

CHAPTER 9

SOME CONSIDERATIONS ABOUT THE VERIFICATION ISSUE OF PREVENTING OUTER SPACE WEAPONIZATION

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Nearly half a century has passed since humans first entered outer space. With the rapid advancement of space technology, how to prevent outer space from becoming a new arena for the arms race after land, sea and air has drawn wider and wider concern from the international community in recent years. What is more, the policy of pursuing “space control”, the continued development of ballistic missile defence technology and the deployment of ballistic missile defence systems all further arouse people’s worry about possible outer space weaponization.

As the fundamental legal instrument governing outer space activities, the 1967 Outer Space Treaty (OST) has serious loopholes in preventing outer space weaponization. As a matter of fact, due to the rapid advancement of space technology, people’s knowledge and recognition of outer space inevitably has been an ever increasing and deepening process: the important role that outer space now plays in the social development of mankind was far beyond the imagination of people in 1957 when Yuri Gagarin from the former Soviet Union first went into outer space; and the challenges that outer space now faces were unpredictable to people 10 years later in 1967 when the OST was concluded. So, it is no surprise that the OST has loopholes, which simply reflects the evolving degree of people’s knowledge of outer space.

Until now, though no consensus has been reached in the international community as how to address the serious challenges that outer space faces, adopting legal and diplomatic approaches have more and more become a common point of agreement. Outer space weaponization is a threshold that cannot be crossed at will, since once weapons are deployed in outer space, the status quo of outer space will be severely and irreversibly damaged and

lead to a new round of the arms race, with harm to strategic stability and social development that cannot be overestimated. It is apparent from the history and experience of nuclear disarmament how difficult it is to limit a new weapon once it is developed much less control it or perhaps prevent its proliferation, let alone completely eliminate it. In 1985, Jayantha Dhanapala, the then ambassador for disarmament affairs of Sri Lanka, noted that preventing an arms race in outer space "is an easier task than attempting to control and decelerate such a race after it has begun". Though 20 years have elapsed, his insight still has significance today. Fortunately, no weapon has ever been deployed in outer space, which offers us an opportunity to address this important issue.

I want to take this opportunity to present my personal views concerning preventing outer space weaponization and will focus on the specific issue of verification.

Since the 1980s, many countries have put forward a number of proposals, suggestions and views concerning the verification issue, among which the non-paper *Verification Aspects of PAROS* on 26 August 2004 by the Chinese and Russian Delegations to the Conference on Disarmament is the latest addition. The verification measures contained in these proposals and suggestions fall roughly into two categories: space-based remote-sensing surveillance and Earth-based on-site inspections.

With the development of science and technology, outer space is becoming increasingly transparent and remote sensing with optical, infrared, radar, electronic and other technologies is well within the reach of many countries. However, as more and more space objects are potentially dual-use, the capabilities of a verification system to discriminate between permitted satellites and prohibited space weapons would be very limited.

On the other hand, on-site inspection carried out on launch-sites would be more effective and relatively inexpensive, because all space objects, including potential space weapons, are launched from the Earth. Germany, the Russian Federation, Sweden and several other countries have contributed their ideas about on-site inspections. For example, forming an international observer team and dispatching permanent observers to each space-launching site to ensure that no weapons will be deployed in outer space is a good idea. Germany further suggested that pre-launch on-site inspection, if accepted, would make other verification measures

unnecessary. Clearly, the key point is whether space-faring countries would accept this highly intrusive approach.

Effective verification measures are indeed very important to enhance the confidence of each and every state party to a treaty. During the Cold War, many treaties and agreements, especially many bilateral nuclear disarmament treaties—for example, the Intermediate-range Nuclear Forces and the Strategic Arms Reduction Treaty—all have relatively complete and very strict verification provisions. However, the outer space issue is quite different in essence.

As no weapon has ever been deployed in outer space, the endeavour and the intended different measures are all preventive in nature. Lloyd Axworthy, former minister of foreign affairs of Canada, also mentioned the necessity of preventative diplomacy in addressing outer space issues in his speech at a seminar held in Beijing in 2002. Thus, it seems that the political will of the space-faring countries to prevent outer space weaponization is a crucial factor. Outer space is a high-tech matter and only a small number of countries have mastered the technology to varying degrees; only one country is pursuing “space control” and a “space dominance” doctrine in which a programme of placing weapons in outer space could be included. The fact is that the political will of the international community, especially the single country with the intention of placing weapons in outer space, would play a fundamental role in preventing outer space weaponization.

In reality, the OST is largely a preventive treaty. Although it lacks a verification mechanism, the OST is very effective regarding implementation. Its loophole lies in that it covers only weapons of mass destruction, and without a verification mechanism it has never been an issue of serious concern for nearly 40 years.

From a purely technical point of view, though verifying weapons deployed in outer space is possible and feasible, the difficulties that may be encountered are still very challenging. If we can reach consensus on preventing outer space weaponization on the basis of common political will, then other relevant and perhaps contentious issues, such as the verification mechanism, will be relatively easier to resolve. As mentioned above, the on-site inspections of launch-sites would be much more effective, easier and inexpensive. Joe Clark, former minister of external affairs of Canada, speaking before the United Nations General Assembly on

24 September 1986 stated that “verification is not just a question of technical capacity but of the political will to reach agreement on the application of technologies and techniques”.

However important formulating a perfect and ideal treaty with verification provisions is, preventing outer space weaponization is our real goal, and the urgency of negotiating and concluding a legal instrument is without doubt. Otherwise, should our task become one of limiting, controlling and even eliminating outer space weapons, the consequences would be unimaginable and the costs too high. Considering the current situation, I think that we need to deal with the issue of verification with a more open attitude, but the issue itself should not be an obstacle to concluding a legal instrument preventing outer space weaponization.