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## POTENTIAL CONTRIBUTION OF JAPAN TO THE CODE OF CONDUCT FOR OUTER SPACE ACTIVITIES

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### ABSTRACT

In this paper Japan's potential contributions to the confidence-building measures (CBM) proposed by the European Union (EU) will be discussed.

The EU Council adopted a Draft Code of Conduct for Outer Space Activities (EU CoC) in 2008. The main objective of the EU CoC is to strengthen the safety, security and predictability of all space activities. The EU CoC defined international peace and security as one of its fundamental values, which were by themselves indisputable; however, the actual prospect of adoption of the EU CoC is yet in question, and the EU will most likely need to find allies to implement it.

Japan is one of the major space-faring nations and is also considered to be one of the "key partners" according to the proposed document in EU. This paper will consider the possibility of Japan's contribution to the EU CoC.

Japan shares many goals with the EU in regard to space policies, the question to consider is how the Far East and Western nations could cooperate to assure and improve the peaceful use of outer space. To answer this question three forums in Japanese government with regards to the newly adopted Japanese Basic Law will be addressed.

### FULL TEXT

#### 1. The Need for Confidence-Building Measures

An arms race in outer space should be prevented. This issue has already been raised during the initial phase of space activities among the international society, resulting in two options to try to address the situation. One was to amend the Outer Space Treaty, and the other was to adopt a new treaty. Although the United Nations Committee on Peaceful Uses of Outer Space (COPUOS) sincerely attempted to resolve the issue, a consensus could not be reached. As a result, the COPUOS had to pass the matter over to the Conference on Disarmament (CD) around 1981. The CD began with clarifying what should be prohibited and concluded that prohibiting any act of weaponization would be the most ideal way to achieve arms control. If there is a clear definition of a 'space weapon' then there could be a presumption of weaponizing outer space. There exists, however, a difference in perception with regard to this definition from various nations in the global community. As a result, this conflict of perceptions prevented a treaty that would have specifically prohibited weaponization of space.

Due to the interference of interests among nations, discussions continued without bearing results. Although it seemed impossible to reach an agreement on whether a missile could be a target, there seemed to be a consensus with regard to attacking space objects<sup>1</sup>. Therefore, Sweden made a new proposal to the CD which narrowed the prohibition to any weapon that attacks space objects. This proposal was a revolutionary one, but failed to crystallize into a treaty because of the lack of confidence among the international societies.

In 1986, the Federal Republic of Germany proposed a dual approach to the situation. Germany suggested that while negotiating the restriction of Anti-Satellite Weapon (ASAT) between the U.S. and the U.S.S.R., the immunity of satellites as well as CBM were to be negotiated on a multinational basis, and so the CD started to deal with confidence-building at that point in time.

The notion that the majority of nations in the international society actually desired to build confidence amongst them can be seen in many

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<sup>1</sup> CD/PV.301.1985.

of the working papers that have been submitted<sup>2</sup>. For example, in the absence of clear and timely information on the enforcement of space law and the character of space activity, Poland suggested that the CD adopt a measure which imposed no obligation on the ratifying nations which is the CBM<sup>3</sup>. France, with this approach, showed supported Poland's position<sup>4</sup>.

Moreover, the General Assembly adopted resolutions entitled "Transparency and CBM in outer space activities" for four years in a row, confirming the conclusion that CBM will suppress the arms race and ensure the prohibition of weaponization<sup>5</sup>.

## 2. Code of Conduct for Outer Space Activities

### 2.1. Background

In 2006, the UN General Assembly adopted a resolution on "Transparency and CBM in outer space activities" in hopes of preventing an arms race in outer space<sup>6</sup>. The EU unanimously voted for this resolution.

In February 2007, a representative of Germany expressed his view on behalf of the EU in the Plenary Meeting of the CD in reference to the Chinese ASAT test that occurred earlier in the year. He stated that "Any CBM could, among others, be based on the principle of non-interference with non-aggressive activities in space and require the drawing up a "code of conduct"..."<sup>7</sup>

In March 2007, Italy brought up an idea to create a paper entitled "Food for Thought". With the paper being seen as a 'first stepping stone', Italy strongly stressed the necessity of a "comprehensive code of conduct", and asserted its purpose to be a "prevention of on-orbit break-ups and collisions; safe disposition or de-orbiting of spacecraft that have reached the end of mission operations; and limitations of objects released during normal operations". Italy also provided general principles and specific practices that were to be followed voluntarily. In

relation to the paper, the EU held a "Workshop on Security and Arms Control in Space and the Role of the EU" in Berlin on June 2007<sup>8</sup>. The German Ambassador pointed out that adopting a Code of Conduct might be more realistic, rather than adopting a treaty to ban space weapons. During the next, the elaboration of a Comprehensive Code of Conduct on Space Objects and Space Activities was proposed to the UN General Assembly on September 2007<sup>9</sup>. In November that same year, the "Food for Thought" paper was shared with the main space-faring nations to elicit their comments before proceeding further<sup>10</sup>.

For the next step, the discussions were moved to the Coordination Committee for UN Commission (CODUN), also known as the Working Party on Global Disarmament and Arms Control. In March 2007, the "Draft Best Practices Guidelines for / Code of Conduct on Outer Space Activities" was drafted; this was then followed with the "Draft Code of Conduct on Outer Space Activities" in April, which was less stringent than the March draft. The U.S. (the Bush administration) made comments on the drafts during the process to show the possibility of future collaboration on this topic.

In June 2008, the April draft was adopted in the CODUN by EU countries<sup>11</sup>. In addition, the Netherlands proposed a document indicating the next steps with regard to having discussions with key partners and identifying modalities for promoting the document in the relevant international forum<sup>12</sup>.

Despite the agreement for the adoption of the April draft by the EU countries, there was still much to be discussed; for example, the necessity to have a bilateral discussion with the non-EU space-faring nations. According to the EU

<sup>8</sup> "Workshop on Security and Arms Control in Space and the Role of the EU" 21-22. June 2007, Berlin.

<sup>9</sup> A/62/114/Add.1.2007.

<sup>10</sup> 16494/08. PESC 1586. CODUN58. 2.Dec.2008.1.

<sup>11</sup> Deckov, Marcel. "The European Proposal for a Code of Conduct for Outer Space Activities" Yearbook on Space Policy 2007/2008 - From Policies to Programmes. Eds. Kai-Uwe Schrogl, Charlotte Mathieu and Nicolas Peter (eds.). Vienna: Springer, 2009. 152-163.

<sup>12</sup> Rathgeber, Wolfgang. Remuss, Nina-Louisa. "Space Security- A formative Role and Principled Identity for Europe" ESPI REPORT 16. February 2009.

<sup>2</sup> Federal Republic of Germany CD/PV.345.1986.9; Pakistan CD/708, CD/OS/WP.12.1986.2.; China CD/1606.2000.6., CD/1645.1-6.2001; Russia and China CD/1679.2002.3, CD/1778.2006.1.

<sup>3</sup> CD/941, CD/OS/WP.38.1989.3.

<sup>4</sup> CD/1092, CD/OS/WP.46.1991.5.

<sup>5</sup> A/RES/60/66.2005; A/RES/61/75.2006; A/RES/62/43.2007; A/RES/63/68.2008.

<sup>6</sup> A/RES/61/75.2006.

<sup>7</sup> CD/PV.1052.4.2007.

Council's documents, China and Russia had informal bilateral consultations with the EU in October and November in 2008<sup>13</sup>. Following these consultations, the CODUN prepared a revised version of the EU CoC in November and agreed in December 2008 to launch consultations with a wider number of space-faring nations or nations with an interest in space with, the objective of preparing a text that would be acceptable to as many countries as possible<sup>14</sup>.

After finalization was completed by the CODUN and with the Political endorsement by the Security Committee (PSC), the Draft Code was submitted to the EU Council for adoption in December<sup>15</sup>.

### 2.2. Contents

The EU CoC is made up of a Preamble and 12 articles. The 4 sections are:

- I. Core principles and objectives
- II. General measures
- III. Cooperation Mechanism
- IV. Organisational aspects

In the CD, it was stated that "... the adoption of measures of transparency and CBM, as conducive towards the prevention of an arms race in outer space, could be discussed"<sup>16</sup>. In the "Food for Thought" paper, the primary objectives of the code were stated as the, "prevention of on-orbit break-ups and collisions; safe disposition or de-orbiting of spacecraft that have reached the end of mission operations; limitations of objects during normal operations." Neither of the objectives mentioned were found in the EU CoC.

In the "Food for Thought" paper, which reflected the working papers submitted to the CD in the course of discussing the code of conduct, the specific practices that could be implemented in the code were proposed; however, not only did the EU CoC have no articles referring to "special caution zones", but

<sup>13</sup> 17184/08. PESC 1700. CONOP102. CODUN 63. 17. Dec.2008.17.

<sup>14</sup> 16494/08. PESC 1586. CODUN 58. 2. Dec.2008.2.

<sup>15</sup> 16560/08. PESC 1595. CODUN 59. 3. Dec.2008.1; 17175/08. PESC 1697. CODUN 61. 17 Dec.2008.1.

<sup>16</sup> CD/PV.1052.2007.4.

articles were more vague than the former drafts. For example, in the "Food for Thought" paper, it was stated within the notification section that before a launch or the approach of a satellite occurs, prior notice should be given. The EU CoC portrayed a more relaxed attitude and simply stated: "... to notify in a timely manner, to the greatest extent feasible and practicable". In addition, the "Food for Thought" paper suggested that the nations within the J category, "Military practices...[should]... refrain from simulating attacks on satellites and [from] flight testing, and should, in any case, avoid any manoeuvres or actions which can bring, directly or indirectly, to the damage or destruction of a satellite or of a space object".

The EU CoC contradicted this by allowing the execution of these actions, stating "The inherent right of individual or collective self-defense in accordance with the United Nations Charter". Although the articles have become ambiguous during the process of dealing with other space-faring nations in and outside of the EU, the main objective that is the most important pillar of the EU CoC was emphasized. As seen in the seventh paragraph of the preamble, "[r]ecalling the importance of developing transparency and confidence-building measure for activities in outer space" and in Article 1.3, the phrase "contributes to transparency and CBM" introduced new language.

### 2.3. Legal Point of View

It is important to remember that the language of a treaty should be clear and well-defined. Treaties do not just prohibit actions, they define and clarify actions and purposes, and all that language has to be carefully written. Imprecise language creates many possibilities for interpretation that may result in loopholes that will enable some of the states to avoid the prohibition without violating it. Unfortunately, the EU CoC contains many terms to designate a single object.

For example, two terms are used for objects: "space objects" and "outer space objects" in the text. The former "space objects" (refer to Preamble, Article 2,4,6,7 and 9) is used in UN treaties and decisions and it is defined as "(space objects) includes component parts of a space object as well as its launch vehicle and parts thereof". On the other hand, the latter "outer space objects" (refer to Preamble) is used in the Draft Treaty on the Prevention of the Placement of Weapons in Outer Space, Threat of use of

Force Against Outer Space Objects (PPWT)<sup>17</sup> was submitted by China and Russia. In it “outer space objects” is defined as “designed for functioning in outer space, being launched into an orbit around any celestial body, or being in the orbit around any celestial body, or on any celestial body except the Earth, or leaving the orbit around any celestial body towards this celestial body, or moving from any celestial body towards another celestial body, or placed in outer space by any other means”. The difference derived from these two terms needs to be further considered; however, they make a slight difference in the prohibition of accidental incidents and intentional damage, referring to Article 4 of the EU CoC.

In Article 4.1, it states that. “The Subscribing States will establish and implement national policies and procedures to minimise the possibility of accidents in space, collisions between *space objects* or any form of harmful interference with other States’ right to the peaceful exploration and use of outer space.”, but in Article 4.2. it is mentioned that “The Subscribing States will, in conducting outer space activities refrain from any intentional action which will or might bring about, directly or indirectly, the damage or destruction of *outer space objects* unless such action is conducted to reduce the creation of outer space debris and/or justifies by imperative safety considerations”<sup>18</sup>. Therefore to understand the intention of the EU CoC the definition of outer space objects especially “designed for functioning in outer space” should be carefully considered.

It should be noted that “activities in outer space”(refer to Preamble) and “outer space activities”(refer to Article 1,3,4,6,8,9 and 12) , “debris”(refer to Article 4) and “space debris”(refer to Preamble, Article 3,4,5 and 8) contain multiple definition as well.

### 3. Japanese Basic Law

#### 3.1. Changes in Japanese Space Policy

Since the adoption of the Japanese Basic Space Law in May of 2008, fundamental changes in Japanese space policy have occurred. The most notable change has been in military use.

Japan restricted the Japanese Self Defense Force (JSDF) to use outer space for military purposes

in general<sup>19</sup>. When considering the “peaceful use of outer space” in Article 4 of the Outer Space Treaty, Japan interpreted this meaning as “non-military”. This principle was set in the Diet resolutions of 1969<sup>20</sup>. It was, however, the development of technology that led to the expansion of military use in outer space. The emergence of private enterprise in this new field produced benefits from satellites and consequently, enriched the lives of the citizens of Japan. With the development of technology, the Japanese government had to admit the necessity of use of outer space by the JSDF. Article 2 of the Basic Law states that the “development and use of outer space shall be carried out in accordance with treaties on space development and use and other international commitments 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, based on the pacifism of the Constitution of Japan”. To this end, JSDF will now be able to use outer space in a “non-aggressive” context.

Although Japan has adopted the international standard in relation to the interpretation of Outer Space Treaty, it does not mean that Japan can use its self-defense force for any activity that falls under the scope of non-aggressive activities. Article 9 of the Japanese Constitution states “aspiring sincerely at international peace based on justice and order, the Japanese people forever renounces war as a sovereign right of the nation and the threat or use of force as means of settling international disputes.” Even in the case of self-defence, the Japanese Constitution strictly limits the military activities of JSDF and maintains an exclusively defence-oriented policy. This exclusively defence-oriented policy presumes the minimum necessary forces to defend the state; therefore, it is not permitted to possess weapons such as those used in the ASAT. In 1993, North Korea conducted a missile test launch of its medium range ballistic missile, No-dong 1, towards the Japan Sea. Again in 1998, a Taepodong-1, long-range ballistic missile flew over Japanese territory. In response to these incidents, Japan will most likely be stressing the

<sup>19</sup> There were few exceptions such as communications satellites; e.g. CS-2a and CS-2b.

<sup>20</sup> 9 May 1969. House of Representatives Proceedings of vol.35; 13 Jun. 1969. House of Councillors Special Committee for the Promotion of Science and Technology Proceedings vol. 9. 332.

<sup>17</sup> CD/1815.2007.

<sup>18</sup> Italic by author.

importance of early warning satellites and reconnaissance satellites. The document submitted by the secretary of the Second Expert Panel to the Panel members stated: “[i]t is essential to advance the consideration of military use; [e.g. by strengthening early warning functions and communication method]; in the range of defence-oriented policy.<sup>21</sup>” The introduction of early warning satellites had been strongly advocated since the North Korea’s missile launch test.

### 3.2. Adaptability with the EU Code of Conduct

It will take a few more years to solidify Japanese space policy, but for now it is possible to point out the growing trend toward safe use of outer space from the Japanese Basic Law. Regarding international cooperation, which is mentioned in the EU CoC in the Preamble, Article 1 of the Basic Space Law states the “contribution to global peace and welfare of all mankind “. In addition, in the context of debris mitigation, avoiding intentional destruction of space object is mentioned in the EU CoC, while Article 20 of the Basic Space Law notes to consider “appropriate measures to ensure international cooperation for the preservation of the space environment “. Even in the context of registering space objects (Article 7 EU CoC), Japan intends to develop necessary law systems to execute space related treaties.

In this regard, Japan has no reason to refuse collaboration with the EU CoC.

### 4. Conclusion

As stated in the proposal made by the Netherlands, the EU considers Japan as one of the fifteen key partners to engage in discussions concerning the EU CoC. The EU looks forward to Japan's contribution, since the full support of all key partners (or space-faring nations) is needed to ensure a safer and more secure space activities<sup>22</sup>.

Considering that the new Japanese Space Policy will allow the JSDF to use outer space technology for military purposes, international

cooperation is required more than ever.

Japan and the EU can both gain advantages from cooperating in discussions with the EU CoC. It is critical for Japan to contribute to the Code to protect its newly formed space policies and objectives.

Since the full support of all the key partners is needed to ensure safer and more secured space activity, it is safe to say that the EU is looking forward to Japan’s contribution in the near future<sup>23</sup>. Moreover, there are still concerns expressed about Japan's close relations with the U.S, since Japan's position is dependant on U.S. reactions to the EU CoC. For example, throughout the discussions on the content for Japan’s Basic Plan, many documents emphasized the necessity for cooperation with the US military. It was stated by the Expert Panel under the Japanese government that “Contributing [or, maybe investing] diplomatic effort to the formulation of international security reflects our country’s national benefit based on the comprehensive cooperative relation with the U.S., including other bilateral and multilateral relations.<sup>24</sup>” This discussion can also be noted in proceedings of the documents submitted to the Council on Security and Defense Capabilities and also in many of the documents that were submitted to the Committee for the Space Exploitation Promotion. According to the discussion, although Japan would have no trouble in dealing with the EU Code of Conduct, it may need to move in step with the U.S.

Although the EU has introduced the EU CoC to the U.S. in the past, it was addressed to the Bush Administration and not to the recent Obama Administration. Fortunately, President Obama stated the necessity of codes of conduct concerning the space security during his presidential campaign<sup>25</sup>. Also, on his White House website Obama’s staff uploaded his new 21st Century Defense Program, which, once again, mentions the necessity of codes of

<sup>21</sup> “Status of Development and Utilization of the Satellites and Rockets” 4 Nov. 2008. 2<sup>nd</sup> Meeting of the Strategic Expert Panel on Space Exploitation. 26 Jan. 2008. 5.

<<http://www.kantei.go.jp/jp/singi/utyuu/senmon/dai2/siryuu1.pdf>>.

<sup>22</sup> STSC meeting. Interview with one of the delegation of EU member states. 10 Feb 2008.

<sup>23</sup> STSC meeting 10 Feb. 2009. Interview with one of the delegation of the EU member states.

<sup>24</sup> “In regard of Basic Direction of the Basic Plan” 27 Nov. 2008. 3<sup>rd</sup> Meeting of the Strategic Expert Panel on Space Exploitation. 26 Jan. 2008. 3.

<sup>25</sup> “2008 Presidential Candidates' Responses to Seven Key National Security Questions” 16 Aug. 2007. Council for a Livable World. 28 Jan. 2009. <[http://livableworld.org/assets/pdfs/2008\\_presidential\\_candidates\\_questionnaire\\_responses.pdf](http://livableworld.org/assets/pdfs/2008_presidential_candidates_questionnaire_responses.pdf)>

conduct<sup>26</sup>.

Moreover, a U.S. representative had made remarks to the CD in 1 April 2008, stating: “[the] United States still hopes to continue working with Russia and other major space-faring nations in ways that could build on our ongoing work with our friends in Europe on concrete proposals for voluntary TCBMs that can gain wide acceptance.<sup>27</sup>” It should be pointed out that the U.S., as a government, has a high level of interest concerning the subject of safe, secure, and sustainable space activity.

The EU CoC and Japan’s contribution to safe, secure, and sustainable space activity has the possibility of a bright future. To strengthen the cooperation between Japan and the EU, what Japan could improve are the issues concerning space debris, Space Situational Awareness (SSA) and Space Traffic Management. It is not an exaggeration to say that the Japanese government was not motivated to deal with the issues concerning these topics in the past. Its reluctance was perhaps further fuelled by the fact that these issues were not written in the JAXA Vision<sup>28</sup>. Considering the fact that the other Japanese governmental agencies have not developed an official space policy and that Japan was using outer space mainly for research, the JAXA Vision could be regarded as a “provisory space policy”. While the Basic Law and other related discussions approach the issues regarding space debris, there have been no attempts to provide technical measures to handle potential problems. In addition, no mature discussions have taken place regarding SSA and Space Traffic Management, which can ensure space security and protect outer space activities.

The more Japan relies on using satellites for security purposes, the more it will affect Japan

negatively if something happens to its satellites. Discussions in the government will not only promote action to safeguard and secure space activities for Japan, but will also achieve the same for the other space-faring nations. Eventually, the continuation of this discussion will lead to a stronger cooperation in the realisation of confidence-building initiated by the EU.

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<sup>26</sup> “Build Defense Capabilities for the 21<sup>st</sup> Century” 21 Jan. 2009. The White House – President Barack Obama. 1 Feb. 2009.

<<http://whitehouse.gov/agenda/defense/>>

<sup>27</sup> “Security in Space the next generation” 1 Apr. 2009 Remarks made by the U.S. representative Garold Larson in a conference organized by UNIDIR 17 Feb. 2009.

<<http://geneva.usmission.gov/CD/updates/0401Larson.html>>; also available on

<<http://www.unidir.ch/pdf/articles/pdf-art2816.pdf>>

<sup>28</sup> “JAXA Vision-JAXA 2025-” JAXA 5 Feb. 2009

<[http://www.jaxa.jp/about/2025/pdf/jaxa\\_vision\\_e.pdf](http://www.jaxa.jp/about/2025/pdf/jaxa_vision_e.pdf)>