

AWAITING LAUNCH: PERSPECTIVES ON THE DRAFT ICOC FOR OUTER SPACE ACTIVITIES

Dr. Rajeswari Pillai Rajagopalan and Daniel A. Porras (Editors)



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Contents	Preface		1
	About the Authors		5
	Abbreviations		15
	I.	The ICoC and the Outer Space Regime	17
		ICoC and Long Term Sustainability of Outer Space Activities Yasushi Horikawa	19
		What's in a Code?: Putting Space Development First Peter A. Garretson	27
		Mission Completed and Mission Ahead: ICoC to the Future Li Juqian	37
		ICoC: Recommendations for Further Elaboration Mohamed HatemElatawy	45
		It happened to Us Ronnie Nader	51
		Customary International Law: A Troublesome Question for ICoC? Michael Listner	53
		ICoC and the Institutionalisation of Space Security Paul Meyer	61
		The ICoC: A Starting Point Victoria Samson	69
		Space Code of Conduct Only a Beginning Ajey Lele	75

	Towards A More Responsible Use of Outer Space Gérard Brachet	81
	ICoC and the Right of Self Defence Kazuto Suzuki	87
II.	Unique Perspectives	93
	ICoC: An Imperfect but Necessary Step? Xavier Pasco	95
	Cyber Threats to Space Systems Christian Olarean	101
	University Micro-Nano Satellites: Need for ICoC for their Sustainable Use Gayantha RL Kodikara	109
	ICoC for Outer Space Activities: An Industry Perspective Ibrahim ÖZ	117
	Addressing Challenges in Space through New Multilateral Processes Beatrice Fihn and Gabriella Irsten	119
III.	Regional Views	125
	The Proposed ICoC for Outer Space: An Australian Perspective Brett Biddington	127
	EU Efforts for an ICoC: A Mexican Perspective Fermin Romero Vazquez	137
	ICoC and Sustainable Use of Outer Space: An African Perspective Gayya Habila Umaru and Godstime James	145
	Draft ICoC: An Ukrainian Perspective Borys Atamanenko and Natalia Redchyts	157
	ICoC: Perspective for India KR Sridhara Murthi and Mukund Rao	159

	Car	C: Perspectives from Latin America and the ibbean erto Becerra and Romina Acevedo
		C: African Perspectives mon Belay Tessema
	Am	commodation of Competing Interests: A Latin erican Perspective Arevalo-Yepes
IV.	Ann	iexures
	1.	Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, 1967
	2.	IADC Space Debris Mitigation Guidelines, 2007
	3.	Draft Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force Against Outer Space Objects, 2008
	4.	Draft International Code of Conduct for Outer Space Activities, 2013
	5.	Transparency and Confidence-Building Measures in Outer Space Activities (UN GGE Report), 2013
V.	End	notes
	End	notes

Abbreviations

ASAT	Anti Satellite
CD	Conference on Disarmament
CEOS-GEOSS	Committee on Earth Observation Satellites - Global Earth Observation System of Systems
CGMS	Coordination Group for Meteorological Satellites
CoC	Code of Conduct
COPUOS	Committee on the Peaceful Uses of Outer Space
EC	European Commission
ECS	European Cooperation for Standardization
EEAS	European External Action Service
ESA	European Space Agency
EU CoC	European Union Code of Conduct
EU	European Union
EUMETSAT	European Organisation for the Exploitation of Meteorological Satellites
GEO	Geostationary Earth Orbit or Geosynchronous Equatorial Orbit
GSO	Geo-Synchronous Orbit
НСоС	Hague Code of Conduct Against Ballistic Missile Proliferation
ICAO	International Civil Aviation Organisation
ICG	International Committee on Global Navigation Satellite System (for Global Positioning)
ICoC	International Code of Conduct for Outer Space Activities
IMO	International Maritime Organzation

IMSO	International Mobile Satellite Organization
ISEF	International Space Exploration Forum
ISO	International Organization for Standardization
ITSO	International Telecommunications Satellite Organization
ITU	International Telecommunications Union
LEO	Low Earth Orbit
LTSS	Long Term Sustainability of Outer Space
MEO	Middle Earth Orbit
MTCR	Missile Technology Control Regime
NASA	National Aeronautics and Space Administration
NEA	Near Earth Asteroids
NEO	Near Earth Orbit
OST	Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies
SIA	Satellite Industry Association
SRM	Solid Rocket Motor
SSA	Space Situational Awareness
STM	Space Traffic Management
TCBMs	Transparency and Confidence Building Measures
UN	United Nations
UNCOPUOS	United Nations Committee on the Peaceful Uses of Outer Space
UNGA	United Nations General Assembly
UNIDIR	United Nations Institute for Disarmament and Research
UNOOSA	United Nations Office for Outer Space Affairs
UNSC	United Nations Security Council
WG	Working Group

II. Unique Perspectives

ICoC: An Imperfect but Necessary Step?

Xavier Pasco

Inventing a "CoC" for Improving Security in Space: A European Union idea Born from a European initiative in the aftermath of the Chinese ASAT test conducted in January 2007, the proposal for an ICoC has appeared for the last five years as a key test of the EU cohesion and diplomatic skills. Initially mentioned in 2007, the notion of a CoChas first been quickly endorsed by the Council of the EU as a way to distinguish the European approach of space security, a mounting issue, from the two former space superpowers traditional views, as the latter opposed the issue for years at the CD. After some level of initial diplomatic consultations, a first version of the Code was then made public during the French presidency of the EU in December 2008. A simple look at the history of this initiative would suffice to convince of the peculiar political angle given by EU to this topic and its reasons for doing so.

Firstly, it must be reminded that EU, which cannot touch upon strictly military issues, has always worked hard to open a narrow path towards integration of security issues. In this context, space security has quickly appeared as having the right mix to help the EU diplomacy take shape on an important issue propelled onto the international scene by the Chinese ASAT test. But a closer look at the inward functioning of the EU should be given thought as well.

The diplomatic initiative involving the ICoChas also reflected a major evolution of the internal balance of power in the EU with new "Treaty on The diplomatic initiative involving the ICoC has also reflected a major evolution of the internal balance of power in the EU with new "Treaty on the Functioning of the European Union" (socalled Lisbon treaty) signed by the EU Member States in December 2007 and intended to better unify European policies and consolidate a legal personality for the EU. the Functioning of the European Union" (so-called Lisbon treaty) signed by the EU Member States in December 2007 and intended to better unify European policies and consolidate a legal personality for the EU. This would take several forms including having EU regulations and policies enacted by the European Commission (EC) and the Council of the EU, two major components of the EU alongside a reinforced Parliament, better integrated to form a single EU policy. Space has been no exception to this evolution. In particular, the article 189 of the Lisbon treaty is providing more weight to the European Commission (EC), which is to elaborate and propose an integrated European Space Policy covering all space activities. This article is today subject to various interpretations regarding the limits of the powers given to the EC on these issues, especially in its relations with the Member States and with the European Space Agency. This situation has brought about rather tense relationships, especially when it came to discussing the range of possibilities given to the EU. However, whatever the real practices that will prevail, it remains that a renewed attention has been given by EU to space in all of its facets, including the new notion of the European space diplomacy.

The conjunction of the Code of Conduct initiative and of the reinforced role of EU in space policy making has explained the major role played by the EU institutions in this debate. This role has endured from then on, sometimes at the price of possible misunderstandings by many states wondering about this unprecedented European involvement.

Highlighting Basic Collective Principles

From the perspective adopted by the major European space countries, including France in the first place, a few principles have to form the basis of what could become an ICoC: ensuring the freedom of access to space for peaceful purposes; ensuring the preservation of the security and integrity of space objects in orbit; but also considering the right of self-defence of states as ensured in the UN Charter. This three-legged position was in particular stated by the French president Sarkozy in a speech made on 11 February 2008 in Kourou in French Guyana. This speech was made a day before the proposal for a new treaty – Prevention of Placement of Weapons in Outer Space (PPWT) – made by China and Russia in the CD in Geneva. This parallelism between a CoC pushed by EU and a new treaty preferred by China and Russia is worth noting to better understand both the criticism of the European initiative and also the reasons that have been presented in the defense of the Code. Indeed, beyond the fundamental principles highlighted in the text proposals, some issues regarding both the form and the perception of the CoC have somewhat complicated European outreach efforts. What could be called the environment of the CoC proposal has remained intensively discussed over the recent years:

- First, the non-legally binding character of what would remain what political scientists would call an international regime⁶⁷ has been discussed by many countries or legal specialists as dismissing the importance of the text (and of its content) outright. Only a legally binding text, i.e. a treaty, would accord genuine importance to the issue by making its signatories liable to it.
- Another issue deals with the parameters of the ICoC which would call upon state parties to "refrain from any action which brings about, directly or indirectly, damage, or destruction, of space objects unless such action is justified (...)", implicitly raising the notion of military related actions and possibly questioning the very nature of the text regarding disarmament. According to the critics of such a possibility given to the Code, these notions are being addressed in specialised UN forums, especially at the level of the CD and may not be dealt with at the level of such an initiative.
- Last but not least, this text has been considered with some level of reluctance from the perspective of a number of emerging space countries, for reasons of possible constraints applied to nascent space programmes. In many respects, this form of criticism has rejoined somewhat more general and recurrent defiance from the part of representatives of key emerging states, notably India and China, towards international opinion often viewed as by-products of the main international powers' strategies and imposing norms on behalf of the international community. This "original sin" syndrome has, for example, been mentioned many times in the case of the so-called the Hague Code of Conduct against Ballistic Missile Proliferation, a text intended to provide more transparency in the field of space activities and ballistic missile development and calling for notification of launches and better communication of the nature of activities. This text introduced in 2002 and signed by some 138

This parallelism between a CoC pushed by EU and a new treaty preferred by China and Russia is worth noting to better understand both the criticism of the European initiative and also the reasons that have been presented in the defense of the Code. countries (as of early 2014) has been at the centre of debates related to enduring technical gaps between the main spacefaring countries and others. This has remained a major contentious issue preventing some major countries from adhering to it, even if the progress has been steady, given the positive outputs provided to the whole international community by improved coordinating mechanisms and better transparency. A similar path towards mutual understanding and trust will obviously have to be followed for the space Code of Conduct if it is to be developed as a truly global mechanism.

Competing Projects?

These elements have clearly exacerbated a form of competition with the Chinese-Russian more legal-based approach to the problem of space security. By sometimes directly challenging the EU-supported approach, Chinese and Russian representatives have constantly defended the merits of PPWT by underscoring (1) the legally binding character of a treaty and (2) the fact that such a treaty would properly address the issue of disarmament in space through the CD.

Beyond the content of both text proposals, which can be discussed in term of relevancy or comprehensiveness,⁶⁸ their relation with the diplomatic environment, i.e. their ability to effectively address practical space security concerns shall remain an ultimate measure of their respective legitimacy. Indeed, the two presumed strengths that support the PPWT project, namely its legally binding character and the legitimacy of discussions conducted at the CD, have been considered on the contrary as major weaknesses by supporters of the Code. Any legally enforced text will necessarily render signatures from countries more difficult as, as for any treaty, the exhaustivity of the cases considered, the symmetric character of the threats or, for example, the possibility of fair verification will become prerequisites for most of the possible signatories. In this case, and given the fact that no learning procedure will precede the legal constraints once the treaty signed, discussions around the details of the treaty will probably lead to diplomatic deadlock in the first place as it has already been largely experienced for more than a decade at the CD. While in a sense ultimately desirable from a legal perspective, it is fair to acknowledge that pursuing the treaty-only path will indeed likely delay any agreement at any level, precisely leading to a situation that all want to avoid. The whole PAROS (Prevention against Arms Race in

Outer Space) process has been largely blocked in Geneva since the beginning of the last decade also due to the comprehensive nature of the discussions conducted at the CD, including nuclear strategic reduction discussions often put in the balance with the PAROS debate per se. Raising the debate about measures for improving collective space security on the short-term at the level of those PAROS discussions would no doubt have the effect of recreating an undesired link with high-level slow and difficult debates, then negating the usefulness of the current diplomatic process altogether. In other terms, the best would then very likely become the enemy of the good. At this stage, the CoC initiative has also signalled a recognition of the difficulties experienced at the United Nations.

A Peculiar EU Expertise for Sensitive Situations

In some sense, this has also explained this unusual level of involvement of the EU in this initiative. The whole history of the EU political integration can indeed be conceived as a parallel to this institutional and legal debate. Conceiving a collective "Common Foreign and Defense Policy" has always proved to be impossible for EU despite many decades of high-level discussions between Member States. Clearly, issues associated with national sovereignties have prevented EU from finding a common political agreement on a common defence policy. No EU "ministry of defence" would exist for a long time. As mentioned, this has put the EU in a position to look for a narrow path, helping making progress in terms of defence and security while not equipped with any integrated legally binding mechanism. This path has been under construction for many years now, ending up with many ad-hoc agreements on many concrete steps dealing with security at large, without going into details of any military decision-making process per se, that has remained under the control of individual Member States. While this process has demonstrated many shortcomings, it has also allowed reinforcing collective decision on security issues, possibly leading to sending EU mandated material, and sometimes personal, in operations, for example for securing maritime routes or helping resolve humanitarian crises. The EU has seen the glass half-full.

In a more profound way, this may show that a Code of Conduct-based solution may not be irremediably opposed to any treaty-based solution in the longer term.

The ICoC Project: A Way to Avoid Mutually Exclusive Approaches?

A parallel with the security situation in space can be drawn directly from this way of proceeding. As this kind of aggiornamento may not be conceived as a definitive solution, even the most sceptical observers have recognised that it allows intervening in the best of collective interests, even if in a limited manner. A similar situation may prevail for those space security issues that will have to be tackled in the short term and that certainly puts EU in a position to exert its peculiar expertise in effective "quick fixes".

In a more profound way, this may show that a Code of Conduct-based solution may not be irremediably opposed to any treaty-based solution in the longer term. It can certainly be admitted that the particular urgency of the security situation in space can motivate some form of political pragmatism and lead the main spacefaring nations to get to agree on an acceptable modus vivendi as represented by something like a CoC and based on those nations' good will. But of course, such a first move may also signal a general intent on behalf of the state parties to look for a more long-term and engaging legal solution, possibly leading to a future common agreed treaty. In any case, one immediate advantage of proceeding in such an incremental manner would be to provide more time to discuss possible contentious elements of any future text without blocking the whole discussion process altogether. As a matter of fact, it can even be advanced that a first step in that direction, allowing further rules in greater mutual confidence, based on this previous experience.

Faced with the resistance displayed today by countries unwilling to get legally engaged in a quickly-defined treaty, the CoC path might then well be conceived as a necessary first step to create mutual confidence and knowledge, precisely paving the way for more definitive frameworks. In this respect, very much in line with the EU experience, the "soft law" approach (as often labelled by sceptical lawyers) may end up proving to be an effective way to progressively create consolidated relationships while addressing urgent issues. Whatever the solution envisioned, space certainly deserves to be at the centre of our collective thinking for the best of our collective security.

and its prospects to become binding international law are not good. However, if both countries subscribed to the Code and implement its practices and assurances, they would both be in a good position to make the case that the Code meets the standard of customary international law. As discussed before, this would put the space policy of the United States with regards to TCBMs in jeopardy and effectively back it into a legal and geopolitical corner. The flip side is that if either or both the PRC and the Russian Federation made the case that the Code meets the standard of customary international law, they would both be affected by the Article IX issues as they are both signatories to the Outer Space Treaty. Seegenerally Michael J. Listner, Geopolitical Challenges to Implementing the Code of Conduct for Outer Space Activities, June 26, 2012, available at http://www.eir.info/2012/06/26/geopolitical-challenges-toimplementing-the-code-of-conduct-for-outerspace-activities/ (for a discussion on the geopolitical challenges to the acceptance of the Code).

- 54. Statement by the Spokesperson of the EU High Representative Catherine Ashton on the Consultations for an International Code of Conduct for Outer Space Activities, Nov. 20, 2013, http://eeas.europa.eu/statements/docs/2013/13112 0_01_en.pdf
- 55. Draft International Code of Conduct for Outer Space Activities, Version 16 September 2013, http://eeas.europa.eu/non-proliferation-anddisarmament/pdf/space_code_conduct_draft_vers_ 16_sept_2013_en.pdf, p. 8
- 56. Ibid, pp. 8-9
- 57. Ibid, p. 9
- 58. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, http://www.unoosa.org/oosa/en/SpaceLaw/gares/h tml/gares_21_2222.html
- 59. Draft International Code of Conduct for Outer Space Activities, Version 16 September 2013, p. 3
- 60. Draft International Code of Conduct for Outer Space Activities, Version 16 September 2013, p. 6
- 61. General Assembly Resolution A/68/189, Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities, distr. July 29, 2013, http://www.un.org/ga/search/view_doc.asp?symbol =A/68/189
- 62. Cosmic Study on Space Traffic Management, IAA, 2006

- 63. A/AC.105/L268 of 10 May 2007(section D)
- 64. International Code of Conduct for Outer Space Activities, Version 16, September 2013 <http://www.google.co.jp/url?sa=t&rct=j&q=&esrc= s&source=web&cd=3&ved=0CEEQFjAC&url=http%3 A%2F%2Feeas.europa.eu%2Fnon-proliferation-anddisarmament%2Fpdf%2Fspace_code_conduct_draf t_vers_16_sept_2013_en.pdf&ei=SaYBU67LN6r4yQ Gkh4CwDQ&usg=AFQjCNGARByPluj0Gel07cR_OIHBBmSqw&sig2=sXjIUhhfNPn9tnEZKRQHg&bvm=bv.61535280,d.aWc&cad =rja>
- 65. The White House, U.S. National Space Policy, 2006. http://www.whitehouse.gov/sites/default/files/micr osites/ostp/national-space-policy-2006.pdf
- 66. Michael N. Schmitt (ed.), Tallinn Manual on the International Law Applicable to Cyber Warfare, Cambridge University Press, 2013
- 67. The reader may refer to the major work by Krasner (Stephen), Ed., International Regime, (Cornell University Press, Ithaca, New-York, 1983, 372 p.), for a comprehensive overview of these international instruments.
- 68. In particular, the PPWT has been heavily criticized considering the rather restricted definition of « weapon in outer space » it proposes as well as because of the unwillingness of its promoting countries to consider ground-based missiles (as the one used for the Chinese ASAT test of 2007) as possible ASAT weapons. In addition, the difficulties to ensure solid verification mechanisms to sustain such a treaty have resulted in a strong opposition to the text from the part of the United States in particular.
- 69. North Korean jamming attacks on South Korea (December 2010, March 2011 and April, May 2012). More information available at: http://gpsworld.com/massive-gps-jamming-attackby-north-korea/ also on http://www.insidegnss.com/node/3532 Accessed on March 24, 2014.
- 70. Through a cyber-attack, the atomic clock of a satellite could be changed (even if this time is less than a second) by sending a fake GPS signal, and if this satellite is controlling synchronization's of a electricity grid, an explosion can occur in the power generator of the synchronization station.
- 71. Ukraine attempts to take down a Russian satellite (March 15th). More information available at: http://www.independent.mk/articles/2688/Western +Ukraine+Has+Attempted+to+Jam+Russian+Satelli tes Accessed on March 24, 2014.

As the outer space environment changes, the sustainability of space activities is being put under tremendous pressure by evolving technologies, an increased number of space actors and a rapidly changing security context on Earth. The international community has been slow to react to many of these challenges through legal channels, but the last few years have seen the emergence of numerous multilateral political initiatives that could represent the dawn of a new era of policy making in outer space.

At the forefront is the proposed development of an International Code of Conduct for Outer Space Activities, proposed by the European Union. This Code will seek to enhance the safety, security and stability of the space environment through political commitments, establishing a framework within which responsible space actors can continue to operate and grow. This Code has undergone many changes and has been the subject of much discussion among international space actors.

This initiative has not been without significant controversy. Numerous issues remain outstanding, and the acceptability of the Code to the wider international community is still in question. As the development of the Code approaches a new round of Open-Ended Consultations, this book provides a platform to international experts who have been closely following the Code's progression and evolution. These experts have zeroed in on the hurdles and obstacles that stand between them and an acceptable Code, providing insight as to what steps might be taken next in order to launch the Code from a proposed European text to a widely-adopted instrument for the regulation of space activities.



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