# EU's Space Code of Conduct: Right Step Forward

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#### I. Preface

994 operational satellites in orbit, 21,000 space objects larger than 10 cm of which 40 % are satellites no longer operational and 55% are fragments of other objects, 450,000 objects of size between 1 and 10 cm, and several million objects below 1 cm. 1) These are recent figures of man-made objects orbiting in the outer space and increasing. Certainly, a source of concern for space-faring nations whose numbers are increasing as well from the current 60-odd as more countries enter into the space activities as the cost to launch the satellites is down with new technology. The concern is genuine as we witnessed the collision of an active Iridium satellite against the dysfunctional satellite of Cosmos 2251 in 2009. Other cases of damage resulting from the collision with space debris for precious space objects are numerous despite attentive maneuvers from the ground control to avoid the collision. So far so lucky not to have serious damage due to collision cannot be the reason for not doing anything because the simple probability of collision increases as does the number of space object.

Apart from the above concerns about haphazard accident with equal chance of damage to be inflicted to the space-faring countries, concerns on peaceful uses of the outer space are have connotation of international politics. Article 4 of the Outer Space Treaty of 1967<sup>2)</sup> prohibits placing in orbit around the Earth nuclear weapons and weapons of mass destruction. It further stipulates that the moon and other celestial bodies shall be used exclusively for peaceful uses. Immediate outcome of the interpretation is first, small weapons with no effect of mass destruction can be allowed in the space, and second, as it became a cliché in the space law, whether the peaceful

A Lukaszczyk, International Code of Conduct for Outer Space Activities vis a vis Other Space Security Initiatives, presented on 3 Feb. 2012 at the Air and Space Law Institute, Leiden University.

<sup>2)</sup> Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Celestial Bodies, opened for signature on 27 Jan. 1967. As of 1 Jan. 2012, 101 States are Parties to it.

uses allows military uses as long as they are non-aggressive. Another aspect of the current space law is that there is no judiciary mechanism even advisory to cover possible disputes that may arise from ever-increasing space activities. The avenues to solving the conflicts in the space are through consultations and negotiations applicable to any other area of international relations. Another avenue recently introduced is through the Specialized Panel of Arbitrators, composed of 15 space law experts<sup>3)</sup> from 14 States, established pursuant to the Optional Rules for Arbitration of Disputes Relating to Outer Space Activities<sup>4)</sup> adopted under the auspices of the Permanent Court of Arbitration based in The Hague, the Netherlands. As it is the case with any other disputes, as long as the factual elements around the disputes are clearly determined, more than half of the solution to the disputes are considered resolved. The rest may be simple procedural matters and technicality requiring common sense.

### II. Background of the EU Initiatives

The draft Code of conduct for outer space activities was finalized by the Working Party on Global Disarmament and Arms Control and endorsed by the Political and Security Committee<sup>5)</sup> of the European Union before being submitted on the 3rd December 2008 via COREPER<sup>6)</sup> to the Council of the EU for adoption and to serve

<sup>3)</sup> See the names at http://www.pca-cpa.org/showpage.asp?pag\_id=1484 under the banner of "Specialized Panel of Arbitrators".

<sup>4)</sup> Based on these Rules adopted by the Permanent Court of Arbitration effective 6 December 2011, each Party to the Hague Convention of 1899 on the Peaceful Settlement of International Disputes could recommend up to two qualified arbitrators who, after being screened by the group of experts, are carrying their names on the website of *supra*, 3 as of 2 October 2, 2012. For the Rules see http://www.pca-cpa.org/showpage.asp?pag\_id=1188.

<sup>5)</sup> PSC, sometimes referred to by its French acronym COPS derived from Comité politique et de sécurité is a permanent body within the European Union dealing with Common Foreign and Security Policy issues, including Common Security and Defense Policy. It is based in Brussels, consists of ambassadorial level representatives from the EU member States and usually meets twice per week.

as a basis for consultation with third parties.<sup>7)</sup> The Council, the executive branch of the bicameral legislature of the EU, approved on 8-9 December 2008 following conclusions together with the text of the draft Code:

- It considers strengthening the security of activities in outer space is an important goal in the context of the expanding space activities that contribute to the development and security of States.
- The above objective is part of the EU's space policy.
- It supports the draft Code in which States would participate on a voluntary basis for consultations with key third countries that have activities in outer space or have interests in outer space activities with the aim of reaching a text that is acceptable to the greatest number of countries.

The background of the EU initiatives is probably due to the space activities giving harm to orbiting satellites. The USA in February 2008 destroyed an ailing satellite before it deorbited with a ballistic missile. Although it cites the safety concerns as the reason, the timing and occasion aroused the suspicion of its demonstration of anti-satellite (ASAT) capabilities following the Chinese test of an ASAT system in 2007 destroying a satellite but creating significant space debris. Making progress on space issues was a goal of Nicolas Sarcozy, French President, during France's presidency of the EU, which ended with the close of 2008.<sup>8)</sup> At large, the purpose was to achieve enhanced safety and security in outer space through the development

<sup>6)</sup> From French Comité des représentants permanents, the Permanent Representatives Committee or Coreper (Article 240 of the Treaty on the Functioning of the European Union - TFEU) is responsible for preparing the work of the Council of the European Union. It consists of representatives from the Member States with the rank of Member States' ambassadors to the European Union and is chaired by the Member State which holds the Council Presidency. Coreper occupies a pivotal position in the Community decision-making system, in which it is both a forum for dialogue (among the Permanent Representatives and between them and their respective national capitals) and a means of political control (guidance and supervision of the work of the expert groups). It thus carries out preliminary scrutiny of the dossiers on the Council agenda (proposals and drafts for acts tabled by the Commission). It seeks to reach agreement at its own level on each dossier, failing which it may suggest guidelines, options or suggested solutions to the Council.

<sup>7)</sup> EU Doc 16560/08, PESC 1595, CODUN 59, Brussels, 3 Dec. 2008 (04.12), p.1.

J Abramson, EU Issues Space Code of Conduct, Arms control Today, Jan/Feb 2009, Arms Control Association

and implementation of transparency and confidence-building measures.

The Council approved the revised draft of the Code on 27 September 2010 as the basis for consultation with third parties. It is though only on 5 June 2012 in Vienna, when and where the members of the United Nations Committee on the Peaceful Uses of Outer Space<sup>9)</sup> were present for the 55th Session, that the EU officially launched the multilateral diplomatic process to discuss and negotiate its initiative for an International Code of Conduct for Outer Space Activities. The EU however made bilateral contacts for consultation with some major space powers, in particular, USA for last two years. The revised text, attached as an Annex to this Article, is believed to have reflected the comments received in bilateral contacts. Substantial negotiation on the basis of this text was originally planned to start at the Multilateral Experts Meeting of October 2012 in New York, which will be open to all UN member States, with a view to adopt the Code in 2013. However, without clear explanation on the part of the EU, there was no negotiation meeting in New York last October with the ensuing rumor that the negotiation will be put off to 2013 with further preliminary informal talks among key players.

#### **I**. Similar Initiatives

EU's initiatives are not the first one to bring in order to activities in the outer space where nobody has the right to control. Disregarding intermittent suggestions and proposals of certain representatives of countries, academic associations or scholars, I will introduce three (3) solid initiatives with enough maturity for normative values.

<sup>9)</sup> The Committee on the Peaceful Uses of Outer Space was set up by the United Nations General Assembly in 1959 (Resolution 1472 (XIV) to review the scope of international cooperation in peaceful uses of outer space, to devise programs in this field to be undertaken under the UN auspices, to encourage continued research and the dissemination of information on outer space matters, and to study legal problems arising from the exploration of outer space. It meets annually in Vienna after its two standing subcommittees, Legal Subcommittee and Scientific and Technical Subcommittee, finish their respective annual sessions.

The first one is the UN General Assembly Resolution on the prevention of an arms race in outer space (PAROS). It has been adopted in the General Assembly of the United Nations every year since 1982 by vote and the most recent one is the Resolution 67/30 adopted on 3 December 2012 at the plenary meeting of the General Assembly of the United Nations. The Resolution with similar contents adopted every year carries the following points<sup>10</sup>):

- Need to consolidate and reinforce the legal regime applicable to outer space and enhance its effectiveness
- Necessity of further measures with appropriate and effective provisions for verification to prevent an arms race in outer space
- Reiteration that the Conference on Disarmament<sup>11)</sup>, as the sole multilateral disarmament negotiating forum, has the primary role in the negotiation of a multilateral agreement(s) on the prevention of an arms race in outer space in all its aspects
- Invite the Conference on Disarmament to establish a working group entitled "Prevention of an Arms Race in Outer Space" as early as possible

It is noteworthy that the United States has consistently opposed to or recently abstained from the Resolution. It was the isolated position with only Israel to side with. Without exception, the above Resolution 67/30 was adopted by vote with 183 States in favor, none for opposition, 2 States (USA and Israel) for abstention. The reason for the United States not to accept the Resolution is that its freedom in the outer space will be restricted when the new comprehensive regime is introduced to

<sup>10)</sup> Operative parts of the UNGA Resolution 66/27 on Prevention of an arms race in outer space, UN Doc A/RES/66/27, 12 Jan. 2012.

<sup>11)</sup> Conference on Disarmament (CD) is a forum established by the international community to negotiate multilateral arms control and disarmament agreements. Established in 1979, it was the forum used by its member States, currently numbering 65, to negotiate the Biological Weapons Convention and the Chemical Weapons Convention. While the Conference is not formally a United Nations (UN) organization, it is linked to the UN through a personal representative of the UN Secretary-General; this representative serves as the secretary general of the Conference. Resolutions adopted by the UN General Assembly often request the Conference to consider specific disarmament matters. In turn, the Conference annually reports its activities to the Assembly. Wikipedia visited 7 Sept. 2012.

the outer space with the assessment that it has the strategic security advantages over other States because of its superior space technology.

It is in this context that the Conference on Disarmament (CD) after having established *ad hoc* committees for 10 consecutive years to discuss issues related to prevention of an arms race in outer space from 1985 to 1994 could not do so any longer because of the American opposition. It was only in May 2009 that the CD adopted a program of work which establishes a Working Group entitled "Prevention of an Arms Race in Outer Space" to discuss substantively all issues related to the prevention of an arms race in outer space. It remains to be seen how much the Working Group can fulfill its mandate when the USA stands in the way.

The second one was purely to deal with the space debris. Because it has nothing to do with politics and it is in the interests of each space-faring State to establish a regime to enable its space activities without hindrance from the space debris which is alarmingly increasing, the international community could easily agree to what to do and what not to do in outer space. Besides, many space-faring States have already introduced the guidelines in their space activities not to produce unnecessary space debris and in certain instances these norms were commonly applied in collectivity among some space agencies of different countries. <sup>12)</sup> It was with this background that the Legal Sub-committee of the United Nations Committee on Peaceful Uses of Outer Space (COPUOS) worked on it for a few years to produce the voluntary guidelines that were adopted by the COPUOS and endorsed by the United Nations through UNGA Resolution 62/217 in 2007.

The UN Space Debris Mitigation Guidelines thus adopted contain many technical elements that all the States involved in the outer space activities are expected to

<sup>12)</sup> IADC (Inter-Agency Space Debris Coordination Committee) is an international governmental forum for the worldwide coordination of activities related to the issues of man-made and natural debris in space. IADC member agencies are currently 12, 11 from 11 space-faring countries and ESA (European Space Agency). IADC home page http://www.iadc-online.org/index.cgi visited 7 Sept. 2012. It adopted in 2002 the IADC Space Debris Mitigation Guidelines. European Code of Conduct for Space Debris Mitigation endorsed in 2008 by the Council of Europe is another such collective effort to reduce the space debris.

observe to produce least space debris from the moment of design of their launchers and satellites until the end of satellite life. Although the norms are on the voluntary basis which is normal in the current international space law environment where any attempt to formulate binding international rules has to face opposition and sometimes unnecessary screening from many corners of numerous countries. Nevertheless, because of common concerns of space-faring countries, the Guidelines could be adopted smoothly and are believed faithfully followed by most countries. It is a rare success story of international cooperation in the area of outer space.

The third one is about the proposal of the Russian Federation and China for a treaty to prohibit placing weapons and the threat or use of force against the space objects in the outer space. The proposal was made by letter dated 12 February 2008 from both Russian and Chinese Representatives to the Secretary General of the Conference on Disarmament with the draft Treaty attached thereto. The name of the instrument is the draft "Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects (PPWT)" some of which salient points are as follows 13):

- Desires to keep outer space from any weapons of any kind being placed
- Definition of "outer space" as the space above the Earth in excess of 100 km above sea level
- Definition of "outer space object"
- Definition of "weapon in outer space"
- Introduction of measures to verify compliance with the treaty in an additional protocol
- Establishment of the executive organization of the Treaty of which details shall be the subject of an additional protocol
- Entry into force of the Treaty by ratification of 20 States including five permanent members of the United Nations Security Council

There are some express and implicit elements of the draft Treaty that do not go

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<sup>13)</sup> Conference on Disarmament Doc CD/1839, 29 Feb. 2008.

along with the position of the United States. Defining the outer space is against the US interests as it became the source of disagreement for last half a century. The US believes that there is no need to define and delimit the outer space and argue that having not done so did not impede the outer space activities. Otherwise, in accordance with the position of the USA and its allies, the freedom of the outer space would have been restricted for no meaningful benefits in return. In an August 19, 2008 letter to the CD, US Ambassador Christina Rocca rejected the PPWT, reiterating the US opposition to "prohibitions on military or intelligent uses of space". She raised concerns about the lack of clarity in defining what constitutes a threat and ease of breaking out of the treaty because it does not ban the research, development, and terrestrial storage of ASAT systems or space-based systems. (14) She restated the US concerns that "it is not possible to develop an effectively verifiable agreement" that would ban space-based weapons or terrestrial-based ASAT systems (15)

There are many States considered to have friendly relationships or which have most times sided with the position of the USA in international politics. Among those, Canada, Turkey, Pakistan, Sri Lanka, and Republic of Korea expressed their favorable positions for discussing the PPWT while Indonesia did so in a stronger term than others if the record of the discussion on the Conference on Disarmament is any guide. <sup>16</sup>

Of course, the draft Treaty prohibits placement of weapons in the outer space while it does not prohibit weapons placed on land of the Earth even though they are for strikes in outer space in the form of anti-satellite (ASAT) systems. Some point out this loophole which damages the comprehensive prevention of weapons as far as their uses are for the outer space wherever the weapons are placed. The treaty neither

<sup>14)</sup> See supra, note 6.

<sup>15)</sup> Ibid.

<sup>16) &</sup>quot;Conference on Disarmament holds Thematic discussions on Prevention of an Arms Race in Outer Space", News and Media, 5 June 2012, UNOG (United Nations Office at Geneva) web http://www.unog.ch/80256EDD006B9C2E/(httpNewsByYear\_en)/2C78A33C60703525C1257A140035D A86?OpenDocument visited 16 Sept. 2012; "Conference on Disarmament Discusses Prevention of an Arms Race in Outer Space, News and Media, 31 July 2012, ditto, http://www.unog.ch/80256EDD006B9C2E/(httpNewsByYear\_en)/23B0ED99B9B9B43BC1257A4C003F86B9?OpenDocume nt visited 16 Sept. 2012.

prohibits the research, development, testing, production, and terrestrial storage of such weapons. For this and other reasons, PPWT which could otherwise be treated better does not find its proper place in the discussion agenda. The fate of PPWT depends on the international politics rather than on the merit of its contents.

#### IV. Reactions of Other States

The draft EU Space Code was one of the subjects of discussion two times in the Conference on Disarmament in Geneva, 5 June and 31 July 2012. Many representatives from some 30 States who took the floor made positive comments while the representative of the European Union mentioned that the current text was still a draft and might be dramatically changed in the future, but reflected efforts to strike a balance among a number of stakeholders in the space field.<sup>17</sup>)

The position of the United States to the Code is confusing. Through the Press Statement of 17 January 2012, Hilary Clinton, the US Secretary of State, expressed that "the United States has decided to join with the European Union and other nations to develop an International Code of Conduct for Outer Space Activities. A Code of Conduct will help maintain the long-term sustainability, safety, stability, and security of space by establishing guidelines for the responsible use of space." In the year of 2011, it was the optimist mood for the United States to sign the Code sometime in the year of 2012 and it seemed in that line of thinking that Hilary Clinton made such announcement with certain conditions not to constrain in any way the US national security - related activities in space or its ability to protect it and its allies. However, the recent position of the USA is colored with reservation. It says that it needs further consultation with EU and that it has to take into account the position of other countries because the Code purports to be international, not regional. This attitude cannot be

<sup>17)</sup> Ibid, News and Media, 31 July 2012.

described other than the change of the US position that seems to have been formulated by the Obama administration in the course of informal consultations with the EU on the EU Space Code the for last two years.

Other nations of space power like Russia, China, India, and Brazil are said to distance themselves from the Code. The objections of China and Russia relate more to do with its focus on arms control than regulating and defining conduct because they co-sponsored the PPWT, a treaty that would ban the placement of weapons in outer space. It would be however rendered moot if the Code was adopted by a plurality of the space-faring and non-space-faring countries alike. 18) In regards to the Code itself, Chinese objections include the Code's insistence that States who adopt the measure must share information on their domestic national space policies, including objectives for security and defense related activities, as well as the Code's focus on orbital space debris. 19) India in particular has raised several specific concerns about the Code, including the fact that the Code is not a legally binding instrument, that it replicates existing domestic policies of nations considering it, that the EU did not consult with the Asian-Pacific nations when drafting Code, that it was too ambiguous, and that the Code's effectiveness would be weakened if it was administered by the EU.20) It is this last point that mirrors the recent US concerns about the EU's custody of the Code.

Unlike the Press Release<sup>21)</sup> of the European Union wherein US, Japan and India are mentioned as the countries endorsing the Code, it seems to be that only Japan is in support of the Code.

While the Republic of Korea has not made any comments on the Code, its unique position confronting the belligerent North Korea has its interest to speak out for the complete peaceful uses of outer space. South Korea like almost all other countries

<sup>18)</sup> M Listner, US rebuffs current draft of EU Code of Conduct: is there something waiting in the wings?, The Space Review, 16 Jan. 2012.

<sup>19)</sup> *Ibid*.

<sup>20)</sup> Ibid.

EU launches negotiation on an International Code of Conduct for Outer Space Activities, A 252/12, Brussels, 6 June 2012.

cannot sit idle to see a rogue State ridicules the time honored international law about the peaceful exploration and uses of outer space with camouflage.<sup>22)</sup> Unless proven otherwise, the nominal argument of North Korea that their missile launch is to put their satellite into orbit cannot be refuted. It rests on the international community to check how serious and truthful they are. While there is no international regime to screen the veracity of the intention of the country like North Korea in this context, the EU Code of Conduct can fill the gap by revising the contents accordingly. In a world a treaty type of norm cannot be adopted, the relevant code can be an important source for the security of the world. South Korea has reasons to support for the EU Code for it to be adopted with revision.

#### V. Analyses of the Code

The draft Code mentions about military activities among others aimed at enhancing the safety, security and predictability of outer space activities and at preventing outer space from becoming an area of conflict. No treaty related to outer space activities describes "military activities", may be because leading space powers wanted the ambiguity. However, with the inclusion of this term, is the military activities regarded fait accompli?

Paragraph 3, (a) of the Code enumerates treaties to be complied with. The Comprehensive Nuclear Test Ban Treaty (1996) is mentioned as one of the existing international legal instruments regulating outer space activities. I wonder whether this Comprehensive Nuclear Test Ban Treaty regulates outer space activities, because it's not effective yet.<sup>23)</sup> Yes, the treaty exists but not in the way to have it complied

<sup>22)</sup> UN Security Council Resolution 1718 adopted in 2006 and 1874 in 2009 condemned the North Korean nuclear tests by firing long range missiles under the pretext of launching a satellite.

<sup>23)</sup> Despite the ratification of 157 States, the treaty (CTBT) cannot enter into force unless all the 44 States listed in Annex 2 to the treaty have ratified it. These "Annex 2 states" are states that participated in the CTBT's negotiations between 1994 and 1996 and possessed nuclear power

because it has not yet entered into force.

Paragraph 10 of the Code has significant elements. It purports to hold biannual meeting of the Subscribing States to review the implementation of the Code and the evolution of the Code. The former, when realized, has the implication of moving the stage of discussion of prevention of arms race in outer space from the current CD to this new establishment. When the meetings are provided to exclusively discuss the issue of the arms disarmament of the outer space, it would make certain space-faring countries, in particular, USA uncomfortable because of its unique position. This is more so with the eventual discussion of the latter because the evolution of the Code means nothing but altering its status from the current voluntary character to binding one which in turn would resemble the PPWT already in hand. Besides, this desire is already expressed in the last paragraph of the preamble " - Conscious that a comprehensive code, including transparency and confidence-building measures could contribute to promoting mutual understandings". A cause of concern for certain major space powers in particular, the United States of America.

In accordance with the paragraph 11, Central Point of Contact will be established to serve the secretary role of the Code. Is it desirable to set up a new secretariat that is costly? How about giving additional mandate to the UN Office of Outer Space Affairs (OOSA) rather than creating a new organization? The essential task of the Central Point of Contact seems to maintain an electronic database foreseen in the paragraph 12. The task will require new fund but can be ably discharged by the UN OOSA because of its professional expertise in the similar subject.

reactors or research reactors at that time. As of 7 December 2011, eight Annex 2 states have not ratified the treaty: China, Egypt, Iran, Israel and the United States have signed but not ratified the Treaty; India, North Korea and Pakistan have not signed it. In 1998 India said it would only sign the treaty if the United States presented a schedule for eliminating its nuclear stockpile, a condition the United States rejected. Wikipedia visited 2 Sept. 2012.

#### **W. Conclusions**

The three following principles<sup>24)</sup> reflected in the Code seem to be the incorporation of three representative views of the space law as it now stands:

- Freedom of access to space for peaceful purposes
- Preservation of the security and integrity of space objects in orbit
- Due consideration for the legitimate defense interests of States

The first one is universally accepted principle nobody can oppose to and thus is written in almost any space related instruments, binding or not, national and international alike. The second one is due to genuine concerns of all the space-faring countries. This is more so for the EU of which approach to the outer space activities is more practical. The built-in measures in the Code to mitigate the space debris result from this approach and for which the EU has to be credited. The third one is to reflect the concerns of America whose interests are, in my view, to keep its strategic advantages under the pretext of self-defense.

Of the space issues, the space debris reduction and the space traffic management require some urgent attention. But the current legal instruments of the outer space do not have any binding rules to be applied thereto despite the increasing activities on the outer space. We need to start somewhere sometime soon before it's too late with the chaotic situation. The Outer Space Treaty of 1967 is not a comprehensive tool to include such issues, and furthermore a source of contention regarding the military activities and weapons in the space. The UN resolutions, despite their wide acceptance, dealt with the outer space either piecemeal like the UNGA Resolution 62/217 (2007) on the Space Debris Mitigation Guidelines or in conflict because the leading space power does not agree like in the case of prevention of an arms race in outer space as explained earlier in the above.

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<sup>24)</sup> See supra, note 1.

It is in this context that we need a new and comprehensive approach which may develop further to deal with not only the current pending issues but also new issues beyond our current perception but that may arise in the future. Of course, it is a difficult task even to start with and we cannot expect binding rules created for those thorny issues where the conflicts of interests of each State cross over. That is why the formula "Code of Conduct" rather than a "treaty" or "recommendation" as it is tabled by the EU is the right level of document for universal acceptance.

It is hoped that this EU initiative as another contribution to the international community following its leading role for the Kyoto Protocol of 1997<sup>25</sup>) be successful to allow us to continue in safety and security the outer space activities in our generation and beyond.

Annex: EU draft of the International Code of Conduct for Outer Space Activities

<sup>25)</sup> To prevent the global warming, the world community adopted the Climate Change Convention in 1992 and for the implementation of the Convention, the Kyoto Protocol whereby rich countries are obliged to forcefully cut the global warming gases (CO2 and five other gases) emitted in their countries by at least 5 % during five-year period 1998 to 2012 vis-à-vis the level of 1990. As the rich countries got involved in the emissions reduction, only the USA bolted out of the treaty.

#### [Annex]

# WORKING DOCUMENT REVISED DRAFT INTERNATIONAL CODE OF CONDUCT FOR OUTER SPACE ACTIVITIES

#### **Preamble**

The Subscribing States

Considering that the activities of exploration and use of outer space for peaceful purposes play a growing role in the economic, social, and cultural development of nations, in the arrangement of global issues such as the preservation of the environment, disaster management, the strengthening of national security, and in sustaining international peace;

Noting that all States should actively contribute to the promotion and strengthening of international cooperation relating to these activities;

Recognising the need for the widest possible adherence to relevant existing international instruments that promote the peaceful uses of outer space, in order to meet existing and emerging new challenges;

Further recognising that space capabilities - including associated ground and space segments and supporting links - are vital to national security and to the maintenance of international peace and security;

Recalling the initiatives aiming at promoting a peaceful, safe, and secure outer space environment, through international cooperation;

Recalling the importance of developing transparency and confidence-building measures for activities in outer space;

Considering the importance of the sustainable use of outer space for future generations;

Taking into account that space debris affects the sustainable use of outer space,

constitutes a hazard to outer space activities and potentially limits the effective deployment and utilisation of associated outer space capabilities;

Stressing that the growing use of outer space increases the need for greater transparency and better information exchange among all actors conducting outer space activities;

Convinced that the formation of a set of best practices aimed at ensuring security in outer space could become a useful complement to international law as it applies to outer space;

Reaffirming their commitment to resolve any dispute concerning another State's actions in outer space by peaceful means;

Recognising 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 peaceful purposes; (ii) preservation of the security and integrity of space objects in orbit; and (iii) due consideration for the legitimate defence interests of States;

Conscious that a comprehensive code, including transparency and confidence-building measures could contribute to promoting mutual understandings;

Without prejudice to future work in other appropriate international for such as the Conference on Disarmament and the United Nations Committee on the Peaceful Uses of Outer Space;

Adhere to the following Code of Conduct for Outer Space Activities (hereinafter referred to as the "Code").

# I. Purpose, Scope and General Principles

#### 1. Purpose and Scope

1.1. The purpose of this Code is to enhance the security, safety and sustainability of all outer space activities.

- 1.2. This Code addresses all outer space activities conducted by a Subscribing State or jointly with other States or by non-governmental entities under the jurisdiction of a Subscribing State, including those activities conducted within the framework of international intergovernmental organisations.
- 1.3. This Code, in endorsing best practices, contributes to transparency and confidence-building measures and is complementary to the normative framework regulating outer space activities.
- 1.4. This Code is not legally binding. Adherence to this Code and to the measures contained in it is voluntary and open to all States.

#### 2. General Principles

The Subscribing States decide to abide by the following principles:

- the freedom for all States, in accordance with international law, to access, to explore, and to use outer space for peaceful purposes without interference, fully respecting the security, safety and integrity of space objects and consistent with internationally accepted practices, operating procedures, technical standards and policies associated with the long-term sustainability of outer space activities, including, inter alia, the safe conduct of outer space activities;
- the inherent right of individual or collective self-defence as recognised in the United Nations Charter;
- the responsibility of States to take all appropriate measures and cooperate in good faith to prevent harmful interference in outer space activities; and
- the responsibility of States, in the conduct of scientific, civil, commercial and military activities, to promote the peaceful exploration and use of outer space and to take all appropriate measures to prevent outer space from becoming an arena of conflict.

# 3. Compliance with and Promotion of Treaties, Conventions and Other Commitments Relating to Outer Space Activities

The Subscribing States reaffirm their commitment to the existing legal framework relating to outer space activities. They reiterate their support to encouraging efforts in order to promote universal adoption, implementation, and full adherence to the instruments to which they are parties or subscribe to:

- (a) existing international legal instruments regulating outer space activities, including:
- the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (1967);
- · the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1968);
- the Convention on International Liability for Damage Caused by Space Objects (1972);
- · the Convention on Registration of Objects Launched into Outer Space (1975);
- the Constitution and Convention of the International Telecommunication Union and its Radio Regulations, as amended;
- the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water (1963) and the Comprehensive Nuclear Test Ban Treaty (1996).
- (b) declarations, principles and recommendations, including:
  - · International Co-operation in the Peaceful Uses of Outer Space adopted by the United Nations General Assembly's (UNGA) Resolution 1721 (December 1961);
  - the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space as adopted in UNGA Resolution 1962 (XVIII) (1963);

- the Principles Relevant to the Use of Nuclear Power Sources in Outer Space as adopted by UNGA Resolution 47/68 (1992);
- the 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 as adopted by UNGA Resolution 51/122 (1996);
- the International Code of Conduct against Ballistic Missile Proliferation(2002), as endorsed in UNGA Resolutions 59/91 (2004), 60/62 (2005), 63/64 (2008), and 65/73 (2010);
- the Recommendations on Enhancing the Practice of States and International Intergovernmental Organisations in Registering Space Objects as endorsed in UNGA Resolution 62/101 (2007);
- the Space Debris Mitigation Guidelines of the United Nations Committee for the Peaceful Uses of Outer Space, as endorsed in UNGA Resolution 62/217 (2007).

# II. Safety, Security and Sustainability of Outer Space Activities

# 4. Measures on Space Operations and Mitigation of Space Debris

- 4.1. The Subscribing States commit to establish and implement policies and procedures to minimise the possibility of accidents in space, collisions between space objects or any form of harmful interference with another State's peaceful exploration, and use, of outer space.
- 4.2. The Subscribing States commit, in conducting outer space activities, to:
- refrain from any action which brings about, directly or indirectly, damage, or destruction, of space objects unless such action is conducted to reduce the creation

of outer space debris or is justified by the inherent right of individual or collective selfdefence as recognised in the United Nations Charter or by imperative safety considerations, and where such exceptional action is necessary, that it be undertaken in a manner so as to minimise, to the greatest extent possible, the creation of space debris and, in particular, the creation of long-lived space debris;

- take appropriate measures to minimize the risk of collision; and
- make progress towards adherence to, and implementation of International Telecommunication Union regulations on allocation of radio spectra and orbital assignments.
- 4.3 In order to minimise the creation of outer space debris and to mitigate its impact in outer space, the Subscribing States commit to avoid, to the greatest extent possible, any activities which may generate long-lived space debris. To that purpose, they commit to adopt and implement, in accordance with their own internal processes, the appropriate policies and procedures or other effective measures in order to implement the Space Debris Mitigation Guidelines of the United Nations Committee for the Peaceful Uses of Outer Space as endorsed by UNGA Resolution 62/217 (2007).
- 4.4. When executing manoeuvres of space objects, for example, to supply space stations, repair space objects, mitigate debris, or reposition space objects, the Subscribing States commit to take all reasonable measures to minimise the risks of collision.

#### 5. Promotion of Relevant Measures in other Fora

The Subscribing States commit to promote the development of guidelines for outer space operations within the appropriate international fora, such as the Conference on Disarmament and the United Nations Committee on the Peaceful Uses of Outer Space, for the purpose of protecting the safety and security of outer space operations and the long-term sustainability of outer space activities.

### **II.** Cooperation Mechanisms

#### 6. Notification of Outer Space Activities

- 6.1. The Subscribing States commit to notify, in a timely manner, to the greatest extent possible and practicable, all potentially affected Subscribing States on the outer space activities conducted which are relevant for the purposes of this Code, including:
  - · scheduled manoeuvres which may result in dangerous proximity to the space objects of both Subscribing and non-Subscribing States;
  - · pre-notification of launch of space objects;
  - · collisions, break-ups in orbit, and any other destruction of a space object(s) which have taken place generating measurable orbital debris;
  - predicted high-risk re-entry events in which the re-entering space object or residual material from the re-entering space object would likely cause potential significant damage or radioactive contamination;
  - · malfunctioning of space objects which could result in a significantly increased probability of a high risk re-entry event or a collision between space objects.
- 6.2. The Subscribing States commit to provide the notifications described above to all potentially affected States, including non-Subscribing States where appropriate, through diplomatic channels, or by any other method as may be mutually agreed, or through the Central Point of Contact to be established under section 11. In notifying the Central Point of Contact, the Subscribing States should identify, if applicable, the potentially affected States. The Central Point of Contact should ensure the timely distribution of the notifications to all Subscribing States.

#### 7. Registration of Space Objects

The Subscribing States commit to register, in a timely manner, space objects in accordance with the Convention on Registration of Objects Launched into Outer Space and to provide the United Nations Secretary-General with the relevant data as set forth in this Convention and in the Recommendations on Enhancing the Practice of States and International Intergovernmental Organisations in Registering Space Objects, as endorsed by UNGA Resolution 62/101 (2007).

#### 8. Information on Outer Space Activities

- 8.1. The Subscribing States commit to share, on an annual basis, where available and appropriate, information on:
- their space policies and strategies;
- their space policies and procedures to prevent and minimise the possibility of accidents, collisions or other forms of harmful interference and the creation of space debris; and
- efforts taken in order to promote universal adoption and adherence to legal and political regulatory instruments concerning outer space activities.
- 8.2. The Subscribing States may also consider providing timely information on outer space environmental conditions and forecasts to the governmental agencies and the relevant nongovernmental entities of all space faring nations, collected through their space situational awareness capabilities.

#### 9. Consultation Mechanism

9.1. Without prejudice to existing consultation mechanisms provided for in Article IX of the Outer Space Treaty of 1967 and in Article 56 of the ITU Constitution, the Subscribing States have decided on the creation of the following consultation mechanism:

- A Subscribing State or States that may be directly affected by certain outer space activities conducted by a Subscribing State or States and has reason to believe that those activities are, or may be contrary to the commitments made under this Code may request consultations with a view to achieving mutually acceptable solutions regarding measures to be adopted in order to prevent or minimise the potential risks of damage to persons or property, or of potentially harmful interference to a Subscribing State's outer space activities.
- The Subscribing States involved in a consultation process commit to:
- · consult through diplomatic channels or by other methods as may be mutually determined; and
- · work jointly and cooperatively in a timeframe sufficiently urgent to mitigate or eliminate the identified risk initially triggering the consultations.
- Any other Subscribing State or States which has reason to believe that its outer space activities would be directly affected by the identified risk may take part in the consultations if it requests so, with the consent of the Subscribing State or States which requested consultations and the Subscribing State or States which received the request.
- The Subscribing States participating in the consultations will seek mutually acceptable solutions in accordance with international law.
- 9.2. In addition, the Subscribing States may propose to create, on a case-by-case basis, independent, ad hoc fact-finding missions to investigate specific incidents affecting space objects and to collect reliable and objective information facilitating their assessment. These fact-finding missions, to be established by the Meeting of the Subscribing States, should utilise information provided on a voluntary basis by the Subscribing States, subject to national laws and regulations, and a roster of internationally recognised experts to undertake an investigation. The findings and any recommendations of these experts will be advisory, and will not be binding upon the Subscribing States involved in the incident that is the subject of the investigation.

### **IV.** Organisational Aspects

#### 10. Meeting of Subscribing States

- 10.1. The Subscribing States decide to hold meetings biennially or as otherwise decided by the Subscribing States, to define, review and further develop this Code and ensure its effective implementation. The agenda for such meetings could include: (i) review of the implementation of the Code, (ii) evolution of the Code, and (iii) discussion of additional measures which may be necessary, including those due to advances in the development of space technologies and their application.
- 10.2. The decisions at such meetings, both substantive and procedural, are to be taken by consensus of the Subscribing States present.
- 10.3. Any Subscribing State may propose modifications to this Code. Modifications apply to Subscribing States upon acceptance by all Subscribing States.
- 10.4. The results of the Meeting of Subscribing States are to be brought in an appropriate manner to the attention of relevant international for including the United Nations Committee on Peaceful Uses of Outer Space (COPUOS) and the Conference on Disarmament (CD).

#### 11. Central Point of Contact

A Central Point of Contact to be established by Subscribing States will:

- receive and announce the subscription of additional States;
- maintain an electronic database and communications system;
- serve as secretariat at the Meetings of Subscribing States; and
- carry out other tasks as determined by the Subscribing States.

#### 12. Outer Space Activities Database

- 12.1. The Subscribing States commit to creating an electronic database and communications system, which should be used exclusively for their benefit in order to:
- collect and disseminate notifications and information submitted in accordance with the provisions of this Code; and
- serve as a mechanism to channel requests for consultations.
- 12.2. Funding the development and maintenance of the Outer Space Activities

  Database will be agreed by the Meeting of Subscribing States.

# 13. Participation by Regional Integration Organisations and International Intergovernmental Organisations

In this Code, references to Subscribing States are intended to apply, upon their acceptance:

- To any regional integration organisation which has competences over matters covered by this Code, without prejudice to the competences of its member States.
- With the exception of sections 10 to 12 inclusive: To any international intergovernmental organisation which conducts outer space activities if a majority of the States members of the organisation are Subscribing States to this Code.

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#### 초 록

#### EU의 우주행동강령의 의미와 평가

박원화\*

유럽연합(European Union: EU)이 2012년 6월 유엔의 우주의평화적이용위원회 (COPUOS) 제 55차 회기에서 공식 제기한 우주활동의 국제 행동규범안(Draft International Code of Conduct for Outer Space Activities)은 그간 우주에서의 국가활동 규범에 대한 미비한 요소들을 제시한 내용으로서 국제사회의 관심을 끌기에 충분한 내용이다. 현재 우주에서의 미비한 질서는 군비경쟁 금지, 우주쓰레기 경감 등을통한 우주의 안전과 안보를 위한 지침, 그리고 우주활동의 정보를 참여 국가 간 교환하는 것이라고 할 수 있는 바, EU의 상기 제안은 여사한 문제들에 대한 행동 강령을정한 것으로서 주목되는 내용이다.

2008년 말부터 시작된 EU의 제안 활동은 그간 일부 우주활동 국가들, 특히 미국과의 비공식 접촉을 통하여 접촉대상국들의 의견도 반영한 가운데 2013년 채택을 목표로 하는 자발적 이행 규범으로서 강제력을 가지고 있지는 않지만 미국은 우주에서의 군축 관련 규범 제정의 필요성에 탄력을 제공하는 계기가 될 가능성에 우려하는 가운데 현재는 방관하고 있는 입장으로 보인다. 이러한 미국의 입장은 우주에서 전략적 우위를 점하고 있다는 자국의 이익이 군축에 관한 규범의 제정으로 손상될 수 있다는 판단을 근거로 하고 있다. 이에 따라 미국은 유엔 총회에서 우주에서의 군비경쟁 방지 (PAROS)에 관한 결의에 반대하고 군축회의(Conference on Disarmament: CD)에서 오랫동안 논의되어 왔던 우주에서의 군축을 촉구하는 논의의 장을 마련하는 것에 반대하여 왔다.

중국과 러시아는 2008년 우주에서의 군축에 관한 PPWT (Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects )채택을 제안하였는 바, EU의 제안은 자신들이 제안한 PPWT의 추력을 저상시키는 내용이 되기 때문에 불편한 심정으로서 역시 소극적인 입장이다.

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한편, 미국이 상기 입장의 연장선 상에서 PPWT에 반대 입장을 취하는 것은 이해하기 어렵지 않다.

EU의 행동규범안은 주요 우주대국의 군사전략적 측면에서의 이해관계 때문에 그 장래가 명확치 않으나 우주쓰레기의 경감을 위하여 노력하고 우주활동의 정보를 상호 교환하면서 우주에서의 안전과 안보를 보장을 통하여 가능한 우주의 평화적 이용과 탐사라는 기본 명제를 극대화 시키는 효과를 가져오는 것으로서 매우 바람직한 조치로 간주된다.

단, 동 규범안은 참여 국가들간의 협조와 연락업무를 수행하기 위하여 상설기구를 설치하도록 되어있지만 이는 기존 조직인 유엔외기권사무소(UN Office for Outer Space Affairs)가 담당하도록 할 경우 효율과 경제를 도모할 수 있을 것이다. 동 규범안에 대한 추후 구체 협상 시 여사한 내용도 논의될 것으로 보지만 EU의 우주활동의 안전과 안보에 관한 조치는 환경문제에서와 같이 국제사회를 이끌어가는 또 하나의 의미있는 기여로 평가받아야 한다.

주제어 : 우주 군축, EU행동강령, 우주의 평화적 이용, PAROS, 우주군축조약(PPWT)

#### **Abstract**

The Draft International Code of Conduct for Outer Space Activities officially proposed by the European Union on the occasion of the 55th Session of the United Nations Peaceful Uses of the Outer Space last June 2012 in Vienna, Austria is to fill the lacunae of the relevant norms to be applied to the human activities in the outer space and thus has the merit our attention. The missing elements of the norms span from the prohibition of an arms race, safety and security of the space objects including the measures to reduce the space debris to the exchange of information of space activities among space-faring nations. The EU's initiatives, when implemented, cover or will eventually prepare for the forum to deal with such issues of interests of the international community.

The EU's initiatives begun at the end of 2008 included the unofficial contacts with major space powers including in particular the USA of which position is believed to have been reflected in the Draft with the aim to have it adopted in 2013. Although the Code is made up of soft law rather than hard law for the subscribing countries, the USA seems to be afraid of the eventuality whereby its strategic advantages in the outer space will be affected by the prohibiting norms, possibly to be pursued by the Code from its current non-binding character, of placing weapons in the outer space. It is with this trepidation that the USA has been opposing to the adoption of the United Nations Assembly Resolutions on the prevention of an arms race in the outer space (PAROS) and in the same context to the setting-up of a working group on the arms race in the outer space in the frame of the Conference on Disarmament.

China and Russia who together put forward a draft Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects (PPWT) in 2008 would not feel comfortable either because the EU initiatives will steal the lime light. Consequently their reactions are understandably passive towards the Draft Code while the reaction of the USA to the PPWT was a clear cut "No".

With the above background, the future of the EU Code is uncertain. Nevertheless, the purpose of the Code to reduce the space debris, to allow exchange of the information on the space activities, and to protect the space objects through safety and security, all to maximize the principle of the peaceful use and exploration of the outer space is the laudable efforts on the part of EU. When the detailed negotiations will be held, some problems including the cost to be incurred by setting up an office for the clerical works could be discussed for both efficient and economic mechanism. For example, the new clerical works envisaged in the Draft Code could be discharged by the current UN OOSA (Office for Outer Space Affairs) with minimal additional resources.

The EU's initiatives are another meaningful contribution following one due to it in adopting the Kyoto Protocol of 1997 to the UNFCCC (UN Framework Convention on the Climate Change) and deserve the praise from the thoughtful international community.

**Key Words**: disarmament in outer space, EU code of conduct, peaceful use of outer space, PAROS, PPWT