

## The Hague Code of Conduct Against Ballistic Missile Proliferation: “Lessons Learned” for the European Union Draft Code of Conduct for Outer Space Activities

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*Concerns about the harm caused upon orbiting space objects - whether intentional or accidental - have increased in recent years, as well as the emerging awareness that the security and safety of national satellites - of vital importance for modern societies but at the same time so vulnerable - relies on a collective effort. In December 2008 the EU responded to these concerns by adopting a Draft Code of Conduct (EU Draft CoC) for outer space activities. According to some experts, many look at the Hague Code of Conduct against Ballistic Missiles Proliferation (HCoC) as a successful example of how “soft law” can be implemented and play a concrete role in an international security context. While it is certainly interesting to look at the two Codes in parallel (they are complementary and similar in some aspects but different in others), a closer look at the HCoC would unveil its limits. This important exercise can allow for the drawing of “lessons learned” and avoid the repetition of circumstances that may undermine the credibility, universality and implementation of the EU Draft CoC. The main aspects considered here include the universalisation of the EU Draft CoC and its chances to motivate a larger participation in it, its effective implementation by adhering states and the scope of the Code. Some recommendations to increase the chances of a universal and effective EU Draft CoC are put forward.*

### 1. The Context

In December 2008 the Council of the European Union adopted a Draft Code of Conduct (EU Draft CoC) for Outer Space Activities. Concerns about the harm caused by intentional or accidental events to orbiting space objects have increased in recent years, following two episodes that caused damages to satellites and an impressive amount of debris (Chinese anti-satellite missile test, held on January 2007 and the collision between Iridium 33 satellite (US) and Cosmos 2251 satellite (Russia) in February 2009). An international legal framework in the use of space already exists, but some standards for good behavior are still missing. As the use of space expands in terms of activities and actors, the potential for additional frictions around it increases.

Satellites are today of vital importance for modern societies but at the same time so vulnerable. The awareness that the security and safety of national space assets relies on a collective effort has emerged and some

propositions were put forward. Among them, the joint proposition by China and Russia for a treaty concerning weapons and the use of force in outer space<sup>1</sup> has few possibilities to have follow-up, due to the legally binding nature of the treaty and the consequent difficulties to draft a shared text. The European Union – acting for the first time as an international normative actor in the domain of space - proposed a Draft Code of Conduct for Outer Space Activities. The EU Draft CoC has a greater chance to achieve a large consensus since it concerns the whole international community, it adopts an approach that does not require a space weapon definition and it is politically and not legally binding.

Many question the role and the efficacy of a Code of Conduct, as a tool of “soft law”. In

<sup>1</sup> United Nations Conference on Disarmament. 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)” Introduced by the Russian Federation and China. CD 1839 of 29 Feb. 2008. Geneva: United Nations.

particular, studies have been already conducted about regimes in the security domain, which are particularly valuable but also particularly difficult to achieve and implement<sup>2</sup>. More rules of the road do not mean that they will be respected by all and in any circumstances (also legally binding treaties can be broken) but the adoption of a Code of Conduct can serve this purpose. By defining new good practices it can augment the likelihood that rules (that did not exist before) are respected and can help to identify irresponsible actors. Moreover, a Code today can facilitate the adoption of a Treaty tomorrow, or even the creation of customary international law.

**Many look at the Hague Code of Conduct against Ballistic Missiles Proliferation (HCoC) as a successful example of “soft law”.**

According to some experts<sup>3</sup>, the Hague Code of Conduct against Ballistic Missiles Proliferation (HCoC) is a successful example of how “soft law” can be respected and can play a concrete role in the international security context. While it is certainly interesting to look at the two Codes in comparison (they are complementary, similar and different at the same time), a closer look at the HCoC unveils its limits. Such an important exercise can allow for the drawing of “lessons learned” and avoid repeating the circumstances that can undermine the credibility, universality and implementation of the EU Draft CoC.

## 2. The EU Draft CoC and the HCoC

First of all, it is important to note a fundamental difference between the two Codes. While the HCoC refers to a specific effort of non proliferation and addresses in real terms the few countries that develop BM, the EU Draft CoC aims at regulating the use of space which is an issue concerning many more countries, not only those that produce launchers or satellites but also those that use satellites. Moreover, while BM constitutes a security and defense tool, services provided by satellites are today essential to a huge number of activities that are part of the day-to-day life of all citizens in modern societies (navigation, weather

forecast, TV broadcasting, telephone services, environment monitoring just to name a few). The community concerned is much larger and is increasing very quickly. This important difference has to be considered when estimating the chances of the adoption of the EU Draft CoC by a large number of countries as well as developing strategies to this end.

Despite this fundamental difference, the two Codes can be seen in a certain manner as complementary and in some aspects similar. It is interesting to note that the HCoC applies to Ballistic Missiles (BM) capable of delivering Weapons of Mass Destruction (WMD) and therefore addresses also Space Launch Vehicles (SLV) that could be used to conceal BM programs. More precisely, with regard to the Transparency Measures, it asks subscribing states to make annual declarations not only on BM programs but also on SLV policies and launch sites, providing information on the generic class of SLV launched during the previous year. The EU Draft CoC calls for a similar sharing of information as well<sup>4</sup>. More interestingly, the HCoC requires also pre-notifying launches and test flights. Similarly the EU Draft CoC asks countries to “notify in a timely manner” all potentially affected subscribing states on the outer space activities conducted.

On the other hand, and in order to mitigate the production of debris and increase the security of space objects, the EU Draft CoC asks subscribing states to “refrain from any international action which will or might bring about, directly or indirectly, the damage or destruction of outer space objects [...]”. Every tool used to this purpose - weapons installed in space, on the ground, on airborne systems or at sea - are addressed, including BM used as ASAT weapons. Therefore, such wording also includes the Chinese test of January 2007, unlike the Treaty proposed jointly by China and Russia which refers only to weapons in space.

The EU Draft CoC complements the HCoC since it also asks subscribing states to refrain from the use of BM, even if limited to those flying in space or directed in space and in any case to those that might cause harm to satellites and generate debris. Moreover, the EU Draft CoC refers explicitly to the HCoC

<sup>2</sup> Krasner, Stephen D. Editor. *International Regimes*. New York: Cornell University Press, 1983.

<sup>3</sup> Rathgeber, Wolfgang, Nina Louisa Remuss and Kai-Uwe Schrogl. “Space Security and the European Code of Conduct for Outer Space Activities”. UNIDIR Disarmament Forum, 10.4 (2009): 33-42.

<sup>4</sup> Council of the European Union. Council Conclusions and Draft Code of Conduct for Outer Space Activities. Doc. 17175 of 17 Dec. 2008. Brussels: European Union: 8.1. [http://register.consilium.europa.eu/pdf/en/08/st17/st17175\\_en08.pdf](http://register.consilium.europa.eu/pdf/en/08/st17/st17175_en08.pdf)

when asking subscribing states to reaffirm their commitment and to make progress towards the adherence to and the implementation of the existing framework regulating space activities. The EU Draft CoC incites also to the promotion of the universalisation of those initiatives.

Finally, the two codes are politically and not legally binding, they foresee a series of Transparency and Confidence Building Measures (TCBM) and some basic mechanisms for exchanging information, and they are both part of a broader shared international effort.

**A closer look at the HCoC would unveil its limits. Such an important exercise can allow for the drawing of “lessons learned”.**

Having said that, the HCoC should be looked at closely in order to identify its limits and to enhance the efficiency of the EU Draft CoC. If those aspects are properly taken into account during the negotiating phase with third countries, the EU Draft CoC could have a greater chance of success.

### **3. Universalisation: number matters, but it is not enough**

The HCoC has reached in less than 6 years an important number of adhesions: 130 countries including the United States and Russia, which are the most active actors in terms of the development and launch of BM and SLVs. Despite the large number of subscribing states, the HCoC suffers from a paradox (to use the words of Mark Smith<sup>5</sup>) in the sense that significant countries are still absent, such as active actors like DPRK, Iran, China and emerging actors in the space sector like Brazil, Mexico and Saudi Arabia. Most of the countries located in the region going from the north of Africa to eastern Asia do not participate in the HCoC. This paradox undermines the credibility of the Code not only in terms of its universalization and the potential to create an international customary law, but also in terms of its credibility as an international security tool.

**Despite the large number of subscribing states, the HCoC suffers from a paradox.**

It is possible to identify three main reasons

<sup>5</sup> EU Workshop on how to strengthen the HCoC, Vienna, 25 Mar. 2010.

behind these absences. The first is the link with the Missile Transfer Control Regime (MTCR) and the lack of a formal link with the United Nations (UN). Some of the non subscribing states justify their absence by the fact that the MTCR countries – which are perceived as an occidental club created to control exports of missile technologies – took the initiative of the Code and, although negotiations were later open to all states, this link still creates a misperception and skepticism towards the HCoC. Several experts<sup>6</sup> call this fact “the original sin” of the HCoC, which is at present very hard to remove. This fact is exacerbated by the absence of formal links with the UN, not only in the phase of its negotiation and adoption but also later: the only existing link is the mention of the HCoC in three General Assembly resolutions, but this is not perceived as enough in this case.

Another reason for not subscribing is the concern of some states that it is tied to the development of their space programs. The provision in the HCoC<sup>7</sup> dedicated to the right of all states to use space for peaceful purposes is not considered sufficient and therefore the HCoC is seen with skepticism, especially by emerging space actors who want to develop space programs and SLVs free from constraints.

Finally, countries that do not intend to develop space or missile programs because they do not have the resources and they are much more concerned with other issues (like economic development, small arms and light weapons [SALW], education, AIDS) do not feel concerned at all by the Code and do not have an incentive to adhere. On the contrary, countries that are deeply concerned by the regional or international security situation and are developing BM and SLV programs do not want to impede their defense policies, unless - in some cases - this is done in a reciprocal manner. The bilateral agreement between India and Pakistan on the notification of BM launches is an interesting example: they are bilaterally committed but they have not adhered to the HCoC.

<sup>6</sup> Ibid.

<sup>7</sup> International Code of Conduct Against Ballistic Missile Proliferation, the Hague, entered into force on 25 Nov. 2002: paragraph 2(f): “Recognition that states should not be excluded from utilising the benefits of space for peaceful purposes, but that, in reaping such benefits and in conducting related cooperation, they must not contribute to the proliferation of Ballistic Missiles capable of delivering weapons of mass destruction;”.

As far as the European Draft Code of Conduct is concerned, it is important to consider these aspects in order to maximize the number of adhesions. In particular, it is important to open rounds of consultations with other space faring nations and especially with future (emerging) space actors, which should be involved from the beginning of the negotiating process. The EU has already conducted such a diplomatic effort in 2008 and 2009<sup>8</sup>.

**It is fundamental that the EU continues to involve third countries, listen to their concerns and reassure them of their freedom to access and use outer space for peaceful purposes.**

Above all, the EU has to insist on the fact that the EU Draft CoC requires states to refrain only from activities that can cause harmful interferences and the production of debris, while stressing the fact that these provisions are intended to create a safer environment for their own future space objects as well. Such a communication effort has to be conducted before the Code is open to subscription, in order to reassure emerging actors on their involvement from the beginning and on the fact that the EU considers them space actors and interlocutors, maximizing the possibilities of adherence even at a later stage.

For practical reasons the EU has decided not to propose the EU Draft CoC within the UN framework, and in particular within international forums like the Conference for Disarmament (CD) or the Committee on Peaceful Uses of Outer Space (COPUOS), where international norms on space are traditionally discussed. Although the reasons can be fully shared (the fear of a blockage of the dossier linked to the PAROS situation), it could be important for the EU to conduct an effort of communication towards third countries to explain these reasons and it is equally important to create in the future a formal link with the UN context in order to guarantee its insertion in the broader existing international legal framework regulating space activities. The link could be created by the adoption by the UN General Assembly of a resolution recalling the existing international legal framework regulating the use of space

and welcoming the EU Draft CoC as a part of it. Such an effort would avoid future criticism of the Code’s regionalization or of its incoherence/competition with existing tools from a procedural point of view.

Lastly, the EU Draft CoC clearly states in its principles the “freedom of access, 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”. Countries should therefore not fear any constraint or limit to their space activities, as long as they are conducted for peaceful purposes and they do not cause – intentionally or accidentally – harmful damages to space objects nor create debris. This aspect should be stressed in any occasion. However, some countries can be interested in destroying their own space objects for some reason. If such an activity is conducted without creating debris, as was the case with the USA satellite 193 in 2008, then the EU Draft CoC would not prevent it.

On the other hand, countries wishing to develop and test ASATs, like the Chinese test conducted in January 2007, would certainly be in disagreement with the EU Draft CoC. These countries could have difficulties in accepting the Code, although it is quite clear that limiting ASAT tests would be to their own benefit as well, since every satellite in orbit – including their own - could be damaged by space debris. Discussions should be focused on this point exactly, as well as on the fact that the EU Draft CoC does not concern ASAT tests conducted in low orbit without creating debris. On the other hand no flexibility should be shown towards the ban of ASATs, since this issue is really at the core of the EU Draft CoC’s purpose.

#### **4. Implementation of the Code by subscribing states**

Although 130 countries have subscribed to the HCoC, its effective implementation has been quite disappointing. In 2009 only 13% of the launches conducted by HCoC countries were pre-notified and none of these included Russian or American launches, although they represent the largest quota. This fact considerably limits the efficiency and credibility of the Code and does not offer an incentive for new adhesions. Officially, the reason for this was the planned creation of the Joint Data Exchange Center, which however never became operational. The only solution to this problem would be a change

<sup>8</sup> The EU performed a first round of consultations in 2008, in particular with the US, Russia, and China. A second round of consultations was performed in 2009: several countries – including Australia, Brazil, Canada, Japan, India, and the Republic of Korea – were involved, with an ambiguous result globally.

in the political will of the actors involved, which would consequently provoke a change in the behavior of third countries as well. The intention not to pre-notify launches was made clear from the beginning by the US delegation, but the new administration and the Obama Prague speech on nuclear weapons can give hope for a change to this respect.

**It is therefore recommendable that before the adoption of the EU Draft CoC interested countries should make sure that all signatories will effectively implement it, in order to avoid undermining its credibility and provoking negative reactions from third parties.**

The EU Draft CoC foresees a provision which should aid its implementation and which is not contained in the HCoC. The consultation mechanism<sup>9</sup> does not intend to avoid or prevent actions contrary to the purpose of the Code, but rather to minimize their effects. An investigation mechanism is foreseen as well<sup>10</sup>. These two mechanisms, which will be agreed in detail at a later time and will rely on the will of participating states to proceed with it, can play an important role. If the EU could reach an agreement even in general terms before the opening of subscriptions, to effectively implement at least the consultation mechanism, which might be easier to negotiate in comparison with any investigation process, this would really offer an incentive to its implementation by subscribing states and improve the effectiveness and credibility of the EU Draft CoC. On the other hand, it must be noted that such a provision (referring only to subscribing states) could discourage countries to subscribe to the EU Draft CoC.

## 5. The scope of the EU Code: large enough?

Another critic to the HCoC regards the fact that it addresses BM only, while other means of delivering WMD like UAVs or cruise missiles

<sup>9</sup> Council of the European Union. Council Conclusions and Draft Code of Conduct for Outer Space Activities. Doc. 17175 of 17 Dec. 2008. Brussels: European Union: 9.1: “A subscribing State with reason to believe that certain outer space activities conducted by one or more than one Subscribing State(s) are or may be contrary to the purposes of the Code may request consultations with a view to achieving acceptable solutions, regarding measures to be adopted in order to prevent or minimize the inherent risks”.  
[http://register.consilium.europa.eu/pdf/en/08/st17/st17175\\_en08.pdf](http://register.consilium.europa.eu/pdf/en/08/st17/st17175_en08.pdf)

<sup>10</sup> Ibid: “In addition, the Subscribing States may propose to create a mechanism to investigate proven incidents affecting space objects”.

are not considered at all. The HCoC does not contain a definition for its object, but it refers only to Ballistic Missiles. Trying to define the object or trying to enlarge the scope of the code by including UAVs or Cruise Missiles could entail very long, complicated and very likely unsuccessful discussions among countries. This is why, although the critique is technically correct, it is politically ill-advised to open such a discussion. Finding commonly accepted definitions is one of the most difficult challenges when drafting a normative tool.

The EU Draft CoC does not need to stipulate which weapons should be prohibited in outer space since it addresses the adverse effects of the use of any weapon: harmful interference, damage or destruction of a space object and the creation of space debris. Furthermore, defining the action rather than the weapons also facilitates the verification process, which might not have been accepted by states if it consisted of inspecting the SLVs. As it was very well suggested by the Stimson Center<sup>11</sup>, providing a definition of “harmful interference” could be difficult as well, but it would certainly constitute a much more affordable exercise. Indeed, the EU Draft CoC asks states to refrain from “any intentional action that will or might bring about, directly or indirectly, the damage or destruction of outer space objects”, and from “intentional destruction of any in-orbit space object or other harmful activities which may generate long-lived space debris”. While the spirit of the Code is very clear from these sentences, “harmful activities” still needs to be further defined in order to assure a common understanding and reduce the possibility of irresponsible behaviors under this pretext.

## 6. Conclusions

The European Union adopted a Draft Code of Conduct on Space activities in order to promote CBTMs and responsible behaviors in the use of outer space. At the moment, the EU is conducting rounds of consultations with third countries in order to maximize the consensus and possibilities of a wide adoption of the Code by the international community. Many look at the HCoC as a good example of “soft law”. A thorough analysis of the results achieved by the HCoC highlights some of its limits in terms of its implementation, universalisation and scope.

<sup>11</sup> Black, Samuel. “No Harmful interference with Space Objects: the Key of Confidence-Building”. Stimson Center Report No. 69,  
<http://www.stimson.org/space/pdf/NHI%20Final.pdf>.

These limits, if properly considered, can be avoided in the context of the EU Draft CoC.

**In particular, it is recommended that the EU continues the rounds of consultations with space faring nations and especially with emerging space actors during the negotiation phase and in any case before the EU Draft CoC is open to subscriptions.**

Such an effort will likely prevent a feeling of exclusion by some countries and maximize the possibilities of adhesion, even at a later stage.

Third countries should be reassured about the fact that subscribing to the EU Draft CoC would not entail any limits to accessing and using outer space, as long as it is done for peaceful purposes. The EU should insist on the fact that the EU Draft CoC requires states to refrain only from activities that can cause harmful interference and the creation of debris, and insist that these provisions are intended to create a safer environment for every nation's present and future space objects. In any occasion, it should be also made clear that ASAT tests conducted in low orbit and without the creation of debris are not addressed by the EU Draft CoC. While it is important not to risk the blockage of the EU Code in the CD or the COPUOS due to the PAROS situation, it would be equally important to create a formal link with the UN in the future in order to guarantee the insertion of the EU Draft CoC into the broader existing international legal framework regulating space activities.

To assure its effective implementation, it is recommended that before the adoption of the EU Draft CoC interested countries should make sure that all signatory states have the will to implement it effectively and unreservedly, in order to avoid undermining its credibility and the consequent negative reactions of third parties. The EU Draft CoC foresees a consultation and an investigation mechanism, which could enhance its implementation, but at the same time dissuade subscriptions. Finding a good balance between efficiency and attractiveness is a delicate task that the EU needs to address. Finally, although the EU has intelligently adopted an approach that does not require the definition of space-weapons, an agreement on a definition of these activities that are the object of the EU Draft CoC should nevertheless be agreed upon, in order to assure a common understanding on what a “harmful activity” is and to reduce the possibility of irresponsible behavior under such a pretext.

The EU is conducting an initiative that addresses important concerns for all countries, not only space faring nations but also emerging and future space actors. Space objects play a vital role in modern societies but they are very vulnerable. Only a joint effort by the international community will ensure the safety of satellites and guarantee uninterrupted services and security for all citizens. It is therefore essential for the current and future use of outer space that the proposed EU Draft CoC can rally the maximum possible number of adhesions and that it can be also fully implemented.

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