Weapons in Space and the Nuclear Disarmament and Non-Proliferation Regime

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First let me thank Jonathan Granoff and the Global Security Institute and the Government of Sweden for this very welcome opportunity to address such an important topic at the NPT PrepCom. I greatly appreciate it[1].

UNIDIR's work on the issue of space security and PAROS is not new. Work began on this topic soon after UNIDIR was established in 1980.

[According to our mandate, UNIDIR's work aims at

(a) Providing the international community with more diversified and complete data on problems relating to international security, the armaments race and disarmament in all fields, particularly in the nuclear field, so as to facilitate progress, through negotiations, towards greater security for all States and towards the economic and social development of all peoples;

(b) Promoting informed participation by all States in disarmament efforts;

(c) Assisting ongoing negotiations on disarmament and continuing efforts to ensure greater international security at a progressively lower level of armaments, particularly nuclear armaments, by means of objective and factual studies and analyses;

(d) Carrying out more in-depth, forward-looking and long-term research on disarmament, so as to provide a general insight to the problems involved and stimulating new initiatives for new negotiations.
Throughout the twenty-five years of UNIDIR's existence, the topic of outer space security and the peaceful uses of outer space has been a major focus for the Institute. This is of course in part because our work aims to assist and facilitate disarmament negotiations and in part because we are mandated to carry out forward-looking, long-term research so as to stimulate new initiatives.]

More recently our work has produced a series of conferences and workshops co-funded by the Simons Foundation, the Secure World Foundation and a range of Member States. As a result of the meetings we have produced a series of publications and a special issue of our quarterly journal *Disarmament Forum.* All of these publications are available through our website (www.unidir.org).

2007

[1] Please note that the ideas contained herein have been forged through listening to many discussions at UNIDIR conferences and this paper has borrowed shamelessly from a previous presentation made by Dr Lewis in Geneva and available at www.unidir.org

This year is a special year for the prevention of weaponization of space. First, it is the 50th anniversary of the launch of the first satellite in space, Sputnik. (Ironic therefore, isn't it, that the beginning of the year was marked by the shooting down of a younger sister satellite). Second, it is the 50th anniversary of the IAEA, marking the recognition of the need to control the use of nuclear energy. Third it is the 40th anniversary of the Outer Space Treaty that banned the placement of WMD in space.

The connection to nuclear disarmament and non-proliferation:

- Space for missile guidance
- Space for monitoring and verification
- Vulnerability of space assets re both the above
- Vulnerability of ground forces and assets to attack from space
- Increases uncertainty
- Increases perceived needs for missile defences
- Space insecurity leads to increased uncertainties and fears and therefore increased reliance on nuclear weapons as a counter balance?

Approaches
There are a number of different approaches that can be taken in approaching the prevention of the weaponization of space and space security:

I have divided up these ideas into the following approaches:

1. A Transparency & Confidence-Building Measures Approach
2. The New Treaty Approach
3. The Outer Space Treaty Approach
4. Using and building on other international instruments – the matrix or patchwork quilt approach

I shall now address each of these as a possible way forward.

1. A Transparency & Confidence-Building Measures Approach

Under TCBMs there are three distinct divisions:

a. Codes of Conduct
b. Cooperative measures
c. Unilateral trust-builders

a. Codes of Conduct

Codes of Conduct, can be bilateral or multilateral agreements that are binding or voluntary. Their aim is to prevent dangerous practices and thus prevent accidents. They are very similar in concept to for example, rules for driving on the roads – highway codes, rules of the road etc. They would focus on behaviour in space, rather than on specific weapons systems. Codes of Conduct could, for example, address the prevention of close encounters of space objects, the prevention of crashes in space and what to do when things like this occur accidentally.

b. Cooperative Measures

Cooperative measures are one level down from codes of conduct in that they can be bilateral, plurilateral – particularly regional - or multilateral in participation. They can include information exchanges, agreements on prevention of key destabilizing activities, international cooperation to track and mitigate debris, international space surveillance & tracking cooperation – including jointly operated observation satellites and cooperative data exchange centres. Increased collaboration to detect and track satellites and space debris is one possibility with some chance of meaningful success and revisiting the Russian proposal for joint data exchange centres and the Russian-American observation satellite (RAMOS) could be worth trying. Both of these proposals could be adapted for a wider cooperative approach.

c. Unilateral Trust-builders

There are a number of measures that states can take to increase trust and confidence. These can be taken up and adopted by others. For example the Russian Federation's unilateral declaration of No First Deployment of space weapons has been adopted by a wider – although certainly not wide enough - group of states.

All forms of unilateral transparency measures, such as pre-notification of launches including details such as place, time and purpose can be undertaken by space-faring nations will little cost to the declarer and large benefits for the planet. Many states have already adopted such measures over and above their international commitments.

2. The New Treaty Approach

It is possible – and deeply hoped for – that under the 2007 Six presidents' process in the CD that structured discussions – building on those that have taken place in 2006 and under the coordination of Canada in 2007 - would take place on PAROS, in conjunction with discussions on a range of other subjects, including nuclear disarmament, and negotiations on the long overdue ban on the production of fissile material for weapons purposes could begin (again!).

One approach within the CD once such discussions get going is for step-by-step discussions focusing on agreeing TCBMs. Then there could be follow-on steps and then – if these go well and confidence is built- an international agreement or even agreements – many other treaties have been formed in just this manner. Indeed this could well be the road that would lead to the realization of President Putin's proposed PPWT – a treaty to prevent the placement of weapons in outer space – in February this year.

There are of course concerns from some states over beginning a discussion process because they fear that they could end finding themselves locked into a negotiation that they do not want. But in the end it is up to states whether they choose to join a negotiation or sign or ratify a treaty. The only slippery slopes at the moment seem to be going uphill, all the sliding seems to be away from multilateral legally binding treaties.

Could CD work with COPUOS?

As we are in Vienna, this is question to address. In the discussions with the new Chairman of COPUOS at UNIDIR's recent conferences it is clear that where it comes to the peaceful uses of outer space, COPUOS could work with the CD to consider whether there could be further tasking of resources and approaches as what could be done in Vienna and what could be done in Geneva, certainly with the security aspects of space debris and its mitigation. Further work on this issue most certainly can be done together.

Indeed *(as Hans Blix has said)* the WMDC stated that, "given the dual-use nature of space activities, it is unfortunate that regulations dealing with the peaceful uses of outer space – including the activities of the UN General Assembly's Committee on the Peaceful Uses of Outer Space (COPUOS) – are separated from those that address military or weapons-related issues. The lack of an overall framework prevents the development of a coherent approach to future challenges to space security. ……..

Institutions for addressing the full range of space-related issues need to be overhauled and revitalized."

In this regard, a recent report of the Directorate-General for the External Policies of the European Union that examines Europe's space policies is an excellent example of this type of creative thinking.

3. **Outer Space Treaty Approach**

As Dr Blix just outlined, key points of the Outer Space Treaty for the purposes of this discussion are:

- the Treaty underlines that Outer Space is for the benefit of all
and that Space exploration sshould be in accordance with UN Charter – maintaining IP&S

- Specifically the Treaty bans the placement of WMD in space and military bases on the Moon. And promotes peaceful exploration

- The Treaty underscores the national & international responsibility for compliance and the principle of cooperation & mutual assistance. Avoidance of harmful contamination and environmental damage. Consultation mechanism.

The WMDC has proposed that it is time for a review of this treaty and a major push for universalization.

"Because all states have a high stake in maintaining outer space as a secure environment for peaceful uses, even those states with little intention of developing their own military or space-launch capabilities should be encouraged to become parties to the OST. That would reinforce the regime and help to educate and involve all nations in protecting space as a shared resource for peaceful development and the enhancement of global security*." (Weapons of Terror, Freeing*

the World of Nuclear, Chemical and Biological Weapons, the Weapons of Mass Destruction Commission, 2006, p147).

"A Review Conference of the Outer Space Treaty to mark its 40th year in force should be held in 2007. It should address the need to strengthen the treaty and extend its scope. A Special Coordinator should be appointed to facilitate ratifications and liaise with non-parties about the reinforcement of the treaty-based space security regime".

As there is no formal mechanism for such a review in the OST, I had hoped, and indeed proposed, that a conference could be held to mark the 40th anniversary. The 40th anniversary conference could then be used to examine the functioning and scope of the Treaty in light of today's security concerns. Given that there has been no official meeting (as yet??) to mark the anniversary, perhaps I could use this opportunity to propose that we plan now to mark the 50th anniversary of the Treaty in 2017. Ten years should be enough to get the international act together.

4. Other international instruments?

There are a number of other international instruments that could be built upon in order to strengthen the space security architecture. These include:

- The 1968 Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space.
- The 1972 Convention on International Liability for Damage Caused by Space Objects
- The 1975 Convention on Registration of Objects Launched into Outer Space
- The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.
- All of the bilateral treaties that address ballistic missile control

All could be built on or used to build more confidence. However, it is important to note that not all states are party to these conventions.

In addition, the 2003 Hague Code of Conduct contains a commitment to transparency measures, (with an appropriate and sufficient degree of detail to increase confidence…), including exchanging detailed pre-launch notifications on ballistic missile and space launch vehicle launches and test flights. Regional transparency measures are also encouraged where appropriate.

5. The Matrix: from a Patchwork Quilt to a Pax Cosmica [*]

In order to address the prospects for space security using a multifaceted or matrix approach, first we need to look at the areas that are already covered by the various agreements and frameworks and then we need to identify what is not covered. In so doing, perhaps then the institutions that could address such gaps could be identified. For example, frameworks such as the Conference on Disarmament, the Committee on Peaceful Uses of Outer Space (COPUOS), the Outer Space Treaty and other existing structures and treaties could each have a specific role to play. In addition, TCBMs established in industrial and professional forums could be useful.

This Patchwork Quilt approach allows interested states to build a patchwork of existing and new measures around the gaps and the needs. Such an approach could allow a more effective use of the materials we already have and use of the appropriate institutional frameworks

Use an overarching framework to contain all of this, such as the proposed OCSO – Organization for Common Security in Outer Space (a proposal from Dr Detlev Wolter, Common Security in Outer Space and International Law, UNIDIR 2005/29, pp185 - 190) could be a cost-effective measure in that such a body could ensure that gaps are addressed and duplication does not take place.

The issue of space security is perhaps too important, too linked into nuclear strategies, nuclear disarmament and non-proliferation to be put into one basket and one basket only.

Thank you.

[*] Pax Cosmica was coined by Ambassador Peggy Mason to describe an internationally agreed cooperative regime governing outer space, in D. Wolter, Common Security in Outer Space and International Law, UNIDIR 2005/29, p.xv.