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**Committee on the Peaceful
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Item 13 of the draft provisional agenda*
Long-term sustainability of outer space activities

Long-term sustainability of outer space activities

The present conference room paper contains comments received by the Secretariat from the following member State of the Committee on the Peaceful Uses of Outer Space: United States of America.

* A/AC.105/C.1/L.306.

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United States of America

Preamble

1. The United States has been supportive of Long-Term Sustainability of Space Activities (LTSSA) and welcomes the Chair's draft paper, A/AC.105/C.1/L.307. Indeed, in the recently released U.S. National Space Policy (NSP) the President calls for strengthened stability in space and preservation of the space environment through improved information collection and sharing, strengthened measures to mitigate orbital debris, continued development and adoption of international standards and policies to minimize debris, and use of situational awareness data to detect, identify, and attribute actions in space contrary to responsible use and the long-term sustainability of the space environment.

Terms of Reference and Method of Work

2. The United States notes that the Working Group will examine the long-term sustainability of space activities in all its aspects, giving due regard to the role of space systems in effecting sustainable development on Earth and taking into account the concerns and interests of all countries, consistent with the peaceful uses of outer space. The Working Group's examination will take into consideration current practices, operating procedures, technical standards, and policies associated with the safe conduct of space activities throughout all the phases of the mission life cycle.

3. The United States agrees that the work undertaken in the Working Group will be consistent with the existing United Nations treaties and principles governing the activities of States in the exploration and use of outer space.

4. The United States is in agreement with the Chair's suggestion that the Working Group avoid duplication of prior or ongoing efforts by international agencies.

5. The United States endorses the characterization of the Working Group's major activities in the Chair's Working Paper. The Working Group will produce a report on the LTSSA. The Working Group will also examine measures that could enhance the long-term sustainability of such activities, and will prepare a set of voluntary guidelines focused on practical measures that could be implemented to enhance the long-term sustainability of space activities.

Topics for consideration by the WG

6. The Chair of the Working Group has submitted a Working Paper which enumerates 15 topics for consideration, which are reproduced verbatim in Table 1. The United States suggests consideration be given to reorganizing the 15 enumerated topics into four clusters aligned by nature or subject matter to facilitate appropriate and thorough consideration, discussion, resolution, and action by the Working Group. These clusters, also denoted in Table 1, could be defined as follows:

Cluster 1: Topic A (Sustainable space utilization supporting sustainable development on Earth) and all associated sub-topics.

Cluster 2: Topics B (Space debris), D (Space operations), and E (Tools to support space situational awareness [SSA]), and all associated sub-topics.

Cluster 3: Topic C (Space Weather) and all associated sub-topics.

Cluster 4: Topics F (Regulatory regimes), and G (Guidance for new actors in the space arena) and all associated sub-topics.

7. Cluster 1 consists of Topic A from the Chair's Working Paper. The United States welcomes language in the Terms of Reference that stresses the critical role of both space assets and the data they provide for enhancing scientific understanding of both the earth's environment and its changes through time. These assets and data may prove critical in assessing progress towards the Millennium Development Goals. The United States and other nations have freely provided data from their environmental satellites to the scientific community to the benefit of all people. In this regard, the United States notes relevant language from the 1996 UN Declaration on International Cooperation in the Exploration and Use of Outer Space and from Section 1.e.ii and Section 3 of the 1999 Vienna Declaration on Space and Human Development and believes these Declarations provide useful guidance for the Committee. Topic A's sub-topics imply a much broader discussion than might be expected for consultations on outer space operations, and hence may more appropriately be considered at the COPOUS level instead of the STSC or Working Group level. The Working Group could consider referring Topic A and its subtopics to the full COPUOS where they can be deliberated both in the context of the inherent broader issues and in a more appropriately comprehensive manner.

8. Cluster 2 consists of inter-related topics of an operational nature. The United States suggests that by clustering these topics together, the Working Group's efforts will benefit from the interdependencies among these topics.

9. Cluster 3 consists of Topic C, which encompasses the natural inputs to SSA. As defined in the Chair's Working Paper, this topic currently involves more science research than space operations, although certain operational capabilities already exist in this arena. The likely experts, actors, and collaborations among actors on this topic may be different and conducted under alternative frameworks from those in Cluster 2. The United States suggests that this distinction be recognized as the Working Group organizes its activities.

10. Cluster 4 consists of two topics the United States finds inter-related. Existing treaties and principles as well as current national legal and regulatory frameworks (Topic F) can provide models and lessons learned for new and other space actors (Topic G). Consequently, the United States suggests that these two topics be considered together. The United States further understands that Topic F neither reopens existing agreements nor proposes new legally binding agreements. The United States also suggests that Topic G be defined as "Guidance for actors in the space arena," to make clear the view that all space actors can benefit from the experience of others. The United States further suggests that this section needs further discussion to gain clarity for the Working Group. The United States also notes that as with Topic A, the above-referenced 1996 UN Declaration provides useful direction in relation to Topic G of the Chair's Working Paper.

11. The United States, while recognizing the equal priority of all topics within the purview of the Working Group, suggests that these topics be assigned timescales for measurable action within the Committee. The timescales are delineated as near-term (0-3 years), mid-term (3-5 years), and long-term (more than 5 years). The suggested timescale for each topic is included in Table 1. Timescales are useful because some topics are easier to address than others, some topics will require a great deal of effort and study before realizing tangible accomplishments, and a few topics have already experienced some progress. By recognizing both the diversity of the topics and the maturity of the Working Group's understanding of them, and by acknowledging from the beginning that progress on these topics will be uneven, the United States believes that delegations can avoid undue concentration on any particular topic at the expense of other areas of importance.

Logistical Considerations

12. The Topics identified above are primarily technical and detailed in nature, and hence, deliberations and discussion among the delegations could be aided by input from expert working groups along with STSC Member States. The United States supports the idea of establishing expert working groups to inform the Working Group on each of the four clusters defined above and in Table 1 (page 5). The United States suggests that these expert working groups could meet around the margins of the June meetings of the Committee and on other occasions as agreed by the members of the expert working groups.

13. Regarding Topic E, the United States encourages this discussion, and notes that by focusing on the tools for collaborative SSA, the Working Group is likely to find mechanisms and processes by which countries lacking SSA capabilities may make meaningful and substantive contributions in this area.

14. The United States asks that consideration be given to a workplan structure that includes relevant non-governmental actors. Examples of such actors include universities, research-performing institutions, and commercial entities. These are all current and future actors in space, whose participation in space exploration and use will likely increase over time. These actors have significant expertise in launching and operating satellites, and have developed their own best practices that should be taken into consideration.

Table 1
Suggested clustering and time-prioritization of topics for consideration by the Working Group. Topic wording is taken verbatim from the Chair's Working Paper

Cluster	Topic	Description	Timescale
1	A	Sustainable space utilization supporting sustainable development on Earth	LONG
	i	Contribution of space science and technology to sustainable development on Earth	near
	ii	Concept of sustainable development extended to the domain of outer space	near
	iii	Technical capacity-building for developing countries	long
	iv	Equitable access to the limited resources of outer space and to the benefits of outer space activities for human development	long
2	B	Space debris	MID
	i	Measures to reduce the creation and proliferation of space debris	mid
	ii	Collection, sharing, and dissemination of data on space objects	near
	iii	Re-entry notification regarding substantial space objects	near
	D	Space operations	MID
	i	Collision avoidance processes and procedures	near
	ii	Pre-launch and pre-maneuver notifications	mid
	iii	Common standards, practices, and guidelines	near
	E	Tools to support collaborative space situational awareness	MID
	i	International, multinational, or national registry of operators and contact information	near
	ii	International, multinational, or national data centres for the storage and exchange of information on space objects and operational information	near
iii	Information sharing procedures	mid	
3	C	Space Weather	NEAR
	i	Collection, sharing, and dissemination of data, models, and forecasts	near
	ii	Capabilities to provide a comprehensive and sustainable network of key data in order to observe and measure space weather phenomena adequately in real or near-real-time	near
	iii	Open sharing of established practices and guidelines to mitigate the impact of space weather phenomena on operational space systems	near
4	F	Regulatory regimes	LONG
	i	Adherence to existing treaties and principles on the peaceful uses of outer space	near
	ii	National legal and regulatory frameworks for space activities	long
	G	Guidance for new actors in the space arena	MID
	i	Technical standards, established practices and lessons learned for the successful development and operation of space systems throughout all the phases of the mission	mid
	ii	Microsatellites and smaller satellites	near