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SCIENCE AND TECHNOLOGY COMMITTEE

IMPROVEMENT OF INTERNATIONAL LAW FOR SPACE POLICY

DRAFT SPECIAL REPORT

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* Until this document has been approved by the Science and Technology Committee, it represents only the views of the Rapporteur.

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Whilst developing effective cooperation with the NATO Parliamentary Assembly in general and within the Science and Technology Committee (STC) in particular, the parliamentary delegation of the Russian Federation points out that the topics under discussion affect political decisions of heads of state and governments, as well as activities of international organizations. The Russian Delegation is hence presenting a special report entitled "Improvement of International Law for Space Policy". Humankind spent most of the past millennium trying to work out some efficient principles for allocating spheres of interest on the surface of this planet. Thus, it has not yet learnt to bear responsibility in the three-dimensional reality.

I. OBSOLESCENCE OF THE SPACE TREATY SYSTEM

1. The world is changing very quickly, and unfortunately, technological development in all spheres of human activity is outrunning the development of legal control. This particularly concerns space activities. Last spring, President Vladimir Putin proclaimed at an international conference in Munich, that Russia is ready to propose a full-scale agreement on the legal regime of outer space, similar to the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies of 1967. This statement made by the Russian leader was no surprise for the members of the NATO PA Science and Technology Committee, who had been debating the subject for quite some time. Such an agreement can only be significant if entered into by a large number of countries. Russia has pioneered this legislative development, since it has been the most active country in outer-space exploration, and has made the greatest number of space launches with the largest accident free-score.

2. We must be aware that the current international space legislation does not correspond with the realities of the modern world. Some legal questions of outer space exploration were discussed within the framework of the UN back in 1958. We have gathered for this session almost on the same date as when the Space Age began 50 years ago. It was on 4 October 1957, that the Soviet Union launched the first-ever space satellite. As this session comes to an end, we will be able to celebrate 40 years of International Space Law, since it was on 10 October 1967, that the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, came into effect. However, anniversaries alone cannot bring humankind closer to establishing a new legal order, in line with the challenges of the 21st century. Drawn up between 1963 and 1993, this package of five international treaties is no longer capable of regulating the new relations currently emerging in outer space. This treaty system comprises:

- The Treaty Banning Nuclear Weapon Tests in the Atmosphere, In Outer Space and Under Water, 1963.
- The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, 1967.
- The Convention on International Liability for Damage Caused by Space Objects, 1972.
- The Convention on the Registration of Objects Launched into Outer Space, 1975.
- The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, 1977.

3. The USSR and the United States, being the two leading nations in the field of space exploration, reached a number of bilateral agreements in the past that managed to restrain the militarization of outer space for a number of years:

- The Anti-Ballistic Missile Treaty (ABM Treaty) between the USSR and DEFENCE on the limitation of anti-ballistic missile (ABM) systems (1972), with a Protocol prohibiting space-based ABM systems (1974).
- The Soviet-American Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles, 1987.
- Treaties on the Reduction and Limitation of Strategic Offensive Arms (START-I and START-II), signed in 1991 and 1993.

4. As is well known, the US has withdrawn from the ABM Treaty and presumably intends to continue with the destruction of the multilateral and bilateral guarantee system that has a direct bearing on the legal regime of outer space. Today, Moscow and Washington have to get ready to deal with the problems they will face after the START expires in 2009, and the SORT (Strategic Offensive Reductions Treaty) expires in 2012.

5. Fifty years of Space Age have changed the world significantly. New international law actors have entered into space activities, such as private companies that lie beyond some legal restrictions. The lack of proper regulation results in numerous negative consequences, such as uncontrolled obstruction of outer space, and the sale of land on the Moon by entrepreneurs.

There are several crucial yet unresolved problems concerning the legal regime of outer space, such as:

- Aerospace delimitation;
- Definition of some significant terms, such as "space object" and "the launching State" with respect to extraterritorial launching sites;
- Definition of the terms "outer space activities", "military space activities", and "peaceful activities", as well as the Participants of such activities;
- Procedure for the use of force in and from outer space in accordance with Articles 42 and 51 of the UN Charter;
- Responsibility in case of violation of the non-proliferation regime;
- Limitation of private commercial activities concerning intentional appropriation of celestial bodies, the Moon in particular.

6. The first group of international treaties is merely becoming obsolete. However, nonobservance of the second group of treaties, limiting the use of weapons in space, through space and from space, shatters the foundation of international stability. We are facing a situation where conflicting approaches to antimissile and anti-satellite defence maintained by certain countries hamper the creation of an up-to-date international treaty on outer space. Moreover, it became apparent early in this century that the issue of shaping an adequate legal regime on space depends upon certain Treaties on conventional arms, such as the Conventional Armed Forces in Europe Treaty (CFE), 1990, and the Istanbul Adapted CFE Treaties (ACFE), 1999 - both of which are still waiting to be ratified by NATO member states. Reaching agreements on the legal regime on airspace and outer space is most closely linked to the implementation of the Partnership for Peace programme.

II. TREATIES ON OUTER SPACE, ANTIMISSILE AND ANTISATELLITE DEFENCE (ABM & ASAT)

7. Space activities have become genuinely universal over the past decades. The number of states with space programmes of their own has increased. More than 40 countries currently explore outer space not only for civilian, but also for military purposes. In 2006, nations worldwide spent roughly

US\$22.7 billion on military space programmes. The United States (US\$21.4 billion), France (US\$591 million), the United Kingdom (US\$263 million) and Russia (US\$197 million) account for the world's largest military space budgets, followed by Spain (US\$53 million), Italy and Israel (US\$50 million each), Germany (US\$39 million), and Belgium (US\$32 million). Many countries, such as China, India, South Korea, Brazil, and Japan, have their military space expenditures incorporated into civil budgets for dual-purpose programmes.

8. China carried out a successful anti-satellite weapons test in January 2007. Soviet and American designers of anti-satellite systems were under the presumption that they would have to destroy active satellites emanating radio signals, which is why beacons were used during the tests. China destroyed a nearly invisible "silent" or dark satellite. Such military and scientific achievements arouse respect for a nation that is seeking to ensure its defences. The NATO PA STC should probably congratulate our colleagues from China and give credit to their achievements. In a way, your Rapporteur has managed to do so. The Chinese delegation was among the most active at the recent MAKS 2007 International Aerospace Show that took place in Moscow in August. At the same time, the above-mentioned Chinese experiment has had a serious drawback, as it resulted in a great number of uncontrolled fragments in outer space, which may obstruct the orbit of the destroyed satellite.

9. The US and Japan are naturally worried about China's growing might, and the lack of transparency in its space programmes. These two countries requested an explanation from Beijing about this military test. You might as well ask for an explanation as to why the Great Wall of China was built.

10. China is stepping up its outer space military activities in response to US space initiatives. The two countries are protecting themselves from the same threats. China's successful test does not mean that Beijing will now start shooting down all satellites indiscriminately. The history of the global arms race shows that weapon systems can be considered as defensive until they reach a certain level of development. Countries do not admit their aggressive intentions, and all military programmes are defensive at the start. It shouldn't be difficult to monitor the defence sufficiency limit of outer space programmes through both national and international means. But a new legal framework is required to ensure transparency and mutual confidence in outer space. It should include on-ground spacecraft inspection. An orbital inspection is technically dangerous and may be interpreted as an attempt to affect the spacecraft's performance, providing an actual *casus belli*.

11. China has proposed that it be involved with the international community in the process of elaborating a legal, international outer space regime. Russia has repeatedly stressed the necessity of inviting China, Japan and India to co-author a new treaty on outer space. Russia is able to provide mediation and even guarantee the interests of China, the US and the EU in the new treaty. The treaty must not only be open for membership, but also for joint elaboration at its early stages.

12. The US has been wary of the recent Iranian dual-purpose scientific research. The US Department of Defense is anxious about Iranian missile technologies which will allow Iran to create its own satellite in the near future. The US Defense Department has already seriously overestimated the threat of WMD in Iraq. If Iran has the possibility to launch a suborbital vehicle of its own, then it is most likely ready to join the negotiations on the legal regime of outer space.

13. One cannot rule out the possibility of Washington's estimates of Iran's or North Korea's missile potential being intentionally exaggerated, serving the interest of a specific American NGO called the Missile Defense Advocacy Alliance (MDAA). This organization does not only give voice to fighters against "international terrorism", but it also represents the interests of certain industries involved in the

emerging hi-tech ABM defence market. It is the task of the STC to evaluate the capacity of this market, and hence the integrity of the opposition to ABM limitation. It is the duty of national legislators to provide their citizens with complete information concerning international treaties, be they observed or violated.

14. The Iranian nuclear threat, imaginary as it is, is nevertheless destabilizing the entire world. Iran is not giving any guarantees to the US. The US is not giving any guarantees that it will not attack Iran, claiming that Iran bought 20 medium-range missiles from North Korea in 2005. Washington argues that these missiles pose a threat to Central Europe, where 56,000 US soldiers are deployed. It is mainly for their protection that the US is erecting a missile defence system in Europe. An unbiased military analysis suggests, however, that Iran may have some other, more likely targets outside Europe. Nobody besides has attempted to analyze the possible military and political consequences of blasting Iran's (or any other country's) missiles in the airspace over other nations.

15. The logic of deploying missile and radar sites in Eastern Europe has little to do with countering the Iranian threat. Otherwise, the US top brass would have chosen deployment areas in Turkey, Georgia, or even Romania. The US is completing the tests of a new radar system on Kwajalein Atoll (Marshall Islands). It is scheduled to be deployed in the Czech Republic in 2011. But in August, at his meeting with General Yuri Baluevsky, the Russian Chief of General Staff, First Deputy Minister of Defence Martin Bartak announced that Prague had postponed its decision on the radar for one year. And I hope that this wise decision has been due to the influence of our fellow-parliamentarians from some of the NATO Member States. We realize that a postponement does not mean cancellation, but it could be the first step. Regretfully, the US still plans to manufacture such radar systems and deploy them in other East European countries, right next to the Russian border.

16. We hope it is within the Committee's competence to ask experts to study the destabilizing influence on the international situation resulting from the deployment of radars with an operational range of 200-400 km along Russian borders. It would partially ease the Russian leadership's concern over foreign military activities along our borders. The US has not made any statements on the submission of new missiles and their deployment areas to international control, as well as on the characteristics of the new radars. In particular, a radar site in Norway (Varde) is officially announced monitoring outer space, but instead, it maintains surveillance over Russia's airspace, which makes it a functional element of the US National Missile Defense (NMD) system. The US activity in Europe is closely linked to its operations in the Northwestern Pacific. The deployment of interceptor missiles in Fort Greely, Alaska, the floating radar recently deployed to the Aleutian Islands, together with the developments in Europe, make us question the direction of the US and NATO military efforts.

17. NATO parliamentarians must realize that an arms race in space holds real danger for the future. However, an imbalance of armaments on the ground is already resulting in an arms race. The US NMD systems, Theatre Missile Defense (TMD) with its elements in outer space and on the territories of Allies do not contribute to peacekeeping efforts. Only a global MD system aimed at countering terrorist strikes, created jointly by all nations concerned in Europe, America, and even Asia, can prove efficient in the long run. Only in this case will it be possible to develop confidence-building measures and prevent the actions of some actors aimed at destabilizing the international situation. This is what prompted President Putin's proposal to President Bush at the latest G8 Summit in Heiligendamm. Mr. Putin suggested that Russia and the US should jointly use the Gabalin radar site in Azerbaijan, which was designed to monitor outer space and track ballistic missile launches. This initiative was discussed at the ministerial level during the NATO Council meeting last June. This Committee reviewed such a possibility at its Spring Session in Portugal in May. 18. Russia's military and technical achievements in developing its strategic weapons do not mean that Russia is preparing for an aggression. The Russian militaro-industrial complex is capable of developing the most sophisticated weapons systems. No one will artificially decrease the characteristics of combat systems that cost millions. It would be irrational to re-invent a zeppelin when there is the possibility of creating a jet. It's generals who always prepare for the wars of the past, while scientists prepare for the wars of the future. We should admit that it takes great effort to hold back progress in developing means of destruction.

19. The Russian delegation to the NATO PA Spring Session proposed a moratorium on deploying new TMD elements in Europe. One year should be enough to evaluate the military and strategic necessity of TMD and discard shallow short-term political considerations. Disappointed with its counterparts' failure to ratify the CFE Treaty, Russia has been forced to suspend the Treaty. Luckily, the parties have subsequently managed to coordinate and partially harmonize their stands, thus, avoiding a confrontation.

20. It is necessary to come to reasonable agreements on the ground before drawing up rules for outer space. Once we have fulfilled the task of enhancing confidence-building measures as far as ground-based arms and airspace monitoring is concerned, we can gradually take on other far-reaching goals.

III. REDUCTION OF SPACE DEBRIS

21. The problem of space orbits being obstructed by debris is very important for all the countries in the world. Because of the almost uncontrolled activities of launching states, the amount of space debris is increasing. This may paralyze space operations in 20-30 years. Uncontrolled weapons testing may result in the obstruction of orbits most often used by commercial satellites. All this drastically increases the risks of unintentional destruction and insurance costs and decreases cost-effectiveness of space programmes.

22. The term "space debris" comprises artificial objects and their fragments in space that are out-ofservice and will never serve any useful purpose, but which are nonetheless hazardous for space vehicles, especially manned stations. Space debris can pose a direct threat to the Earth when it is too large or contains dangerous (nuclear or toxic) materials; when it exits the orbit without control or fails to burn in dense atmosphere and when it falls on inhabited areas, industrial sites, transport communication lines, etc.

23. The problem of space debris received official status in 1993 after the UN Secretary General's report on "The Impact of Space Activity on the Environment". In that report, the Secretary General pointed out that that problem was of international, global importance. It is not national aerospace that is being polluted, rather it is the pollution of the Earth's outer space, which adversely affects all countries directly or indirectly involved in its exploration.

24. The problem of near-earth space debris pollution appeared as a purely theoretical one right after the first man-made satellites had been launched in the late 1950s. According to NASA scientists, the amount of space debris transformed into a new quality. Even if we stop launching vehicles into space today, the fragmentation of space debris will continue. By 2055, the number of newly formed fragments will exceed the number of fragments burning in the atmosphere. Some estimates show that the so-called "cascade effect" will lead to space exploration becoming eventually impossible. "Self-reproduction" of space debris will interfere with the safety of space activities.

25. At present only 6% out of the 9,300 artificial orbital objects are active today. According to different estimates, there are about 5,000 tons of man-made objects at low-earth orbits (up to 2,000 km). Statistical evaluations show that the number of such objects (more than 1 cm in diameter) is imprecise and may total 60,000 – 100,000. Only 10% of them can be detected, monitored (some 8,600 objects) and catalogued by ground radar and optical means. Only 6% of monitored objects are functional. Nearly 22% of the objects do not function, 17% are spent upper and accelerating stages of boosters, and nearly 55% are waste products, technological elements used in launches, explosion fragments and wreckage.

26. A delicate legal situation emerges when operational objects in space (there are over 700 of them worth around 100 billion US dollars) have owners. In other words there are entities with property rights to spacecraft. However, it often happens that as soon as these spacecraft turn into debris, their owners waive their property rights and subsequent obligations. There are no provisions for the use of sanctions against such entities that pollute outer space with debris.

27. Most of these objects lie in the high inclination orbits with intersecting planes, which is why their average encounter velocity is nearly 10 km/s. A collision of any of such objects with an operational space vehicle may damage or even destroy it. There is no effective protection against space debris in particular with a diameter of more than 1 cm. The most polluted are the orbits used by space vehicles, consisting of low-earth, geostationary and sun-synchronous orbits.

28. In January 2005, the US space surveillance network registered a collision of the stage of a US missile launched more than 30 years ago with a fragment of a Chinese launch vehicle, which exploded in March 2000. At least three new fragments of the US missile supplemented the garbage dump, created jointly by all countries, in the near-earth outer space. There is no need for legal evaluation here because this episode did not lead to a conflict of interest. However, it is not always the case.

29. Even existing conventions on space are not strictly observed today. When a Soviet sputnik with a dangerous power system was falling down over Canada in the mid 70s, the USSR took responsibility for the damage caused by its fragments in accordance with the Convention on International Liability for Damage Caused by Space Objects (1972). When a Russian spacecraft "Express AM 11" was damaged in March 2006, none of the signatories accepted responsibility for the damage inflicted on the Russian space programme. Some experts reasonably believe that space debris was the reason for the sudden external influence on the craft. Others link the loss of this Russian sputnik with the "Joint Operations for Outer Space Control" conducted by the US. Russia had to put the sputnik into the disposal orbit.

30. The dropping of space debris has become so regular that it is used as the first hypothesis in explaining the origin of any mysterious fragments. This was the case in August 2007 in Abkhazia. Fragments from space falling in the zones of political instability can bring about armed confrontations.

31. The technical development of our civilization does provide us with effective means of destroying debris at orbits higher than 600 km (due to the absence of atmosphere slowdown effect there). At the same time, the task of providing flight safety in conditions of technologically polluted near-earth outer space is highly important. The danger of uncontrolled outer space objects entering a dense atmosphere is increasing very quickly.

32. International cooperation on the problem of "space debris" should take the following priority routes:

- Environmental monitoring of the near-earth outer space, including the geostationary orbit, "space debris" monitoring and registration of "space debris";
- Mathematical modeling of "space debris" and the creation of international info systems for the prognosis of space debris population and its threat to space flights, as well as for the informational support of dangerous proximity of space objects and their uncontrolled dense-atmosphere entry.
- Developing ways and means of protecting spacecraft against high-velocity space debris.
- Developing and implementing measures aimed at reducing space debris population resulting from military tests.
- Elaborating regulations regarding property rights on man-made satellites and their fragments.
- Establishing an International Space Inspection Body and its arbitration institutions.

33. Space debris problems, like any other complicated and important problem, have several dimensions, including scientific, technical, legal, ecological and others. Though this topic attracts the attention of many research centers, space agencies and international organizations such as the International Astronautical Federation (IAF), the Committee on Space Research (COSPAR), the International Telecommunication Union (ITU) and others, it seems that the recent "technical" and "legal" cooperation of two international bodies has brought the understanding of this problem to a new level. These are the Inter–Agency Space Debris Coordination Committee (IADC) and the Science and Technology Committee of the UN Committee on the Peaceful Uses of Outer Space (STCS UN COPUOS).

34. In IADC, experts from 11 space agencies from the US, Russia, Europe, Japan, China, India, Germany, France, Great Britain, Italy and Ukraine coordinate the technological policy of launching states aimed at reducing pollution in space, and discussing associated problems relating to monitoring, measuring and preventing new space debris. To a great extent, it was the IADC's activity that provided an impetus for this issue to be considered by the STCS UN COPUOS.

35. Today only two countries, Russia and the US, are able to monitor the technological population of the near-earth outer space using their national space monitoring systems. Individual elements of these systems are located outside their national territories and are subject to bilateral agreements. Similar systems in Japan and China are only starting to function, and their specialists are gaining experience.

36. Economically suitable methods of cleaning outer space of debris do not exist, which is why much attention will be paid to international cooperation and the coordination of efforts of launching states aimed at the prevention of debris formation, such as prevention of orbital explosions, moving spent spacecraft into burial orbits, slowing down in the atmosphere, etc. Most of these measures directly or indirectly affect the competitiveness of spacecraft and may result in considerable expenses for modernization. That is why future general norms and standards on outer space population must be adopted on the basis of international coordination, in a well-balanced and global way.

37. It is necessary to grant full access for participating organizations to the national catalogues of countries, especially to catalogues concerning orbits populated after weapons testing. This access will allow every country to optimize its use of outer space. For example, Russian and US scientists calculated that the number of International Space Station (ISS) escape manoeuvres, when the Russian System of Space Control is used, will be 6-8 per year instead of the 24-26 planned by NASA.

38.

Many experts believe that the measures aimed at the prevention of space debris population must be supplemented with sanctions. This is an international activity of a different order. There is no doubt that an international fund accumulating means for developing and creating space cleaning

systems is necessary. Such systems must be put into service before 2030 while there is still a hope for preserving outer space for future generations. It would be helpful to establish incentive awards for environmental achievements in space - the kind of prize that inspired the creation of Space Ship One. International aerospace shows should be used to promote awareness. One should not be afraid of science-fiction as long as it is scientific. After all the first international spacecraft exhibition took place in Moscow back in 1929!

DANGER OF DUAL PURPOSE SPACE SYSTEMS IV.

A very difficult task is regulating those types of space activity which are not governed by 39. international law. This applies to military applied space experiments, such as military tests of guidance technologies of destruction means in space and from space. Space deployment of electro-optical and radio-electronic countermeasures equipment is provoking an arms race beyond the negotiation process. Legislators fighting for a threshold reduction of armed confrontation fail to notice that the military men and politicians are misinforming them about new means of warfare.

In the absence of a legal environment, some countries unilaterally try to determine the rules of 40. the game in space. The Russian Federation and the NATO European members are waiting for an explanation of the US National Outer Space Policy. Why does the US "oppose the development of a new legal regime on the use of space"? What is the real meaning of these words: "Proposed arms control agreements or restrictions must not impair the rights of the United States to conduct research, development, testing, and operations or other activities in space for US national interests"?

During discussions in our Committee, we raised the issue of the dual-purpose space system 41. integration in military systems. Military systems for space and surface control are being developed step-by-step. First of all, intelligence or monitoring facilities are created, then space groupings of communication and navigation are built up, and finally all these groupings are positioned as commercial or dual-purpose. For example, in 2005 only 13 out of 76 newly launched satellites were officially declared military.

When such groupings reach the level of continuous operation they are integrated with combat 42. systems. Space groupings are developed relatively slowly and can be monitored. The integration with weapons can be very fast and nearly unnoticeable, which is why the numerical strength of the communication, navigation and remote monitoring groupings must have reasonable limitations.

The number of the so-called civilian satellites used in recent wars has been gradually 43. increasing. There were 52 military and 9 civilian satellites used during the Desert Storm Operation (1990-1991) and 82 military and 16 civilian satellites during the Desert Fox Operation (1998-1999). NATO used 90 military and 29 civilian satellites in the operation against Yugoslavia. This tendency remains unchanged in the 21st century. On average, dual-purpose satellites accounted for nearly 10% of orbital groupings in the 2002 conflicts and 25% in 2003-2005.

Today, orbital groupings of dual-purpose craft are growing in number, not for commercial tasks 44. but for incorporation in the combat control systems. Military experts can easily determine whether this or that space grouping has reached the necessary qualitative parameters allowing its incorporation into the weapons control circuit.

45. For example, civil space navigation systems developed primarily as civilian ones also solve military tasks. GPS, GLONASS and Galileo have a similar organization. Each of them has three main parts – space and ground control complex and users' receivers. These receivers can be placed on weapons, for example on cruise missiles. The satellites are positioned at medium altitudes – about 20,000 km. This shift from low orbits of the first systems allows them to avoid the influence of the earth's atmosphere, i.e. created conditions for sustained operations without correction of orbit. The configuration of the orbital structure (several satellites on different levels) provides a continuous global zone of operation. The difference lies in the technological realization of space and ground segments.

46. In July 2006, the space segment of the GPS comprised 28 spacecraft in six orbital levels. Galileo will eventually consist of 30 satellites. This system is optimized to service the countries situated in latitudes up to 75°. GLONASS provides for creating an orbital grouping of 24 satellites. Now there are 13 spacecraft in orbit and 18 will be sufficient for reliable navigation in Russia. The Russian navigation system is not ready to home in on weapons at any point on the globe. The average signal availability is 97% over the territory of Russian Federation and 81% over the rest of the world.

47. The indicator of the space grouping's military designation is its multi-echelon formation, which is unnecessary for civilian-purpose groupings. Today some commercial space groupings have already exceeded quality and quantity levels necessary to fulfill the declared tasks. We suggest that the STC should discuss the quality and quantity characteristics of dual-purpose systems and determine threshold values of space groupings. It is necessary to identify specific weapons systems, whether they are bombs or missiles, integrated with space informational systems. This is essential for reaching an agreement on their limitation.

48. The use of precision guided systems gives a considerable economy of ammunition for each target. This leads to the replacement of powerful nuclear warheads with low-yield ammunition. The rationale of warheads development is dominated by the perfection of yield/precision correlation. We are now witnessing a trend towards increasing precision and a reasonable reduction of weapons yield. A weapon with conventional ammunition can become strategic and it will not be under limitations existing today. This is why there is a long-felt need to start negotiations on the limitation of incorporating dual-purpose systems in the high-precision weapons control system. This is also why the negotiation process should include the issue of the limitation of conventional armaments that use target designation and guidance from space. Weapons integrated with space information systems and weapons of the same type which do not have this capacity must be differently classified. Consequently, their export potential should be different, too.

49. Thus, to strengthen confidence-building measures in space and prepare bilateral and international agreements on the improvement of the international legal regime of outer space, it is proposed that the NATO PA STC should work out the parameters of these agreements and the methods of their evaluation:

- Quantity and quality characteristics of orbital groupings of military designation;
- Quantity and quality characteristics of dual-purpose orbital groupings that can be integrated in the combat control system circuit;
- Quantity and quality characteristics of combat systems integrated with space informational systems;

- Measures aimed at prevention of uncontrolled debris appearance resulting from weapons testing in space;
- Measures on limitation of weapon testing and military activities of private companies in space.
- Rights and methods of work of the before-launch inspections of the spacecraft.

50. All these issues should be incorporated as a system into the new International Treaty on Outer Space. The modern world needs a legal basis and good will in controlling the proliferation of weapons-production technologies that use integration of space information systems and strike capacity.

V. CONCLUSION

51. The new international legal regime of outer space must be elaborated faster than means of warfare development. Only in this case would such a regime prove efficient. Russia is ready to provide a comprehensive case for overcoming the legal crisis over space-military issues, and propose a concept for a realistic international agreement that would be acceptable for all parties involved in the peaceful exploration of outer space.

52. A full-scale Treaty on Outer Space will take time to elaborate. There are various ways to achieve this. One could make use of the United Nations, a legitimate global organization which still maintains its role in the modern world. Likewise, one could start with bilateral arrangements — this was done recently as independent experts from Russia and the US engaged in elaborating a Code of Conduct for a States' Activity in Outer Space. It would be wise to use this particular document to ban any measures aimed at reducing the safety of space systems: to make it illegal to deploy, test or use weapons in outer space, including the means of destroying or damaging spacecraft.