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**Committee on the Peaceful  
Uses of Outer Space**  
Scientific and Technical Subcommittee  
Fiftieth session  
Vienna, 11-22 February 2013  
**Long-term sustainability of outer space activities**

**Progress report for the Working Group on the Long-Term  
Sustainability of Outer Space Activities: 2011-2012**

**A report by the Chairman**

**I. Introduction/Background**

1. In 2010, at its forty-seventh session, the Scientific and Technical Subcommittee established the Working Group on the Long-term Sustainability of Outer Space Activities, and elected Mr. Peter Martinez (South Africa) as Chair of the Working Group (A/AC.105/958, paras. 181-182).
2. The terms of reference, methods of work and the multi-year work plan of the Working Group were agreed at the fifty-fourth session of the Committee on the Peaceful Uses of Outer Space in 2011 (A/66/20, Annex II). The Working Group is mandated to examine the long-term sustainability of outer space activities in the wider context of sustainable development on Earth, including the contribution to the achievement of the Millennium Development Goals, taking into account the concerns and interests of all countries, in particular those of developing countries, and consistent with the peaceful uses of outer space.
3. The work takes into consideration current practices, operating procedures, technical standards and policies associated with the long-term sustainability of outer space activities, including, inter alia, the safe conduct of space activities throughout all the phases of the mission life cycle.
4. The Working Group is taking as its legal framework the existing United Nations treaties and principles governing the activities of States in the exploration and use of outer space, in particular 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 (the "Outer Space Treaty"), which was adopted by



the General Assembly in its resolution 2222 (XXI)), opened for signature on 27 January 1967 and entered into force on 10 October 1967.

5. The objective of the Working Group is to identify areas of concern for the long-term sustainability of outer space activities, examine and propose measures that could enhance sustainability in all its aspects, including the safe and sustainable use of outer space for peaceful purposes, for the benefit of all countries.

6. The Working Group will prepare a report on the long-term sustainability of outer space activities containing a consolidated set of current practices and operating procedures, technical standards and policies associated with the long-term sustainability of outer space activities. On the basis of all the information collected, the Working Group will propose guidelines that could be applied on a voluntary basis by States, either individually or collectively, international organizations, national non-governmental organizations and private sector entities to reduce the risks to the long-term sustainability of outer space activities for all participants in those activities and to ensure that all countries are able to have equitable access to outer space and the resources and benefits associated with it. In terms of the current work plan, the Working Group report and the proposed best-practice guidelines will be submitted to the Scientific and Technical Subcommittee for its consideration at its fifty-first session in 2014 (A/66/20, Annex II, para. 23).

## II. Substantive consideration of topics

7. As envisaged in the terms of reference (A/66/20, Annex II, para 23), the Working Group established four expert groups to advance the work inter-sessionally:

(a) *Expert group A: Sustainable space utilization supporting sustainable development on Earth*, co-chaired by Mr. Filipe Duarte Santos (Portugal) and Mr. Enrique Pacheco Cabrera (Mexico);

(b) *Expert group B: Space debris, space operations and tools to support collaborative space situational awareness*, co-chaired by Mr. Richard Buenneke (United States) and Mr. Claudio Portelli (Italy);

(c) *Expert group C: Space weather*, co-chaired by Mr. Takahiro Obara (Japan) and Mr. Ian Mann (Canada); and

(d) *Expert group D: Regulatory regimes and guidance for actors in the space arena*, co-chaired by Mr. Sergio Marchisio (Italy) and Mr. Anthony Wicht (Australia).

8. The expert groups are deliberative forums for the discussion of topics and for proposing candidate guidelines for the consideration of the Working Group. The expert groups agree on the appropriate status, reliability and relevance of the information to be provided to support the deliberations of the Working Group, which will consider inputs received and make any necessary decisions regarding those inputs.

9. Member States and intergovernmental organizations with permanent observer status with the Committee were invited to nominate national focal points for the Working Group and suitable experts to participate in the expert groups

(A/AC.105/987, annex IV). Delegations that have not yet nominated national focal points or experts to serve on the expert groups are encouraged to do so.

10. In 2011 the Secretariat established a dedicated web page (available at [www.unoosa.org/oosa/en/COPUOS/stsc/lts/index.html](http://www.unoosa.org/oosa/en/COPUOS/stsc/lts/index.html)) to facilitate the sharing of information on the work being conducted by the Working Group and its four expert groups. The access details for that web page were communicated to all designated focal points for the Working Group and to all permanent missions to the United Nations (Vienna) of States members of the Committee. The lists of national focal points for the Working Group and national experts nominated to serve on the expert groups are available on the webpage, together with all documentation produced by the expert groups during the course of their work.

11. During 2011 the expert groups commenced their consideration of the indicative list of topics as provided in the terms of reference (A/66/20, Annex II, para 14). They defined their topics more precisely and developed their expert group work plans to support the overall work plan of the Working Group. The expert groups met on the margins of the fifty-fourth session of the Committee and the 62nd International Astronautical Congress in Cape Town, South Africa.

12. In 2012, at the forty-ninth session of the Scientific and Technical Subcommittee, the Working Group on the Long-term Sustainability of Outer Space Activities held three meetings. The Working Group noted that expert groups B (space debris, space operations), C (space weather) and D (regulatory regimes) had held informal coordination meetings on the margins of the 62nd International Astronautical Congress in Cape Town, South Africa, in October 2011, and that documents from those meetings had been made available on the abovementioned web page (A/AC.105/1001, annex IV). The Subcommittee noted that the expert groups had agreed to meet during the fifty-fifth session of the Committee, in 2012 (A/AC.105/1001, para. 209).

13. Also at the forty-ninth session of the Scientific and Technical Subcommittee, and in accordance with its multi-year work plan, the Working Group held a workshop where the intersessional activities of the expert groups and plans for advancing their work were considered. The Working Group agreed on further guidance for the expert groups with regard to meetings, decisions and reports of the expert groups, information flow and incorporation of expert group inputs to the Working Group (A/AC.105/1001, annex IV). The Working Group agreed that expert groups would prepare their draft inputs to the Working Group on the basis of their work, and that those draft working documents should be made available for comments by member States and permanent observers of the Committee, preferably on the margins of and/or during the sessions of the Committee in June 2012 and 2013 (A/AC.105/1001, annex IV, paras. 16-17).

14. At its fifty-fifth session, in 2012, the Committee had before it working papers prepared by the expert groups for the fiftieth session of the Subcommittee (A/AC.105/C.1/L.324-327), presenting the work plans of the respective expert groups. The documents were made available for comments by member States and permanent observers of the Committee. All four expert groups held meetings on the margins of the session, in accordance with the terms of reference and methods of work of the Working Group, and agreed also to hold informal coordination meetings during the International Astronautical Congress, held in Naples, Italy, in

October 2012. During these meetings, the expert groups began their consideration of candidate best-practice guidelines.

15. The expert groups will meet on the margins of the fiftieth session of the Subcommittee to continue their consideration of candidate best practice guidelines and of their draft expert group reports. The draft reports have been made available to delegations for their information as documents A/AC.105/C.1/2013/CRP.11, A/AC.105/C.1/2013/CRP.12, A/AC.105/C.1/2013/CRP.13 and A/AC.105/C.1/2013/CRP.14 at the present session of the Subcommittee.

16. In accordance with the work plan for 2013, a workshop will be held in conjunction with the fiftieth session of the Scientific and Technical Subcommittee. States members of the Committee have been invited to include in their delegations representatives of national non-governmental organizations and of private sector entities having experience in space activities, to provide information on their experiences and practices in the conduct of sustainable space activities.

## **II. Development of Working Group Report and Guidelines**

17. The terms of reference for the working group (A/66/20 Annex II, para 13) specify that the best-practice guidelines to be produced by the Working Group should:

(a) Create a framework for possible development and enhancement of national and international practices pertaining to enhancing the long-term sustainability of outer space activities, including, inter alia, the improvement of the safety of space operations and the protection of the space environment, giving consideration to acceptable and reasonable financial and other connotations and taking into account the needs and interests of developing countries;

(b) Be consistent with existing international legal frameworks for outer space activities and should be voluntary and not be legally binding;

(c) Be consistent with the relevant activities and recommendations of the Committee and its Subcommittees, as well as of other working groups thereof, United Nations intergovernmental organizations and bodies and other relevant international organizations, taking into account their status and competence.

18. The expert groups are developing candidate guidelines for consideration by the Working Group that are consistent with the above requirements. The emerging candidate guidelines are available as expert group working papers A/AC.105/C.1/2013/CRP.11, A/AC.105/C.1/2013/CRP.12, A/AC.105/C.1/2013/CRP.13 and A/AC.105/C.1/2013/CRP.14 at the current session of the Scientific and Technical Subcommittee.

19. The final product of the Working Group will be a report and a set of best-practice guidelines. The content of the final report will be informed by the reports of the individual expert groups and their candidate best practice guidelines, after approval of these inputs by the Working Group.

20. Although the expert group reports are considering topics grouped thematically, a number of issues pertaining to long-term sustainability have multiple facets and therefore require multidisciplinary consideration. Therefore, a number of topics are being discussed from a different perspective in more than one expert group. The expert groups will hold joint meetings to discuss a comprehensive treatment of such crosscutting issues.

21. If, during the examination of topics within the scope of the Working Group, there are new issues raised that were not previously addressed by the Subcommittee or its related working groups, the Working Group may decide to raise such issues to the Subcommittee for further consideration.

22. The Chairman proposes that the final report of the Working Group should not be structured along thematic lines, but rather in a manner that will facilitate the implementation of the guidelines by all space actors. In this approach, the final report would not be a simple collection of the individual expert group reports, but rather a consolidation of the information contained therein into a form that may be most useful to provide guidance for governments and space actors. The individual expert group reports will provide valuable background information to place in thematic context the best practice guidelines in the final Working Group report. A proposed outline of the final report is attached in Annex I.

## **Annex**

### **Draft outline for the report of the Working Group on the Long-Term Sustainability of Outer Space Activities**

#### **Part I: The context for guidelines to promote long-term sustainability of outer space activities**

##### **1. Background**

- (a) A general introduction to the topic of long-term sustainability of outer space activities
- (b) The process followed in COPUOS to arrive at this report and set of guidelines

##### **2. Rationale**

- (a) Why guidelines for long-term sustainability are needed

##### **3. Purpose**

- (a) The purpose of the publication of guidelines

##### **4. Scope/Application**

- (a) The proposed guidelines cover all space activities
- (b) Various guidelines for State and non-state actors
- (c) Guidelines are voluntary

##### **5. Objective**

- (a) Safety of space activities
- (b) Long-term sustainability of space activities

#### **Part II: Guidelines for the Long-Term Sustainability of Outer Space Activities**

##### **6. Guidance for governments**

- (a) Legal and normative issues
- (b) Policy issues
- (c) International cooperation issues

##### **7. Guidance for space actors**

- (a) Scientific and Technical guidance
- (b) Management and policy guidance

### **Part III: Implementation and updating**

**8. Implementation**

**9. Updates**

### **Glossary of terms**

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