

THE RIGHT OF SELF-DEFENSE IN OUTER SPACE

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"... the same forces that are making the world more dangerous contains ingredients that we need to make it safer."

Copper Joshua Ramo, *The Age of the Unthinkable – Why the new world disorder constantly surprises us and what we can do about it*, 2010. ¹

There is no doubt that the right of self-defense has full validity in outer space. If all space activities, according to the 1967 Outer Space Treaty (OST), shall be conducted in accordance with international law, including the UN Charter, it is logical that the customary law of self-defense and, above all, the dispositions of Article 51 of UN Charter on this principle are also valid in outer space.

The great question is how to use, to apply and to control the right of self-defense in outer space. In this relation, we need, of course, to take into due account not only the pertinent requirements of international law, but also the huge specificities of the outer space environment, as well as the peculiarities of human activities – mainly in this case military ones – conducted there.

The right of self-defense can be used exclusively to repulse an "armed attack" and within the legal limitations of necessity, imminence, and proportionality. This attack means an act of aggression, which was defined by the UN General Assembly, in 1974, as "the use of armed force by a State against the sovereignty, territorial integrity or political independence of another State".²

An armed attack in outer space will certainly be an act of aggression of one or more launching States against space objects launched by one or more launching States and registered by one of them, the State of registry, which retains sovereign rights of jurisdiction and control over them (Art. VIII of OST).

In accordance with the UN Charter, all launching States connected to the space objects which suffered an armed attack,

presumably have the right of self-defense to repel aggression, but only until the UN Security Council has taken measures necessary to maintain international peace and security. Is the Security Council prepared to take appropriated action in such a case? If not, who will determine the existence of an act of aggression and decide what measure shall be taken to restore international peace and security? Maybe the States in conflict taking into account their own criteria and interests? The present paper attempts to provide an answer to some crucial questions related to the use of force and the right of self-defense in outer space, although the author is convinced that the best solution is just not use force in outer space any way.

Introduction

Outer space – unlike land, sea and air – has not hitherto been the scene of hostilities between States, but could be. However, there is still chance to prevent such a misfortune.

The recent history of more than 50 years supports the peace. The Space Age – inaugurated with the launch of Sputnik I by the Soviet Union on October 4, 1957 – does not record armed conflict in the new environment. Even at the height of the Cold War, the powers at the time arch rival, the United States and the Soviet Union, did not dare to use force against space objects deemed enemies, although they have developed anti-satellite weapons (ASAT).³

The picture changed for the worse. Today China also has such weapons. Between

China and the United States seems to be a simultaneous relationship of a good businesses and deep suspicions, of love and hate. On January 11, 2007, the Chinese military destroyed an old weather satellite national, Feng Yun 1-C.⁴ It was the first weapon test anti-satellite since the 80s.

In 1959, the U.S. tested its first ASAT and, in 1980, a new model. After 28 years, on February 20, 2008, the U.S. Navy shot and destroyed an old reconnaissance satellite USA-193, a corpse in a state of deterioration. It was a typical anti-satellite action, although it was claimed that the deceased satellite still had large amounts of hydrazine, a highly polluting fuel that can cause serious damage if it fell on earth. Coincidence or not, the allegation functioned also as a response to the Chinese test.⁵ China and the U.S. hitherto did not attack any country, but their experiences were seen as unequivocal demonstrations that both States already dominate entirely the technologies of ASAT and headshots in outer space, which are now perfectly actionable if and when necessary. Hence, it seems evident that there is a space arms race under way, even if some governmental authorities try to deny its existence.

Thus, at the beginning of the present century, it is growing the threat of weapon's facility in outer space, as well as the possibility of using force in this environment and the consequent transformation of the most used Earth's orbits into a new theater of war. Not by chance, José Eli da Veiga foresees: "The systems of defense and preparation for war will be increasingly aerospace ones. The central focus of army operations will be in the capacity of destroying enemy satellites".⁶

We live under the prospect of the use of force in outer space. It is thus opportune have in mind: 1) the international law prohibits not only the threat but also the use of force in international relations, including in outer space; 2) there is only one possible justification for a State to use military force in any environment, including in outer space; it is resorting to the principle of self-defense, recognized by the UN Charter under special circumstances and conditions.⁷ "National defense is currently the sole *casus belli* explicitly recognized in law as a justification for the

use of force by States without Security Council authorization," David Rodin stresses.⁸

However, this resource must be exercised within restrictive conditions: impossibility to respond by other means, proportional use of force, respect for humanitarian law and only to face the armed attack, while the aggression lasts or until the Security Council takes appropriate action.

In this context, in 2008, Russia and China proposed at the Conference on Disarmament in Geneva, Switzerland, the Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force Against Outer Space Objects (PPWT).⁹ In 2008, the European Union, in its turn, launched a draft code of conduct for space activities aiming to prevent conflicts in space, revised in 2010.¹⁰

The debates on this question intensified at meetings of the Conference on Disarmament in 2010. Dozens of countries suggested measures of transparency and confidence-building in space activities, in order to prevent an arms race in outer space and its unpredictable effects. It has been proposed the constitution of a group of experts appointed by governments to study these measures from 2012, with support from the Secretariat of the United Nations.¹¹

Earlier, in October 2007, it was launched the "Model Code of Conduct for responsible space-faring nations"¹², recommending a list of rights and responsibilities to be respected by the countries involved in space activities. It proclaims "the right to safe space operations and free of interference, including military supporting functions" and "the responsibility to refrain from conduct harmful interference against space objects". The expression "harmful interference" was created to cover all space activities capable to produce damage, deactivate or destroy any satellites and other spacecraft. The Model Code was an initiative of the Stimson Center, an American nonprofit and nonpartisan institution, which studies practical solutions to problems of national and international security. For these researches, the Center mobilizes experts from Canadian, French, Japanese, Russian and American non-governmental organizations dedicated to

examining the connections between international relations and disarmament.

What's common among these texts? The right of self-defense under the UN Charter.

The treaty proposed by Russia and China reads, in Article V, that "nothing in this treaty can be designed as an impediment to the implementation by States Parties the sovereign right of self-defense" under Article 51 of the UN Charter.

Both versions of the European Code of Conduct also adopt, as one of its general principles, the commitment of participating states to respect "the inherent right of individual or collective self-defense, according to the UN Charter" (Art. 51).

And the Model Code of Conduct for Responsible Space-Faring Nation also recognizes "the inherent right of self-defense under Article 51 of the UN Charter."

What is the real meaning of this recognition of the right of self-defense?

It seems to attend, first of all, to a demand of major powers, especially the U.S., which reject, *in limine*, any proposal that does not guarantee them such a right.

According to Michael Byers, pressing to expand the right of self-defense, "the United States not only increases its own freedom to act, as well as to diminish the role and authority of the United Nations. Pragmatism may be appealing, but it has a price".¹³

The price of using the right of self-defense in outer space – even if it is supposedly applied in a legally correct manner – can be extremely high. In fact, unpredictable and incalculable. It can affect many countries at the same time. Countries that have nothing to do with the conflict.

Is it lawful to use force in outer space and turn it into a theater of war?

It seems undisputed that according to the international law's general principles in force, it is not lawful to use force anywhere, including in outer space. Consequently it is not lawful to turn outer space into a battlefield.

Before all, we must not to forget that by the first time in human history, thanks to

the clear determination of the UN Charter of 1945, international law prohibits – we can say anywhere, including in outer space – the use of force to resolve any controversy between the countries. The Charter does what no other document was able to do before: it bans the use of violent means in international relations, no matter the place it takes place.

The Charter – now ratified by 193 countries¹⁴ – establishes that the primary purpose of the United Nations (Art. 1/§ 1) is "to maintain international peace and security and to that end: take effective collective measures to pre-vent threats to peace and the suppression of acts of aggression or other breaches of the peace by peaceful means and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of peace". An intergovernmental instrument with such a mission never existed before.

The ban could not be more comprehensive. It is banned not only the use of force, but also the threat of force. As faces of the same coin, a ban on the use and threat of use of force is bound in a logical and intrinsic manner to the obligation to settle any disputes exclusively by peaceful means.

Being blocked everywhere the threat or use of force in relations among countries as a general rule, there are, however, some exceptions. Francisco Rezek, a former Judge of the International Court of Justice, affirms that there are currently only two hypotheses for a just war, it means a lawful use of force: the legitimate defense against aggression and sustained armed struggle for self-determination of a people against colonial domination.¹⁵ It is correct include here the armed movements against institutionalized racism, although the racist regime (apartheid) in South Africa and Rhodesia could be considered as a special kind of colonial domination.

In any case, it is exclusive power of the Security Council of the United Nations to decide on the collective use of force against another State, as establishes Article 24 of the UN Charter. That is why the war against Iraq led by a coalition of States headed by the United States is considered illegal, including by the then UN Secretary General Kofi Annan.¹⁶

The UN Charter thus represents, as well said David Rodin, "a repudiation on the fundamental legal maximum of Clausewitz that 'war is nothing more than the continuation of politics by other means'. Military force – proclaims Article 2, §4 – can never be legally used as an instrument of state policy".¹⁷

Oscar Schachter acknowledges that "most commentators considered such devices as the heart of the Charter and as the most important principles of contemporary international law", which are "reaffirmed repeatedly in unanimous UN statements, as well as in treaties and declarations of political leaders."

However, the lawyer notes, on its actual effects "there is a widespread cynicism," so that "the reality seems to mock them," namely: "Wars happen, countries are invaded, armed force is used to overthrow governments, to taking territory, to avenge past injustices, to impose settlements. Threats of force, open or implied, permeate the relations between states. The danger of nuclear holocaust looms over all nations, large and small. Collective security, as envisaged in the Charter, had little practical effect. Our lives are profoundly affected by expectations of violence, by the fundamental resources to finance weapons and perhaps even more insidiously, by the belief that little can be done to replace force as the final arbiter in conflicts between nations."

Schachter still points out: "It is no wonder that the obligations of the Charter are generally seen as mere rhetoric, at best as idealistic aspirations or, at worst, a pretext as sources of 'cover' for an aggression." And more: "These facts, understandably, lead many to conclude that the regulations on the use of force can be used to rationalize almost any use of force and therefore, they may have little or no influence on their decision to use the strength." Hence he makes a very timely question: "Are the existing standards on the use of force so vague and uncertain that could enable States to present a plausible legal justification for virtually any use of force they choose to do?"¹⁸

Yes, many times they are, indeed. And this debility can simply be fatal and cause a huge disaster in outer space. Thus, the resource to the right of self-defense can be

overly dangerous.

From where did come the right to legitimate defense and where it goes?

Traditionally, the principle of legitimate defense or self-defense, adopted in different legal systems, used to be a natural and fair requirement of self-preservation, fully justifying the legal use of force to repel aggression.

According to Hugo Grotius (1583-1645) – exponent of natural law considered by many authors as the "father of public international law" - "war is allowed to defend life" and "this right to defend itself comes immediately and in first place from the nature that entrusted to each one of us the care of ourselves; it don't come from the injustice or crime of those that expose us to a danger".¹⁹ It would, therefore, be an inherent right, immanent, not necessarily coming from the injustice or danger to which the country has been submitted in a criminal way.

The UN Charter, in contrast, adopted the self-defense as a legal reaction to a crime of aggression. It did so cautiously, setting the limitations necessary to strengthen the system of collective security that had been established. Hence, the Charter, in its famous Article 51, recognizes the right of self-defense in four well-defined situations: 1) "if an armed attack occurs"; 2) "until the Security Council take the measures necessary for the maintain international peace and security"; 3) these "measures (...) shall be immediately reported to the Security Council"; (4) they "shall not in any way affect the authority and responsibility of the Security Council (...) to take (...) such action as it deems necessary (...) to maintain or restore international peace and security."²⁰

Richard Falk, perhaps in view of all this care, remarks: "The text of Article 51 gives the impression that even in a situation of self-defense the primary responsibility rests with the Security Council, not the victim of an attack." In fact, if the goal is collective security, the focus could not be otherwise.

To Falk, Article 51 is so strong that "if implemented, as written, the role of force in international politics would be radically

changed, especially to the extent that these ideas about force are linked to the obligation of states in Article 33 to seek peaceful settlement of disputes endangering world peace and security. As is widely appreciated, this normative promise was never fulfilled consistently."²¹

Marcos Azambuja also notes that "the idea of universal collective security, which offers a vision of order, stability and permanence, never so far materialized."²²

Falk admits: "In some respects, the current situation is very supportive of this long effort to curtail war. Territoriality is far less significant in the new geopolitics, and the role of war is less relevant to the success and failure of many states. The practical rationale for peaceful settlement is stronger than ever." Anyway, he recognizes that in the road to a warless world "the obstacles remain formidable: entrenched economic and bureaucratic interests in military establishments, distrust of the capacity and objectivity of the UN system, inertia associated with reliance on the state to provide security against adversaries, and persisting unresolved regional conflicts, border disputes and territorial conflicts involving offshore islands."²³ How to take away his reason?

Sir Arthur Watts (1931-2007), in turn, highlights the distortions that the principle of legitimate defense has suffered: "Given the need in practice to bring any resort to force which is not authorized by the Security Council within the scope of self-defense if it is to be considered lawful, the concept is being steadily distorted, so as to justify, or attempt to justify, a range of actions which no normal, traditional notion of self-defense would recognize as being comprised within it."

"However, this is not necessarily wrong", he adverted: "Self-defense probably has to be an inherently relative concept – relative to the times and circumstances in which it is invoked. Self-defense at the days of naval warfare, such as that at Trafalgar, is a very different thing from self-defense in the days of nuclear warfare, Exocet missiles, and the possibility of easy transport to almost any destination in the world of small packages of anthrax or nerve agents."

In this line, it should clearly be

elucidated – and be taken into due account of – the specificities of the use of self-defense in outer space, and all its possible consequences. This essential clarification is still to be done in the needed range.

No wonder that Sir Arthur Watts also points out the danger of broad interpretations, which can have disastrous effects: "There are limits to the burden which the concept of self-defense can safely, and legally, be called upon to bear. It is essentially a legal concept, and its application to any particular circumstances must be evaluated in accordance with international law. To stretch the concept to such an extent that it departs from the ordinary meaning of the term, as refined by judicial pronouncements, serves not only to undermine this particular branch of the law, but also to bring the law in general into disrepute."²⁴

David Rodin also stresses that "the right of national-defense may deter aggression, but it may also serve as a mask and justification for dangerous military adventurism, particularly when the right is liberally interpreted."²⁵

Hence, there are strong reasons to have in mind the necessity to regulate and restrict the right of self defense in our dangerous and (in large extent) uncontrolled world of the XXI Century, so as to prevent it from exceeding the exercise of its basic function. It includes the enormous potential of threats existing in outer space – natural and man-made threats. Of course, this looks as a naive utopia in the context of the real politic of today, when the Afghanistan's war, for instance, remains formally based on the right of self-defense for almost ten years. Nevertheless, regulate and limit this right are civilization's imperative.

Is it lawful to deploy weapons in outer space?

The most modern and advanced weapons, excepting those defined as of mass destruction – nuclear, chemical and biological –, have today free access to outer space. Only the placing in Earth orbit of these weapons is prohibited by the Article VI of the Outer Space Treaty²⁶. The international community

has not yet able to reach the necessary consensus for supporting the updating of this fundamental treaty in order to also prohibit other kind of armaments in outer space. This disposition establishes that “States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.”

The Outer Space Treaty was approved during an accelerated phase of the nuclear race of the Cold War as an attempting to limit it. It did not need to go beyond. It did not forbid the presence of other types of weapon in outer space, which became therefore permitted, and currently can be deployed in outer space. At the same time, it did not forbid the flight of intercontinental missiles through outer space, capable to transport any kind of weapons to any target.

The context is entirely different today, when there already are many kinds and projects of space based weapons. That is why, if we really want to guarantee maximum security to outer space and all space activities, it is indispensable and timely altering the treaty, or create a new and effective instrument, in order to close outer space for all types of weapons and conflicts.

Contradictory situation may be noted in all environments – land, sea, air and outer space: while the use of force in relationship between countries is prohibited by the UN Charter, the development and production of weapons necessary to make war – not only defensives but also offensives ones – is not. With an additional problem: in our time hardly we can distinguish between defensive and offensive arms, and in outer space this difficulty seems to be still more complex.

In this framework, it is not easy at all to define the lawful and fair character of a concrete use of the right of self-defense. This probably would create a general atmosphere of uncertainty and distrust, if not of hate and revenge, which could lead the conflict to grow in mathematical progression, with very low possibility of immediate and assured truce, and of a restored peace.

What is the level of world concern regarding to the questions of space security today?

Important facts occurred as consequence of the wide recognition the increasing danger of the radical militarization of outer space, with the placement of weapons over there and its unpredictable effects for all space activities, as well as for the common life on the surface of the Earth:

1) The Stimson Center, as it was already mentioned, launched, in October 2007, the "Model Code of Conduct for responsible space-faring nations", proclaiming "the right to safe space operations and free of interference, including military support functions" and "the responsibility to refrain from conduct harmful interference against space objects".²⁷

2) Russia and China proposed, in 2008, the “Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects” (PPWT)²⁸;

3) European Union decided, in 2008, to launch draft code of conduct to prevent conflicts in space, and, in 2010, a revised one²⁹;

4) Many countries, in 2010, intensified the debate on this theme in the Conference on Disarmament³⁰;

5) The majority of countries, in 2008 and 2010, supported measures of transparency and confidence-building in space activities, to prevent an arms race in outer space³¹;

6) The overwhelming majority of countries, in 2010, supported the request of UN General Assembly to the Secretary-General to establish, on the basis of equitable geographical distribution, a group of governmental experts to conduct study, commencing in 2012, on outer space transparency and confidence-building measures.³²;

7) The United Nations Institute for Disarmament Research (UNIDIR) has been involved in research and awareness-raising on the threats to the peaceful uses of outer space since the mid-1980, and, since 2002, has held annual conferences on different themes in the space security debate: connecting outer space and global security, detailing the nexus

between security and the peaceful uses of outer space, preventing an arms race in outer space, building the architecture for sustainable space security, celebrating the Outer Space Treaty, and exploring cooperative approaches to space security. The last four UNIDIR conferences were: "Security in Space: The Next Generation" (31 March-1 April 2008); "Space Security: moving towards a safer space environment" (15-16 June 2009); "Space Security: from foundation to negotiations" (29-30 March 2010); "Space Security: Building on the Past, Stepping towards the Future" (4-5 April 2011), all of them held in Geneva, Switzerland.³³

8) The UNIDIR held a seminar on "Space Security: Next Steps in TCBMs [Transparency and Confidence-Building Measures]", in New York, USA (14 October 2010).³⁴

9) The Union of Concerned Scientists, an American private non-profit scientific organization, launched, in 2010, as part of its Global Security Program, the report entitled "Securing the Skies – Ten Steps the United States Should Take to Improve the Security and Sustainability of Space."³⁵

10) The Space Security Index (SSI) project launched the document "Space Security 2011", its eighth annual report on trends and developments related to security in outer space. This project aims "to improve transparency with respect to space activities and provide a common, comprehensive knowledge base to support the development of national and international policies that contribute to space security." Its starting point is the view expressed in the OST that "space should be preserved as a global commons to be used by all for peaceful purposes: The secure and sustainable access to, and use of, space and freedom from space-based threats."³⁶

Although all this increasing attention to the issues of space security, the specific question of the right of self-defense has not been deserved the due consideration. Nevertheless, it is possible to infer some positive references about it.

How to deal with the right of self-defense in order to reinforce the state of

law on Earth as in sky and prevent conflicts?

First of all, it is imperative to create all indispensable conditions to avoid and prevent the resource to the right of self-defense in outer space. Preferably, this is a right not to be used. There is no any clarity on how to use it, how to employ proportional means in the operation, how to reach a minimally fair outcome, and how to stop it. It can be used arbitrarily, by merely unilateral criteria, and without limits. The losses can be gigantic, affecting a great number of countries. Thus, a bad situation can become still worst.

In this sense, it is very pertinent the abovementioned proposal of the Union of Concerned Scientists (UCS), "Securing the Skies – Ten steps the United States should take to improve the security and sustainability of space", which could also be sent to all other governments, especially those of space powers.

This report rightly considers that "increasing 'space security' means reducing threats to satellites – including military attacks, collisions with other satellites or space debris, or electromagnetic interference – and lowering the risk of arms races or conflicts, whether in space or on the ground," and that "increasing 'space sustainability' means protecting the future space environment by controlling the growth of space debris and more generally by managing activities in space so as to ensure countries' ability to use it in beneficial ways."

The ten steps are the following:

1. Clarify U.S. intentions for the international community; emphasize international cooperation rather than unilateral actions; reaffirm that all countries have the same rights to the peaceful use of space; take a more balanced view of commercial, civil, and military uses of space; support and reinforce long-held norms against stationing weapons in space and against disabling or destroying satellites.

2. Declare not to cause intentionally damage to or disable any satellites operating in accordance with the Outer Space Treaty; not be the first to install weapons in space, and to urge the other space powers to make

parallel pronouncements.

3. Declare not develop or deploy space-based missile defense interceptors; not to use any element of the U.S. land-, sea-, or air-based missile defense systems to attack or destroy a satellite; ensure that any missile interceptors sold by the United States will not be used as anti-satellite weapons.

4. Vigorously pursue a capability-preserving strategy and make satellites less attractive targets by reducing their vulnerabilities; building in redundancies; improving the capacity to rapidly reconstitute key functions; and developing air-, space-, or ground-based backup systems.

5. Modify U.S. export-control and related regulations to reduce unnecessary barriers to commercial and civil space cooperation.

6. Begin discussions with the international community to identify the most productive venue and agenda for negotiations on space security and sustainability. Play a leading role in setting up these discussions.

7. Assemble a negotiating team and begin building the diplomatic, technical, legal, and other kinds of expertise needed to support negotiations. Encourage other countries to do so as well.

8. Appoint a high-level expert panel to review and prioritize space situational awareness missions and to recommend corresponding improvements to U.S. space surveillance capabilities.

9. Create a standing program to assess and improve options for verifying compliance with potential space security agreements.

10. Develop and implement transparency measures aimed at improving safety and predictability in space.

In line with the proposal of the UCS, Nancy Gallagher, from the Center for International and Security Studies at Maryland, University of Maryland, alerts: "...the United States cannot unilaterally protect all of its satellites or prevent others from acquiring the means to threaten them, even if it dramatically increased military space spending and ended all space-related exports and civilian cooperation. Mutual vulnerability is an inescapable feature of global security, so promoting widespread

adherence to equitable rules that regulate behavior, reduce risks, and provide reassurance in space and on Earth is a much more prudent strategic choice than trying to keep all options open."³⁷

In his election campaign, the current U.S. President Barack Obama promised that the United States will seek a "code of conduct for space-faring nations, including a worldwide ban on weapons to interfere with satellites and ban on testing anti-satellite weapons."³⁸ This very positive manifestation has created an expectation that the U.S. decided in favor of a political and legal approach to safeguarding space activities.³⁹ Yet, so far it remains a nice hope.

In the potential conflict – referred by David Rodin⁴⁰ – between the purpose of international peace and security and the right of self-defense, that is, between Article 1(1) and Article 51 of UN Charter, the higher priority – especially in outer space – must be attributed to the first compromise of the United Nations. The preferential action to ensure, by any means, the states' sovereignty and overvalue the right of self-defense, very often goes beyond the maintenance of international peace and security, overriding it and acting as destabilizing force in the international community. Nobody has anything to gain if it happens in outer space.

Last but not least, it is essential to study the creation of an agreement negotiated with the utmost clarity, banning preventive or pre-emptive use of the right of self-defense⁴¹ from the outer space and the space activities. It is a great defense we can construct right now to guarantee a more secure and sustainable future in outer space. The preventive or pre-emptive⁴² use of the right of self-defense, in general, violates the intrinsic limitation of the right of self-defense, namely those of necessity, imminence and proportionality. As outer space is a *res communis omnium* – that is, a public domain open to the use and exploration by all countries –, the necessity of a reaction to an aggression in outer space should be decided by the UN Security Council, as it is an aggression to the international community, which can affect the legitimate security interests and well being of many countries, as

well as the global security. It is up also to UN Security Council defining if an attack to a space object is in fact imminent. Otherwise, this evaluation can be entirely partial and unilateral, and, worse, start a war that no one knows when or how it will end and how much it will cost to countries affected by it directly or indirectly. As to the requirement for proportionality, it is practically impossible make a proportional defense without knowing yet which and how will be the presumed attack. That is why the ban of the preventive or pre-emptive use of the right of self-defense is the best defense we can construct to prevent an incalculable space war and guarantee a more secure and sustainable future in outer space.

Some conclusions

1) The right of self-defense is fully recognized by international law, including and mainly by the UN Charter, and, therefore, it is also valid for outer space;

2) However, it can be quite difficult and controversial to define the lawful and fair character of a concrete use of the right of self-defense in outer space;

3) Moreover, the use of the right of self-defense in outer space could be extremely expensive and wildly destructive, not only for the countries in conflict, but also for many other countries, as well as for all global space security;

4) Preferably, this is a right not to be used. It can be used arbitrarily, by merely unilateral criteria, and without limits. There is no any legal clarity on how to use it, how to know if it responds to a real necessity and to an imminent requirement, how to employ proportional means in the operation, how to reach a minimally fair outcome, and how to stop it. A bad situation can become still worst. We have many similar and eloquent cases here on Earth.

5) It is imperative creating all needed conditions to avoid and prevent the resource to the right of self-defense in outer space. All space-faring nations, for instance, should commit themselves not to cause intentionally damage to or disable any satellites which operate accordingly to the Outer Space Treaty, not to be the first to install weapons in outer

space, and “to conduct space activities in way compatible with the principle of structurally non-offensive force configurations.”⁴³ They also should create a standing program to assess and improve options for verifying compliance with potential space security agreements, as well as develop and implement transparency measures aimed at improving safety and predictability in outer space.

6) It is essential to examine the adoption of an agreement banning the preventive or pre-emptive use of the right of self-defense in outer space. It is a great multilateral defense that we can construct - the sooner the better - to guarantee a more secure and sustainable future in outer space.

7) It is also opportune and important go ahead and begin a wide discussion how to regulate the use of the right of self-defense in outer space, in order to assure, as much as possible, its just and lawful use, with strong support by all the international community.

8) As said Wolfgang Friedmann in 1964, “the extent of the structural changes in international relations in our time requires a far more basic reorientation of our thinking in international law”.⁴⁴ This includes as never before the international space law and, particularly, the right of self-defense.

Notes and references

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11) *The Role of Transparency and Confidence-Building Measures in Advancing Space Security*, European Space Policy Institute (ESPI), ESPI Report 28, ISSN: 2076-6688, September 2010. Ver: <www.espi.or.at/images/stories/dokumente/studies/ESPI_Report_28>.

12) See *Model Code of Conduct for Responsible Space-Faring Nations*: <www.stimson.org/research-pages/model-code-of-conduct-for-responsible-space-faring-nations/>

13) Byers, Michael, *A lei da guerra – Direito internacional e conflito armado*, Rio de Janeiro, Brasil: Record, 2007, p. 79.

14) <http://en.wikipedia.org/wiki/United_Nations_Charter>

15) Rezek, Francisco. *Direito Internacional Público* (International Public Law), in Portuguese. Sao Paulo: Saraiva, 2005, p. 373.

16) <www.politinfo.com/articles/article_2004_09_16_4815.html> The Article 24 of the United Nations says: “1. In order to ensure prompt and effective action by the United Nations, its Members confer on the Security Council primary responsibility for the maintenance of international peace and security, and agree that in carrying out its duties under this responsibility the Security Council acts on their behalf. 2. In discharging these duties the Security Council shall act in accordance with the Purposes and Principles of the United Nations. The specific powers granted to the Security Council for the discharge of these duties are laid down in Chapters VI, VII, VIII, and XII.”

17) Rodin, David, *op cit*, p. 105; Clausewitz, Karl von, *On War*, United States: Princeton University Press, 1976, p. 87.

18) Schachter, Oscar, *International*

Law in Theory and Practice, The Netherlands: Martinus Nijhoff Publishers, 1991, p. 106

19) Grotius, Hugo, *O Direito da Guerra e da Paz (De Jure Belli ac Pacis)*, Ijuí, Rio Grande do Sul, Brasil: Ed. Unijuí, 2004, Vol. I, p. 287.

20) The Article 51 of UN Charter says: “Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defence shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.”

21) Falk, Richard, *Predatory Globalization – A critique*, UK, Cambridge: 1999, pp. 171-171-172.

22) Azambuja, Marcos Castrioto, *As Nações Unidas e o conceito de segurança coletiva (United Nations and the concept of collective security)*, revista *Estudos Avançados*, São Paulo, vol. 9, Nº 25, Setembro/Dezembro 1995.

23) Falk, Richard, *id ibid*, p 173.

24) Watts, Arthur, *The importance of international law*, in *The role of law in international politics – Essays in international relations and international law*, Edited by Michael Byers, USA, New York: Oxford University Press, 2000, p. 11.

25) Rodin, David, *op cit*, p. 117.

26) The Article IV of the OST says: “States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.” <www.oosa.unvienna.org/oosa/en/SpaceLaw/treatyprep/ost/index.html>.

27) See note 11.

28) <www.reachingcriticalwill.org/political/cd/papers09/3session/CD1872.pdf>.

29) <www.ifri.org/downloads/comptes_rendu/fichiers/58/jfmayence.pdf>, as well as <<http://www.consilium.europa.eu/uedocs/cmsUpload/st14455.en10.pdf>>.

30) The report of the Conference on Disarmament on Informal Meetings on Agenda item 3 – ‘Prevention of an arms race in outer space – PAROS (document CD/1899, at 14 September 2010, annex III), registers in general remarks: “Delegations expressed that outer space should be used solely for peaceful purposes and for the benefit of all countries and not become an arena for competitive strategic policies. Most member States believe that the placement of weapons in outer space could deepen global insecurity, affecting all countries. An arms race could be a destabilizing factor regardless of the category of weapons. Recent technological advancements can lead to production of sophisticated space weapons, such as anti-satellites, which could become a threat to the security and safety of outer space. The development of new and unforeseen weapons may require review of present parameters of space security.” See also document GA/SPD/458, from 14 October 2010, entitled “Strength of International Space Law to prevent militarization of outer space, respond to other current challenges weighed in fourth Committee.”

31) The draft resolution on Transparency and confidence-building measures in outer space activities (UN Doc. A/C.1/63/L.44/Rev.1) was approved by the UN First Committee by a vote of 166 in favor to 1 against (U.S.), with 1 abstention (Israel).

32) UN Document <[A/RES/65/68](#)>, 13 January 2011.

33) See <www.unidir.org>.

34) See <www.unidir.org>.

35) <www.ucsusa.org/securingtheskies>

36) See <www.spacesecurity.or>

37) Gallagher, Nancy, *Space Governance and International Cooperation*, in *Astropolitics*, Volume 8, Issue 2, May 2010. <<http://dx.doi.org/10.1080/14777622.2010.524131>>

38) *Barack Obama and Joe Biden on defense issues*. <www.barackobama.com>

39) Oznobishchev, Sergey, *Codes of Conduct for Outer Space*, in *Outer Space – Weapons, Diplomacy, and Security*, Alexei

Arbatov and Vladimir Dvorkin, Editors; U.S. Washington, DC: Carnegie Endowment for International Peace, 2010, p. 76

(40) Rodin, David, *op cit*, p. 117.

(41) Some authors call this “preventive” self-defense or “preventive” war. See Ian Brownlie, *International law and the use of force by states*, 1963; Yoram Dinstein, *War aggression, and self-defense*, 2001. It is also used the expression “anticipatory self-defense”, reflecting a narrower doctrine that would authorize armed responses to attacks that are on the brink of launch, or where an enemy attack has already occurred and the victim learns more attacks are planned. See Mary Ellen O’Connell, Professor of Law from the Moritz College of Law and Associate of the Mershon Center for International Security and Public Policy, The Ohio State University, in *The Myth of Preemptive Self-Defense*, The American Society of International Law, August 2002.

(42) President George W. Bush spoke of “preemption” in a speech on combating terrorism at West Point in May 2002. Mike Allen & Karen DeYoung, *Bush: U.S. Will Strike First at Enemies*; In West Point Speech, President lays out broader U.S. Policy, Washington Post, June 2, 2002. The term “preemptive self-defense” is used to refer to cases where a party uses force to quell any possibility of future attack by another state, even where there is no reason to believe that an attack is planned and where no prior attack has occurred. See abovementioned Mary Ellen O’Connell, who points out that “there is no self-appointed right to attack another state because of fear that the state is making plans or developing weapons usable in a hypothetical campaign.” And that “the U.S. has no right to use force to prevent possible, as distinct from actual, armed attacks. The further reality is that the U.S. does not advance its security or its moral standing in the world by doing so.”

43) Wolter, Detlev, *Common Security in Outer Space and International Law*, Geneva, Switzerland, UNIDIR, United Nations, 2006p. 154.

44) Friedmann, Wolfgang, *The Changing Structure of International Law*, London, 1964, p.3.