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> Time for the international community to decide whether it would support an effective set of solutions regarding the enhancement of the safety of space operations or wind up its work on this topic with inconclusive results devoid of any functional load and having marginal practical usefulness

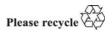
Working paper submitted by the Russian Federation¹

Russian Federation sets the task of achieving substantive regulation

Throughout the three year cycle of considering the topic of ensuring the 1 long-term sustainability of outer space activities and the safety of space operations, the Russian Federation has been consistently developing its own negotiating position with an emphasis on an in-depth view of the existing problems in this field. The Russian side was doing its utmost to ensure the success of the negotiations, which can be testified to by the history of the Russian proposals and their steadily increasing level of detail. A solid portfolio of important initiatives has been formed. They are distinguished by a clear logic and calibrated articulation which should appeal to all those States that value fairness in politics. All these initiatives were carefully arranged to ensure a broader array of issues to be addressed, as well as to generate real opportunities for a comprehensive and efficient safety and security regulation for outer space on the basis of an optimal combination of methods and means for achieving the goals. In this work the Russian Federation suggests leaning on shrewd and adequate analytics and a logically built scheme. The support for what the Russian Federation is doing in this field would meet the interests of the

¹ The text of the present document was first made available, in English and Russian, as a conference room paper at the fifty-eighth session of the Committee on the Peaceful Uses of Outer Space (A/AC.105/2015/CRP.15).





international community. The general progressive line of policy towards working out an efficient set of guidelines should be continued since this topic possesses quite a potential for development.

Goal of achieving, under the auspices of the United Nations, normative regulation of the safety of space operations has been incorporated into the Military Doctrine of the Russian Federation

2. The development and implementation of practical solutions in the field of enhancing the safety of space operations should not only have a positive impact on the situation in outer space, considering the need to decrease the effects of threats and hazards typical of this environment, but also perform a much broader function of preventing such scenarios when the space activity itself becomes the trigger of a conflict. In this regard, it is particularly important to note that the Military Doctrine of the Russian Federation (new edition), approved by the President of the Russian Federation on 25 December 2014, lists among the country's main tasks in deferring and preventing armed conflicts, the "endorsement within the United Nations of the regulatory elements of the safe conduct of outer space activities, including the safety of operations in outer space in their general technical understanding". Earlier, the commitment to solving the problems that are part of a large topic of ensuring the long-term sustainability of outer space activities and the safety of space operations was set out in the Framework for the State Policy of the Russian Federation Relating to Outer Space Activities for the Period up to 2030 and Beyond. The message of the Russian policy is definite and clear. Such a policy line encourages the Russian Federation to take a most serious approach towards forecasting and promoting the efficiency of the future regulatory framework in the field in question. The Russian Federation urges other States concerned to offer similar institutional assistance to the process of working out relevant arrangements within the Scientific and Technical Subcommittee and the Committee on the Peaceful Uses of Outer Space of the United Nations in general. It will be interesting for the international expert community to learn that the commitment of Russian policy to strengthening international regulation of the safe conduct of outer space activities has been authoritatively recognized by the Military Doctrine as well. Analytical publications on possible future regulation of safety and security in outer space (including in the context of conceptualized potential methods and means of space traffic management) are known to make assumptions that any such regulation would hardly affect military activities and military space systems. As of today, these assumptions are not completely unjustified. The implementation of the 1976 Convention on Registration of Objects Launched into Outer Space, as it relates to the provision contained in its article IV on furnishing the information on basic orbital parameters of space objects, is a clear example thereof. Some States, in fact, tend to adhere to a practice of concealing the real location of their military space objects, often publicly announcing the parameters of intermediate orbits in which these objects are located for a short period of time. It is obvious that such a "frivolity" in understanding the objectives and significant elements of registry regulation makes it impossible to identify space objects and, therefore, overtly contradicts the need to ensure the safety of space operations. Hence, these arbitrary practices that some States have established and got used to would have to be corrected, at least due to the need to meet the requirements on enhancement of the practice of registering space objects developed by the United Nations General Assembly. There is good reason to expect that the Russian proposals (the relevant draft guideline in particular) will be instrumental in this regard.

Collective benefits that could be derived from the formula proposed by the Russian Federation for the implementation of the future guidelines

3. At the fifty-second session of the Scientific and Technical Subcommittee, some delegations suggested that the draft guidelines and the implementation mechanism proposed by the Russian Federation would affect to a great extent the interpretation of international law and even lead to changes in the agreed format of the future set of guidelines as a voluntary instrument. There are no real grounds for such a conclusion. The draft guidelines proposed by the Russian Federation were not designed to interpret international law since they do not contain a single provision that would warrant legal qualification. On the contrary, they address those aspects of space security that are characterized either by the absence or the incompleteness of international legal regulation. As for the methods used to define the tasks of each of the draft guidelines proposed by the Russian Federation, they are largely conditioned by the principles and norms of international law, which is perfectly logical and justified. The guidelines themselves are designed to define the modalities for the implementation of the norms of international law in cases when international law does not provide for a comprehensive regulation. For this purpose, the Russian proposals have been formulated in such a way as to provide for functional links and the necessary correlation of the guidelines with the regulatory methods built on international law. The future set of guidelines is proposed to be regarded as an expression of political conscience and political will in terms of political obligations, especially given that the legal semantics confirm that the notion "voluntary" is akin to the notions "conscientious" and "purposeful". It would, therefore, be incumbent upon States and international intergovernmental organizations to practically engage the guidelines; however, their non-observance for various reasons should not entail any consequences in law from the viewpoint of the criteria set out in the 1969 Vienna Convention on the Law of Treaties.

There should be a strong presumption of implementation of the guidelines

4. The functions of the future guidelines for ensuring the long-term sustainability of outer space activities, whatever their ultimate thematic scope, should stem directly from the principles and norms of international law, as well as the goals and objectives defined by the United Nations General Assembly. It would be important to define their normative character. This will affect the efficiency of their implementation. These matters would be of no particular importance if the specifics of the negotiating process allowed for the simplification of the guidelines' tasks and if the possibilities for applying them to solve significant issues remained unused. Despite the fact that the chances of such a scenario, unfortunately, have not been reduced, there are reasonable grounds to believe that the majority of States will decisively speak out in favour of real measures to enhance the level of safety and security in outer space. Consequently, if it is assumed that the guidelines should reflect a broad range of objective needs and incorporate important political arrangements, it would be necessary to agree on concrete methods of implementing the guidelines and providing institutional support to the integrated political and legal regulation. Good and valuable ideas will work under three conditions: availability of a clear concept, logic behind their realization and regulatory potentials. Guided by this understanding, the Russian Federation has made proposals on the implementation and future development of the guidelines. It is worth drawing attention to many useful features of the Russian approach. It is based on the following basic viability criteria of the set of guidelines that is being developed:

- The guidelines should become a workable and living instrument with tight institutional links to the realities of national regulation and the practices of States and international intergovernmental organizations;
- The policy of States and international intergovernmental organizations should be conditioned by the perceived responsibility to diligently follow the guidelines and consider them as a real factor for the development and implementation of the necessary political, technical and other solutions within their proper regulatory systems;
- The focus on the specialized functions of the Office for Outer Space Affairs of the Secretariat is meant to create synergy to scale up the impact of the activities aimed at preserving outer space as an operationally safe, stable and conflict-free environment;

5. It would be imperative to avoid specifying the subordinate character of the future guidelines in relation to national security considerations. On the contrary, it is necessary to create such conditions when aspects of the safe conduct of outer space activities (as well as the entire range of issues related to the long-term sustainability of outer space activities) within the United Nations-agreed regulatory format are directly incorporated in the general decision-making process when implementing national security policies. This is the very approach that forms the basis for the draft guideline of implementation proposed by the Russian Federation. It constitutes an optimal way of establishing an efficient regulatory regime, assuming the voluntary character of the guidelines.

Adaptive strategy of developing mechanisms for ensuring space security

In the absence of a special guidelines implementation mechanism, it will be 6. impossible to develop a clear-cut adaptive strategy for enhancing safety and security in outer space, and any related ideas will be inevitably stuck. Consequently, no conditions for ensuring the receptiveness of States to new possibilities for enhancing the safety and security in outer space and preserving positive trends in this domain will be created. Efficient regulation of safety of space operations should be considered as an important independent issue, but also as a "tactical" phase in future efforts to determine, within a common strategy, the goals at a higher political level that call for more complex technological and, probably, legal solutions. It is necessary to establish a sound foundation for ensuring operational safety and continue to develop the dialogue with a focus on further steps. In the document entitled "Recommendations of the Group of Governmental Experts on Transparency and Confidence-building Measures in Outer Space Activities: views of States members of the Committee on the Peaceful Uses of Outer Space" (A/AC.105/1080/Add.2), the Russian Federation set forth its vision of the ways and means to secure a steady movement towards reforming regulatory mechanisms for space operations safety, with the emphasis on the system of trust. The draft guidelines submitted by the Russian Federation demonstrate that, provided there is goodwill on the part of States, the Scientific and Technical Subcommittee could really succeed in transforming the above recommendations into concrete regulatory functions. The Russian proposals focus on quite a number of those means and elements of outer space safety regulation that form the well-known concepts of potential space traffic management. Logic suggests that, through a comprehensive and meaningful regulation of the safety of space operations, States will open up a new perspective and will lay the foundation for cooperation towards further study and formulation of space security regulation parameters.

Dialogue needs positive energy

7. The opportunity to ensure regulation of a wide range of issues of security and long-term development with regard to outer space activities, which has presented itself, is a kind of unprecedented phenomenon in politics that can grow and become tangible only through collective action. Resolving key and large-scale space security issues is possible only with the conscious active participation of all States. Proficiency, deep and thoughtful immersion in the subject and, finally, political insight are required. However, the level of activity of delegations is not always adequate in practice. The paradox of the situation emerging within the framework of the Committee on the Peaceful Uses of Outer Space is that many seek to complete the work in this direction, but it does not come to discussing and resolving the issues that are of paramount importance for ensuring the safety of space operations and the long-term sustainability of outer space activities. Meanwhile, much depends on the opinions of the representatives of the States. The influential group of developing countries should make its own, unique contribution to maintaining the high intellectual status of the ongoing work, while setting an example of fruitful and effective broadmindedness. Ensuring expert analysis and political decisions of adequate scale is becoming a major task.

Actions should match words

8. The fact is becoming more obvious that some delegations would prefer that the Scientific and Technical Subcommittee stopped working on the subject of the safety of space operations without ever realizing its opportunities. Some colleagues having precisely such preferences even flaunt their unwillingness to work with the comprehensive material (which includes the Russian draft guidelines) and thereby deprive the whole idea of developing the regulatory regime for ensuring the safety of space operations of the right to succeed. Exaggerated arguments are put forward against the expansion of the thematic element of the set of guidelines currently being shaped. The most important issues for the long-term sustainability of outer space activities are arbitrarily classified as extraneous to the subject. It is clear that there is a disregard for all the rules, according to which the discussion and work should develop. The downfall of the once-developed traditions of dialogue is obvious. It is impossible not to draw attention to the fact that the delegates from the States that attest themselves to be the champions of responsible behaviour in space and that have previously urged that the safety of space operations should be ensured, in the spirit of this responsible approach, are currently, as the discussion is in progress, at odds with their own proclaimed slogans. They show no enthusiasm for the practical ideas that would help overcome the many operational risks, hazards and threats in space. The relevance of the subject for them has suddenly disappeared, and these States are either not ready for decisions and changes or just do not want them.

Matrix reading of the negotiating context as a factor that stifles progress

9. The real and honest adherence to the purposes of responsible conduct of outer space activities should be confirmed by the desire and willingness to hold a substantive dialogue on the development and implementation of specific joint measures. Obviously, it is not achieved every time and by everybody due to various circumstances. A deep systemic reason why the establishment of a regulatory regime for ensuring the safety of space operations risks becoming an impossible task lies in the well-known doctrine of dominance in space. This doctrine forms quite well-defined realities of national regulation, the meaning of which is "power projection into outer space" with a strong emphasis on "preemptive measures" for any reason and for no reason at all. The desire to dominate poses the most serious potential regulatory risks, weakens restraints and, as practice shows, creates a certain dilemma in the context of negotiations (including in the light of the need for the development of international regulation of the safety of space operations). In the circumstances where the intrinsic motivation of a State is to ensure dominance, the freedom of thought in that State is not sufficient to form a working international system of security in space, as the task of dominance requires "its geometry" of the presence in space. A peculiarity and a problem of this policy is that it needs 'persuasive threats" for its justification. All the assumptions that are a priori defined by the ideology of domination do not allow its followers to be objective, which, in fact, explains the observed discord in politics.

Coding misconduct in outer space

The events on a global scale, with all their characteristic connections and parallels, tend to combine into certain scenarios. Therefore, it is necessary to take account of the fact that intelligent and vigorous initiatives in the field of regulation of safety of space operations may not succeed at all because of a group of countries promoting an "alternative" option in the format of the version of the draft code of conduct for outer space activities prepared by the European Union (not without purposeful foreign involvement). The notorious paragraph 4.2 of the draft code is apparently a "superimposed" element, as it does not conform to the European mentality and political style, however it may be characterized. The attempt to exempt from censure unauthorized coercive measures with regard to foreign space objects, which is implicit in the said paragraph, points to a disregard for legal principles and is a direct political "investment" in the doctrine of dominance. The authors and co-sponsors of the draft code are not inclined to correct this provision and do not consider it necessary to explain how the targeted unauthorized damage or destruction of a foreign space object can contribute to reducing the creation of space debris and what the algorithms of decision-making and action should be like, namely, how and by whom the real circumstances will be determined that, according to the proposed scheme, will have to justify such measures and how the attribution for attacks on an object will be determined. And it is clear why: uncertainty and understatement are needed. Actually, this is why these very countries are not inclined to discuss the draft guidelines submitted by the Russian Federation, which envisage a clear regulation of the order of in-orbit active removal and destruction operations with regard to space objects strictly on the basis of international law and subject to all necessary precautions. It is remarkable that some delegations (which represent the proponents of the current version of the draft code), anxious not to let the guidelines contain any elements that could potentially affect the interpretation of international law, at the same time show absolute complacency over the attempt to actually revise the international law underlying the draft code.

Issues of informational support for space security

The Russian Federation submitted to the Scientific and Technical 11. Subcommittee a project on establishing, under the aegis of the United Nations, an integrated information system hosted by the Office for Outer Space Affairs. In such a system, information on the operational situation in the near-Earth space obtained from different authorized sources could be effectively accumulated. It would also ensure unified record-keeping on objects and events in space, which is vitally important for achieving the consistent interpretation of the information and, subsequently, effective support for the actions of the States aimed at maintaining the safety of space operations. The point is to consolidate the existing capabilities of States, intergovernmental and non-governmental international organizations and entities within a single information complex. The United Nations information platform could take the lead in addressing the issues of safety and security in space and directly serve the common needs in the implementation of the prospective guidelines. The Russian Federation has outlined the basic elements of the concept of such a platform (A/AC.105/L.290), which allow for a more detailed joint discussion of the project as a whole, and to the development of ways and means of its practical implementation, in particular concerning configuring the system, the algorithm of its functioning and the mode of interaction between the participants and the system. The participation of the Office for Outer Space Affairs in this process would be very valuable. Proposals in this regard are set out in working paper A/AC.105/L.293 by the Russian Federation.

Careful analysis of the set of guidelines being drafted reveals that only the 12. availability of aggregate information on the situation in space, space objects and events will actually allow for the creation and application of the whole international mechanism of ensuring the long-term sustainability of outer space activities. If the impartial approach is upheld, it should be noted that the trends in and objectives of the development of the cooperation in the field of the informational support have only been determined in a fragmented manner so far. There is a widespread stereotype that the safety of space operations can be achieved using any available fragmented and mismatched data on the situation in space. That is a dangerous delusion which may have a tangible negative effect. The Scientific and Technical Subcommittee should, therefore, accept the proposal expressed and reflected in paragraph 249 of the report of the Subcommittee on its fifty-second session (A/AC.105/1088). This proposal provides for the establishment within the Subcommittee of an ad hoc expert group to address the full range of issues of collecting and sharing information on the monitoring of near-Earth space.

13. At the moment, international practice has given rise to a number of established formats of interaction in the information sphere. Such practice can only be welcome, though not overestimated or idealized. It has its own quite specific constraints and deficiencies. Certain specific problems may occur in terms of the completeness of information, its reliability, the security and promptness of its

provision and the ways of its validation methods of data interpretation. With regard to any format of cooperation in the area under consideration, common basic criteria pertaining to the information provided should be met; this concerns, in particular, data categories and composition, information update rate, standards of information presentation and transmission, assessments of data reliability, precision and accuracy, degree of data completeness and compatibility of data acquired from various sources. Otherwise the process of making appropriate decisions on followup actions may be considerably hindered for the user of such information. This conclusion is confirmed by authoritative expert forums involving spacecraft operators. The forums emphasize, in particular, the utmost importance of ensuring the reliability of the estimation of errors of the predicted position of objects and the establishment of data fusion rules.

14. It is noteworthy that the draft code of conduct in space which was referred to in paragraph 10 of the present working paper does not give even a rough idea of how information cooperation related to the monitoring of objects and events in space should be organized in practice. It could be assumed, though, that paragraph 4.2 of the draft code (stipulating unauthorized coercive measures regarding foreign space objects) should have inspired its sponsors and co-sponsors to give due attention to this issue. Because if paragraph 4.2 is "deciphered", it becomes evident that it actually allows for the arbitrary alienation of the rights of States with respect to their space assets. This logically calls for the consideration of all possible political costs the implementation of the provisions of paragraph 4.2 may entail. The real danger is that it opens up the possibility for an abusive practice in the field of informational support (wrong or even intentional illegal acts with respect to foreign space objects will have to be justified).

15. Constructive properties of the regulation in the area under consideration should ensure that activities on the informational support for the safety and security of space activities would not turn into a subject of practical competition or, even worse, become susceptible to the influence of geopolitical factors.