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## Committee on the Peaceful

## Uses of Outer Space

### Legal Subcommittee

### Fiftieth session

Vienna, 28 March-8 April 2011

Item 12 of the provisional agenda\*

### Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-first session

## **Review of the legal aspects of the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space, with a view to transforming the Guidelines into a set of principles to be adopted by the General Assembly**

### **Working paper submitted by the Czech Republic**

1. At its forty-ninth session, in 2010, the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space noted the proposal of the delegation of the Czech Republic, made under the Subcommittee's agenda item entitled "Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fiftieth session", that the Subcommittee should include on its agenda a new item to review the legal aspects of the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space, with a view to transforming the Guidelines into a set of principles on space debris, and that those principles should be elaborated by the Legal Subcommittee and adopted by the General Assembly. The Legal Subcommittee noted that the sponsors of that proposal intended to retain it for possible discussion at subsequent sessions of the Subcommittee (A/AC.105/942, paras. 169 and 170 (b)).

2. As is generally known, during the past several decades, man-made space debris has become one of the most discussed issues relating to the further development of outer space activities. Effective protection of astronauts, functional space objects and the space and Earth environment against the proliferation of space

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\* A/AC.105/C.2/L.280.



debris has become one of the recognized objectives of the world space community. For this reason, the General Assembly, in its resolution 48/39, endorsed the recommendation of the Committee to add a new item entitled "Space debris" to the agenda of the Scientific and Technical Subcommittee, which started to consider the item at its thirty-first session, in 1994 (see A/AC.105/571, paras. 63-74). For a detailed consideration of that issue, the Scientific and Technical Subcommittee adopted a multi-year workplan for the period from 1996 to 1998 and established a working group under this item. The *Technical Report on Space Debris* (A/AC.105/720) resulted from those discussions and was made available to the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) in 1999. The Committee then agreed that, owing to the complexity of the space debris issue, discussions should continue in order to ensure further progress in developing an understanding of the issue (A/54/20 and Corr.1, para. 43).

3. At its thirty-eighth session, in 2001, the Scientific and Technical Subcommittee agreed on a new workplan for the period from 2002 to 2005 (A/AC.105/761, para.130) with the goal of elaborating voluntary debris mitigation measures. Another new element was also introduced in further proceedings on space debris by the involvement of the Inter-Agency Space Debris Coordination Committee (IADC), an international forum of governmental bodies for the coordination of activities related to these issues. In 2003, IADC presented its proposals on space debris mitigation, based on consensus among its members (A/AC.105/C.1/L.260). That document served as a basis for further negotiations in the Subcommittee and its Working Group on Space Debris during the period from 2005 to 2007, which led to the preparation of the Space Debris Mitigation Guidelines, adopted by the Scientific and Technical Subcommittee (see A/AC.105/890, para. 99 and annex IV) and endorsed by the Committee (see A/62/20, para. 118 and annex). By its resolution 62/217, the General Assembly endorsed the Guidelines, agreed that they "reflect the existing practices as developed by a number of national and international organizations" and invited Member States to implement those guidelines through relevant national mechanisms.

4. The Guidelines are generally conceived as a list of specific measures "that curtail the generation of potentially harmful space debris in the near term" and "that limit their generation over the longer term" (see the sections of the Guidelines entitled "Background" and "Rationale"). The Guidelines do not mention the protection of the environment as one of their aims.

5. Nevertheless, the protection of the space and Earth environment against pollution by space debris became a subject of concern of the world space law community at the non-governmental level. In addition to some monographs and many papers presented at different international meetings, it was the International Law Association in particular which directed its interest to that issue. As an important international non-governmental organization which has been initiating the progressive development of international law and its codification for many years, the Association, through its Space Law Committee, worked out a draft International Instrument on the Protection of the Environment from Damage Caused by Space Debris, which was adopted at the sixty-sixth Conference, held in Buenos Aires

in August 1994.<sup>1</sup> The legal definition of space debris, to which the Instrument should apply, was in harmony with the results of scientific and technical studies on that issue. The terms “environment”, which should include both outer space and Earth environments within or beyond national jurisdiction, and “damage” were also defined. The Instrument then brought forth a set of substantive principles covering the essential building blocks of the proposed regulation, including the principles of responsibility and liability for damage caused by space debris. The Instrument also proposed a system for the settlement of disputes, which combined the methods of amicable settlement with arbitration and adjudication.

6. Several delegations to the Committee and its Legal Subcommittee were also aware of the need to explore the legal aspects relating to space debris. They suggested, both before and after the adoption of the technical report by the Scientific and Technical Subcommittee, appropriate items relating to space debris for possible inclusion in the agenda of the Legal Subcommittee. The Czech Republic was one of the member States of the Committee that drew the attention of the Legal Subcommittee to those problems in a background note on the review of existing norms of international law applicable to space debris as an initial step in the consideration of the legal aspects of space debris. That proposal was later co-sponsored by Greece. Another suggestion, made by the delegation of the Czech Republic at the thirty-fifth session of the Legal Subcommittee, in 1996, for a new item to be included on the agenda of the Subcommittee was conceived with a wider focus and was called “Legal aspects of space debris” (see A/AC.105/639, para. 54 (d) and annex III, sect. E).

7. Discussions of the item on space debris in the Legal Subcommittee were given a new impetus in 2002, when the observer for the European Space Agency, acting on behalf of the member States of that organization and States cooperating with it, presented an analysis of the legal aspects of space debris carried out by the Agency. On that occasion, some delegations, while fully supporting the work carried out by the Scientific and Technical Subcommittee and IADC, emphasized the desirability of a declaration of principles relating to the prevention of space debris, to be drafted and adopted as soon as possible (A/AC.105/787, paras. 49-50).

8. A consensus on those initiatives was not reached within the Committee and its Legal Subcommittee at that time, however.

9. The progress in the consideration of the issue of space debris in the Scientific and Technical Subcommittee, particularly the adoption of the Space Debris Mitigation Guidelines, as well as some events in outer space activities, have again raised the question of whether the time is ripe for the Legal Subcommittee to join the efforts of the Scientific and Technical Subcommittee with respect to introducing universally accepted and effective measures for space debris mitigation and thus also against the pollution of the environment by space debris. It must be taken into consideration that the application of the present Space Debris Mitigation Guidelines, notwithstanding their significance, remains voluntary and that the Guidelines are to be implemented by States and international organizations through their own space debris mitigation practices as decided by themselves. It is explicitly

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<sup>1</sup> See James Crawford and Maureen Williams, eds., *Report of the Sixty-sixth Conference of the International Law Association* (London, 1994), chap. I.

stated in the second paragraph of section 3 of the Guidelines that they are not legally binding under international law. Therefore, they cannot give rise to a feeling of duty to comply with them, and any international sense of responsibility and liability for their violation will not emerge. In addition, their unilateral application on a voluntary basis may result in inconsistencies at the international level.

10. Until now, it has been conceded to include in the agenda of the Legal Subcommittee "General exchange of information on national mechanisms relating to space debris mitigation measures" as a single issue/item for discussion. During the discussion on that topic, the delegations of the most active spacefaring countries brought to the attention of the Subcommittee the results of their efforts with respect to establishing national policies on space debris and national mitigation standards. Other delegations also made contributions, and some of them even suggested that the Scientific and Technical Subcommittee and the Legal Subcommittee should cooperate with the aim of developing legally binding rules relating to space debris. The consideration of the item in the Legal Subcommittee has been extended for another year (see A/AC.105/942, para. 163). It must be noted, however, that the mandate of the Subcommittee does not include the consideration of the substantive legal problems of space debris or a detailed analysis of the legal content and effectiveness of the Space Debris Mitigation Guidelines.

11. For these reasons, the delegation of the Czech Republic and some other member States of the Committee proposed at the fifty-third session of the Committee, in 2010, the inclusion of the above-mentioned new item in the agenda of the Legal Subcommittee (see A/65/20, para. 221). Its consideration under a workplan should result in the elaboration of a set of principles based on the Guidelines of the Committee to be enacted in a special resolution of the General Assembly. Such principles would belong to the series of United Nations principles relating to outer space activities that were adopted during the 1980s and 1990s.

12. In its preamble, in addition to other possible paragraphs, the draft resolution could include three important ideas expressed in the latest General Assembly resolution on international cooperation in the peaceful uses of outer space (resolution 65/97), namely the importance of international cooperation in developing the rule of law, including the relevant norms of space law and their important role in international cooperation for the exploration and use of outer space for peaceful purposes; recognition that space debris is an issue of concern to all nations; and acknowledgement of the importance of further developing the legal framework to strengthen international cooperation in this field.

13. The operative part of the draft resolution should be based on those sections of the text of the Guidelines of the Committee which have a normative character, i.e. on the first paragraphs of each of the Guidelines. It would not be necessary, however, to incorporate in the principles the explanatory paragraphs of the Guidelines; they could remain only in the Guidelines, keeping their significance as a supplementary means for interpretation of the principles.

14. In addition to the provisions based on the text of the Guidelines, the principles, as a legal document, should establish some definitions, in particular the definition of "space debris", and fix the conditions for when a space object, as defined in the Convention on International Liability for Damage Caused by Space Objects and the

Convention on Registration of Objects Launched into Outer Space, becomes a non-functional, useless and even harmful piece of space debris.

15. The principles should also declare the responsibility of States for national space activities in the sense of article VI of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, with special regard to space debris and the principle of liability for damage caused by space debris. Similar responsibility and liability would also apply to the space activities carried out by international organizations. In drafting these provisions, the examples of other United Nations principles, particularly the Principles Relating to Remote Sensing of the Earth from Outer Space and the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, could be used.

16. It might be also considered whether to recognize the right of any State or international organization to intervene, in cooperation with other States concerned, with regard to dangerous pieces of space debris, particularly in the most exposed parts of space. Such intervention has been known and regulated in the law of the sea for the protection of the marine environment.

17. Finally, a system for the peaceful settlement of disputes, which would arise from the interpretation and application of the principles, should not be left out. In this respect, a solution of this problem similar to the solution in the Instrument adopted by the International Law Association could be considered.

18. In the light of the long-time practice of the United Nations, a set of principles developed by the Legal Subcommittee in close cooperation with the Scientific and Technical Subcommittee, endorsed by the Committee and adopted by the General Assembly in a resolution, would be a satisfactory form of an international instrument on space debris for the present time and the near future. In such a resolution, the agreement among Member States of the world organization could be enshrined and a certain degree of rule of law would be ensured by a “soft law” instrument. A set of United Nations principles having a recommendatory weight would create a basis for legally binding rules to be negotiated at some time in the future. The compliance of States and international organizations with such principles, and the supervision of the activities of non-governmental entities by relevant States, would lead to a unified practice in this field and to the creation of a conviction among all legal persons involved that it is necessary to fully honour such principles.

19. The work on the set of United Nations principles relevant to space debris could become a new core item on the agenda of the Legal Subcommittee to be considered during the coming years under a workplan. A positive outcome would have the potential to contribute to “broad international cooperation in the scientific as well as the legal aspects of the exploration and use of outer space for peaceful purposes” (fourth preambular paragraph of the Outer Space Treaty). If adopted by consensus, such principles would enrich the current body of law governing outer space activities.