensing. The 1979 Moon Agreement has not received an expressive support: only 4 States ratified it and 13 States signed it. However, it is the unique instrument that regulates Moon exploration and the exploitation of its resources. It will be very useful in a near future to coordinate the return of mankind to the Moon, this time to stay there. Furthermore, the United Nations General Assembly has recommended the adherence of States to the existing legal framework regarding the Space Law, including the 1979 Moon Agreement.

## **CONCLUSIONS**

The European draft Code is at the same time a regression and an evolution.

It is a regression if we compare the draft with the space treaties, approved by consensus in the UN system in the first decades of space age. It is an evolution if we consider the current stalemate in the debate on the use of weapons and force in outer space in the UN Conference on Disarmament. It seems that acting constructively the European Union tries to open an exit for such a deadlock.

Moreover, the draft creates an excellent opportunity to discuss, in a wide and deep way, the quite pressing issue on "sustainability of space activities", which had been included in the agenda of the next session of the COPUOS's Scientific and Technical Subcommittee, in 2010.

This way, in my view, the draft deserves our support, but under some conditions I had indicated.

In fact, we must be realistic and facing the hard present context not forgetting our extraordinary legal conquests of the past and having responsibly in mind the important demands of the future.

The great challenge is to figure out how to keep outer space clear and safe in order to preserve its fundamental role to the present and future generations. <sup>8</sup> Nancy Gallagher is the Associate Director for Research at the Center for International and Security Studies at Maryland (CISSM) and a Senior Research Scholar at the University of Maryland's School of Public Policy. Before coming to the University of Maryland, she was the Executive Director of the Comprehensive Test Ban Treaty Task Force and worked with the Special Advisor to the President and the Secretary of State on recommendations to build bipartisan support for U.S. ratification. She has been an arms control specialist in the State Department, a Foster Fellow in the Arms Control and Disarmament Agency, and a faculty member at Wesleyan University.

<sup>9</sup> John D. Steinbruner is a Professor of Public Policy at the University of Maryland and Director of the Center for International and Security Studies at Maryland (CISSM). He served as Director of the Foreign Policy Studies Program at Brookings from 1978-1996. He has also held various academic positions at Yale University, the John F. Kennedy School of Government at Harvard University, and the Massachusetts Institute of Technology. Steinbruner is a Fellow of the American Academy of Arts and Sciences and co-chair of the Committee on International Security Studies of the American Academy.

<sup>&</sup>lt;sup>1</sup> Data from the Chinese Academy of Science and

Technology – CAST – webpage (www.cast.cn) <sup>2</sup> Data from www.npr.org

<sup>&</sup>lt;sup>3</sup> ESA bulletin # 105 February/2001, pp. 64/68.

<sup>&</sup>lt;sup>4</sup> Michael Krepon is an author of "Space Assurance or Space Dominance: The Case against Weaponizing Space". He is also co-founder of The Henry L. Stimson Center and Director of the Center's Space Security Project. Michael Heller graduated from the University of Colorado with honors in International Affairs and works as a Research Assistant on the Stimson Center's Space Security Project

<sup>&</sup>lt;sup>5</sup> In their article "Model Code of Conduct for Space Assurance, published in the Disarmament Diplomacy Magazine, Issue # 77, May/June 2004.

<sup>&</sup>lt;sup>6</sup> Published by Via Satellite, <u>www.viasatellite.com</u> on May 1, 2009.

<sup>&</sup>lt;sup>7</sup> <u>www.amacad.org/projects/space</u>