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**Committee on the Peaceful
Uses of Outer Space**
Scientific and Technical Subcommittee
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Long-term sustainability of outer space activities

**Preliminary draft report and proposed candidate guidelines
of expert group D: Regulatory Regimes and Guidance for
Actors in the Space Arena**

I. Executive summary

1. This report presents guidelines for actors in the space arena to improve the long-term sustainability of outer space activities. The guidelines presented are designed to facilitate best-practice regulation and information sharing in a way that benefits the long-term sustainability of outer space activities. Some of the guidelines are applicable to all space actors, while others are applicable only to space actors which design regulatory regimes.

2. The twelve guidelines are as follows:

1. International cooperation

States should consider international cooperation in the peaceful uses of outer space as a means of enhancing the long-term sustainability of outer space activities.

2. Information sharing

States, including their national regulatory authorities, Government agencies and intergovernmental organizations, are encouraged to share experience and expertise relating to the long-term sustainability of outer space activities.

3. Procedures for information sharing

States and international organizations are encouraged to adopt procedures to promote the compilation and dissemination of information that will enhance the long-term sustainability of space activities, including information on space debris



and space weather, among the relevant space actors, who may also include national non-governmental organizations and private sector entities.

4. Regulatory outreach

In view of the increasing number and diversity of potential space actors, appropriately-targeted outreach and education on regulations and technical best practices relevant to long-term sustainability should be conducted. States are encouraged to foster such activities by industry, academia, regulators and international organizations.

5. Encouraging non-governmental involvement in regulation

The activities of non-governmental organizations and private sector entities that will enhance the long-term sustainability of space activities should be encouraged and promoted.

6. Consider long-term sustainability in regulation

States should consider the long-term sustainability of outer space activities when adopting or implementing national regulation or policy.

7. Use of mitigation guidelines

In their national regulatory regimes, States should address space debris mitigation and consider the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space in their regulation of space activities.

8. National communication among regulators and experts

In view of the interdisciplinary nature of space activities, States are encouraged to promote communication within and among their competent bodies to ensure efficient and effective measures for the long-term sustainability of space activities.

9. Input from national stakeholders

In the development of the national regulations governing space activities, States should allow and encourage advisory input by affected national stakeholders.

10. Effective regulation

In developing regulatory measures applicable to the long-term sustainability of outer space activities, States are encouraged to weigh the costs, benefits, disadvantages and risks of a range of alternatives, including taking no specific regulatory action, and to consider the following factors:

- (a) Practicability;
- (b) Technical feasibility;
- (c) Predictability;
- (d) Effectiveness and efficiency;
- (e) Responsiveness to technical developments;

- (f) Feedback from, and experience of, other States;
- (g) Impact to stakeholders;
- (h) Effect on international cooperation;
- (i) [Effect on peaceful, free, equitable and safe use and exploration of outer space.]

[*Note: Guidelines 11 and 12 are not yet agreed, and comments on these guidelines are particularly welcome.*]

11. Need for a regulatory framework

Member States and international organizations should adopt a national regulatory framework suitable for their activities in space that provides clear guidance to actors under the jurisdiction and control of the member State.

12. Applicable international law

National regulatory frameworks for space activities should be consistent with applicable international law in a manner that protects the interests of the concerned State.

II. Objective and outputs

A. Introduction

Role of this Expert Group

3. Expert Group D submits this report with the primary objective of providing guidance to space actors on measures to ensure the long-term sustainability of space activities. The work of Expert Group D is focused on regulatory regimes and guidance for actors in the space arena.

Establishment of the Expert Group

4. The report of the fifty-fourth session of the Committee on the Peaceful Uses of Outer Space¹ endorsed recommendations relating to the long-term sustainability of outer space activities. Specifically, as set out in paragraph 147 of the report, the Committee endorsed the recommendations on the long-term sustainability of outer space activities made by the Scientific and Technical Subcommittee (the Subcommittee) and the Working Group on the Long-term Sustainability of Outer Space Activities (the Working Group).

5. The Working Group considered a proposal contained in A/AC.105/C.1/2011/CRP.17 to group the proposed topics listed in section IV (“Scope”) of the draft terms of reference and methods of work as contained in document A/AC.105/C.1/2011/L.307, in order to allow for a more efficient consideration of closely related items. The following clusters were proposed:

¹ A/66/20.

- (a) Sustainable space utilization supporting sustainable development on Earth;
 - (b) Space debris; space operations and tools to support collaborative space situational awareness;
 - (c) Space weather;
 - (d) Regulatory regimes and guidance for actors in the space arena.
6. The Working Group agreed that the proposed clustering of topics could be considered as a basis for the establishment of expert groups. As a result, the Expert Group D was established to consider and report on regulatory regimes and guidance for actors in the space arena.

Purpose of these Guidelines

7. This report is aimed at providing guidance to both current and future “space actors”. That is, the advice is aimed at States and non-governmental actors that are involved in, or propose to be involved in, activities that may impact on the continued sustainability of outer space activities by all nations.
8. It is recognized that the guidelines must be read by all space actors in the context of the varying capacity and experience of those actors. The guidance contained within this report is neither prescriptive, nor inflexible. Indeed, as set out in the recommendations of the Subcommittee, it was agreed that any guidelines that might be developed should be implemented on a voluntary basis and be focused on practical and prudent short- and medium-term measures that could be implemented in a timely manner.
9. The guidelines are not mandatory. However, they have value because they provide a benchmark, or best practice model, against which existing and prospective space actors may measure their activities. It is important to reflect on the fact that outer space activities that do not adequately consider long-term sustainability may ultimately adversely affect all States and space actors, including those who choose to act outside the scope of these guidelines. These guidelines are written in the spirit of providing a consensus and firm foundation for all States and space actors to promote long-term sustainable use of the great, universal resource that is outer space.
10. The guidance in this document is intended to provide complementary information to that which is produced by other Subcommittees and Working Groups of the Committee.

Current regulatory practices and procedures relating to long-term sustainability

11. At present, there exist a wide range of regulatory practices and procedures which relate to the long-term sustainability of outer space activities. These practices and procedures vary in many respects. Some are binding obligations, and some are non-binding. Some are internationally applicable, others are designed for application only in particular countries. Regulation is undertaken in some instances by governments, in others by international organizations, and in still other instances by particular industries or communities.

12. It is impossible to list here all regulatory practices and procedures currently existing which relate to the long-term sustainability of outer space activities. Many of these regulatory practices and procedures were examined by the working group in developing the guidelines which follow.

Proposed guidance to actors in the space arena

13. The following section of this report proposes a series of guidelines for space actors which are designed to improve the long-term sustainability of outer space activities.

14. The guidelines are broken into two parts based on the intended audience. The first part (guidelines 1-5) consists of guidelines for space actors in a general sense. Some of the guidelines in the first part are aimed at all States, others are broader and encompass private sector and non-governmental actors.

15. The broad focus of the first part contrasts with the narrow focus of the second set of guidelines (guidelines 6-12). The second set of guidelines is intended to assist regulators of space activities by suggesting methods for making regulation more conducive to the long-term sustainability of outer space activities.

B. Draft guidelines

Draft guideline 1: international cooperation

States should consider international cooperation in the peaceful uses of outer space as a means of enhancing the long-term sustainability of outer space activities.

16. The fundamental principle of cooperation is established in the preamble of the Outer Space Treaty,² and is a concept carried through the other major space Treaties. This principle is also contained in other articles in the five United Nations space treaties. Examples include Article III of the Outer Space Treaty, which calls upon the promotion of international cooperation and understanding, Article VI of the Registration Convention, which confirms the principle of mutual assistance under equitable and reasonable conditions in the identification of space objects, and Article 4, paragraph 3, of the Moon Treaty, which furthers international cooperation, or through international intergovernmental organizations.

17. The principle has been further developed by the General Assembly through the Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of all States, Taking into Particular Account the Needs of Developing Countries.

18. This guideline applies to all modes of cooperation, including governmental and non-governmental; commercial and scientific; global, multilateral, regional or bilateral; and among countries at all levels of development.

19. This principle is particularly important since, for many States Parties, international cooperation facilitates their participation in space exploration.

² Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies.

20. Article IX of the Outer Space Treaty, when interpreted in the light of 1996 Declaration, bases international cooperation on the free determination of fair, equitable and mutually acceptable contractual terms.

Draft guideline 2: information sharing

States, including their national regulatory authorities, Government agencies and intergovernmental organizations, are encouraged to share experience and expertise relating to the long-term sustainability of outer space activities.

21. The experience and expertise acquired by those engaged in space activities is instrumental to the development of effective measures to enhance the long-term sustainability of outer space. Sharing such experience and expertise with others will facilitate and enhance the development of guidelines, rules, regulations and best practices in this area. The exchange need not be limited to a State to State level, but can occur between national regulatory authorities, Government agencies, intergovernmental organizations, and non-governmental entities.

22. Such exchange will benefit new participants and experienced space actors. New participants or those with very little experience in space exploration will benefit from the experience and expertise of other space actors. Established actors will also find value in developing new partnerships and sharing experiences more widely.

Draft guideline 3: procedures for information sharing

States and international organizations are encouraged to adopt procedures to promote the compilation and dissemination of information that will enhance the long-term sustainability of space activities, including information on space debris and space weather, among the relevant space actors, who may also include national non-governmental organizations and private sector entities.

23. This guideline is intended to facilitate information sharing. In many cases where States and international organizations are willing to share information, the procedures to enable information to be shared are non-existent, slow, or lead to incompatible data. In particular fields, such as space debris and space weather, if shared information is to be useful it must be shared quickly and in a way which allows automatic entry of received data into computer systems. Sharing information on space debris and space weather helps space actors to mitigate the effects of those threats, increasing the lifespan of satellites and reducing the risk to human space flight missions. These measures will contribute to the long-term sustainability of outer space activities.

24. The information should be shared as widely as necessary to enhance the long-term sustainability of outer space activities, which means adopting procedures which permit sharing with private sector entities and national non-governmental organizations in addition to sharing between States and international organizations. In some cases, private sector entities already have effective mechanisms for sharing data which States and other organizations might adopt.

25. Ratification of, and compliance with, the Registration Convention should be encouraged as a starting point in the compilation and exchange of information.

Draft guideline 4: regulatory outreach

In view of the increasing number and diversity of potential space actors, appropriately-targeted outreach and education on regulations and technical best practices relevant to long-term sustainability should be conducted. States are encouraged to foster such activities by industry, academia, regulators and international organizations.

26. Participants in outer space activities vary greatly in their experience, expertise and technical capabilities. While large, experienced participants may be well acquainted with the regulatory framework and industry best practices, newer participants will be less familiar with current standards. Small and medium-sized participants, and even those with significant experience, might find it difficult to keep pace with rapidly evolving rules, practices and technologies. Appropriately targeted outreach and education can assist all space actors to gain a better appreciation and understanding of the nature of their obligations, which can lead to improved compliance with the existing regulatory framework, and the best practices currently being employed to enhance the long-term sustainability of outer space.

27. While regulators should always strive for clarity when designing measures to enhance long-term sustainability, outreach and education can assist with any implementation issues that arise out of national regulatory frameworks. This is particularly valuable where the regulatory framework has been changed or updated resulting in new obligations. States, including their regulators and agencies, can also benefit from the input of space actors when designing regulations and issuing guidelines to the space industry. Outreach programs may provide a valuable, iterative feedback mechanism for regulators.

28. Outreach and educational initiatives could take the form of seminars (in person or broadcast over the Internet), published guidelines to complement national or regional laws and regulations, an Internet site with basic information on a regulatory framework, or the availability of a contact person within government that can assist participants in finding crucial information.

29. The availability of resources to support such initiatives varies greatly among States, thus, fostering similar initiatives by industry, academia and international organizations is strongly encouraged. These entities can contribute valuable input on regulatory matters and technical best practices.

Draft guideline 5: encouraging non-governmental involvement in regulation

The activities of non-governmental organizations and private sector entities that will enhance the long-term sustainability of space activities should be encouraged and promoted.

30. Non-governmental organizations and private sector entities conduct activities that have significant impacts, both directly and indirectly, on the long-term sustainability of space activities. Private commercial activities in space are a growing part of the global economy and many entities have taken steps to implement technical measures in conformance with the Space Debris Mitigation Guidelines. Universities and other educational institutions have shown increasing interest in using small satellites for scientific and teaching purposes. Given the technical and cost constraints often found in small satellite missions, particular

attention may be warranted to the activities of non-governmental and private sector entities to ensure that their activities do not become a significant source of long-lived orbital debris in the future.

31. Non-governmental organizations play important roles in bringing potential stakeholders together to develop consensus approaches in relation to the conduct of space activity. For example, the International Organization for Standardization (ISO) has adopted several standards on best practices and data exchange formats for collision avoidance. States are encouraged to evaluate these standards and seek to use common standards where practicable for debris mitigation, orbit lifetime estimates, safe disposal of hardware, re-entry management, satellite characteristics and trajectories. This will, in turn, promote the valuable contribution by non-governmental organizations in this field.

32. Non-governmental organizations, such as industry associations, academic institutions, and educational public interest entities can play important roles in increasing international awareness of issues associated with space sustainability, as well as practical measures to enhance sustainability. Such measures could include adoption of the Space Debris Mitigation Guidelines, compliance with radio regulations of the International Telecommunication Union (ITU) related to space services, the development of open, transparent standards for the exchange of data necessary to avoid collisions, radio frequency interference, or other harmful events. To these ends, international cooperation between governments and non-governmental organizations and private sector entities should be encouraged and fostered.

Draft guideline 6: consider long-term sustainability in regulation

States should consider the long-term sustainability of outer space activities when adopting or implementing national regulation and/or policy.

33. Given their capacity to influence the activities of space actors on a national level, State space regulators have unique obligations with respect to the long-term sustainability of outer space.

34. Traditionally, national regulation has been concerned with issues such as safety, liability, reliability and cost. As new regulations are developed, States should consider regulations that enhance the long-term sustainability of outer space activities.

35. There are two major aspects to such regulation. The first is ensuring that space actors under the jurisdiction of the regulator have incentives to conduct their activities in a manner that preserves the long-term sustainability of space activities. For example, regulators could require space actors to comply with the Space Debris Mitigation Guidelines.

36. The second aspect is to allow and encourage appropriate new methods for ensuring the long-term sustainability of space activities. Regulation should not be so prescriptive as to prevent sensible innovation aimed at improving the long-term sustainability of space activities.

Draft guideline 7: use of Mitigation Guidelines

In their national regulatory regimes, States should address space debris mitigation (measures) and consider the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space in their regulation of space activities.

37. Since the Committee on the Peaceful Uses of Outer Space published its Technical Report on Space Debris in 1999, it has been a common understanding that the current space debris environment poses a risk to spacecraft in Earth orbit. As the population of debris continues to grow, the probability of collisions that could lead to potential damage will consequently increase. In addition, there is also the risk of damage on the ground if debris survives Earth's atmospheric re-entry. The prompt implementation of appropriate debris mitigation measures is therefore considered a prudent and necessary step towards preserving the outer space and Earth environment for future generations.

38. In 2008, the Committee adopted the Space Debris Mitigation Guidelines. They are available in the Report of the Committee on the Peaceful Uses of Outer Space (A/62/20). These guidelines are applicable to mission planning and the operation of newly designed spacecraft and orbital stages and, if possible, to existing ones. They are not legally binding under international law, however, they represent existing good practice related to space debris damage mitigation.

39. Member States and international organizations should voluntarily take measures, through national mechanisms or through their own applicable mechanisms, as appropriate, to ensure that the Space Debris Mitigation Guidelines are implemented, to the greatest extent feasible, through space debris mitigation practices and procedures. National mechanisms can include national regulatory regimes. In their national regulatory regimes for space activities, States should include space debris mitigation practices and procedures and consider the Space Debris Mitigation Guidelines in their regulation of space activities.

Draft guideline 8: national communication among regulators and experts

In view of the interdisciplinary nature of space activities, States are encouraged to promote communication and consultation within and among their competent bodies across disciplines to ensure efficient and effective measures for the long-term sustainability of space activities.

40. Space activities are among the most interdisciplinary of human activities in that successful space missions routinely draw upon multiple, diverse fields of science and engineering. The management and regulation of space activities draw upon similarly diverse fields such as economics, law, public policy and the social sciences. Given the wide range of space activities carried out by States, intergovernmental, and non-governmental organizations, it is often difficult for competent bodies to have all the necessary expertise to ensure efficient and effective measures are implemented for the long-term sustainability of space activities.

41. States are encouraged to ensure that appropriate communication and consultation mechanisms are in place within and among the competent bodies that oversee or conduct space activities. This is particularly important for regulatory bodies. For example, licenses imposing conditions on space operations may involve

many distinct activities such as launch, on-orbit operations, radio frequency usage, remote sensing activities, and end of life disposal. Communication within and among relevant regulatory bodies can promote regulations that are consistent, predictable and transparent so as to ensure regulatory outcomes are as intended by States.

Draft guideline 9: input from national stakeholders

In the development of the national regulations governing space activities, States should allow and encourage advisory input from affected national stakeholders.

42. States may find it beneficial and efficient to receive advisory input by affected national stakeholders during the process of developing regulatory frameworks governing space activities. These stakeholders might include private sector entities, universities or research organizations, non-governmental organizations operating under the jurisdiction of the State, agencies of the State, or others who play a role in space activities and who will be affected by the proposed regulatory initiative.

43. States with developing space capabilities should identify the essential components of a national regulatory framework after advisory input from, or consultation with, relevant stakeholders. Without such input, the State might regulate its stakeholders too heavily by writing a regulatory framework that is more restrictive than is needed at such a stage of capability development. Over-regulation can have the unintended consequence of stifling the development of space capabilities. In instances in which the State has not previously attempted to legally control or regulate space activities, the State might wish to consider other States' space legislation or, by analogy, other national laws, as a guide to drafting. Without experience, however, the State might inadvertently write laws that are not applicable or technically accurate for the particular space activities or space actors under its control. Allowing advisory input from the affected stakeholders can help the developing State from making these mistakes.

44. For a State with advanced space capabilities, stakeholders are likely to have a practical understanding of how a regulatory framework will affect operations or administration of the space activities. By allowing early, advisory input, the State can avoid unintended consequences of regulation that have an adverse impact on key stakeholders. These stakeholders might also be aware of conflicting obligations by law or agreement. Identifying such conflicts early can avoid jurisdictional disputes after the regulatory framework is adopted.

Draft guideline 10: effective regulation

In developing regulatory measures applicable to the long-term sustainability of outer space activities, States are encouraged to weigh the costs, benefits, disadvantages and risks of a range of alternatives, including taking no specific regulatory action, and to consider the following factors:

- (a) **Practicability;**
- (b) **Technical feasibility;**
- (c) **Predictability;**
- (d) **Effectiveness and efficiency;**

- (e) Responsiveness to technical developments;**
- (f) Feedback from, and experience of, other States;**
- (g) Impact to stakeholders;**
- (h) Effect on international cooperation;**
- (i) [Effect on peaceful, free, equitable and safe use and exploration of outer space.]**

45. In developing binding national regulations for space activities, States take into account their respective interests and national legal systems, as well as the different types of space activities and space actors within their jurisdiction. Furthermore, regulation that is developed without taking into consideration the particular circumstances of the national legal system or national space activities could inhibit innovation and technical advancement for both developing and developed spacefaring countries. States should create and implement their own regulations, applicable to those persons subject to their jurisdiction or control as appropriate, and share such regulations and resulting experiences with other States as models for consideration.

46. Regulations should be practicable in that they should be capable of actually being implemented in terms of the technical, legal and management capacities of the State imposing the regulation. A closely related concept is that of technical feasibility in that a regulation should not require a technical innovation or exceed the current state of practice for the space activity.

47. The effect of regulations should be predictable. The groups to which the regulation applies should know the effects of the regulation on their activities in advance of conducting those activities, as far as possible. A reporting regime to gather information on how the regulations are being applied in practice should be considered.

48. Regulations should be both efficient and effective. Effective regulations are those which accomplish their intended purpose. An important component of effective regulation is to ensure that the regulation has a clear intended purpose. At the same time, regulations need to be efficient in terms of imposing the least cost for compliance (e.g. in terms of money, time or risk) compared to feasible alternatives. Compliance costs occur to the regulator as well as the entity being regulated in both immediate and long-term effects. A best practice for controlling compliance costs is to ensure that regulations are performance-based and responsive to technical innovations. They should avoid requiring a particular technical approach or proprietary solution that constrains future innovation.

49. States are encouraged to solicit input from affected stakeholders prior to developing new regulations. Similarly, regulated entities should be afforded opportunities to provide feedback on regulations related to the long-term sustainability of space activity. A continuing dialog between States and all affected parties, whether governmental or non-governmental, on the regulation of space activities can provide useful information to enhance the prospects for the long-term sustainability of space activities.

50. International cooperation is an important part of the long-term sustainability of outer space activities. Development of regulations should consider any impacts of

the regulation on international cooperation. For example, regulations which have the effect of impeding information sharing, or limiting multinational cooperative projects, should be avoided where appropriate.

51. Regulations should also consider their effects on the aspirational goals for outer space activities. For example, the effect of regulations on the peaceful, free, equitable and safe use and exploration of outer space should be carefully considered.

[Draft guideline 11: need for a regulatory framework]³

[States and international organizations should adopt a national [regulatory framework] suitable for their activities in space that provides clear guidance to actors under the jurisdiction and control of the member State or within the membership of an international organization.]

52. With the globalization and generalization of space activities, in particular the emergence of new actors in non-governmental services and operations, States should ensure the effective application of international norms and standards considering the specificities of enterprises and projects undertaken under their jurisdiction. States are notably encouraged to consider not only existing space projects and activities, but also potential development of their national space sector and to envisage appropriate timely regulation in due time in order to avoid legal lacunae. It is important that national regulation addresses the specific nature and characteristic of the State's space sector, as well as its general economic framework to the extent that it provides the context in which the space sector may further expand.

[Draft guideline 12: applicable international law]

National [regulatory frameworks] for space activities should be consistent with applicable international law.

53. The main purpose of national regulation is to ensure concrete application and implementation of national legislation. To the extent that States' space legislation transposes at national level their commitments and undertakings under international law, national regulation must ensure full consistency with international law. But regulation of space activities also originates from other legal areas, like for instance general administrative law, economic law or environment law. To such extent, it is important that the subjection of space activities to general national law be provided for in consistency with applicable international law, in particular with the principles of the United Nations Outer Space Treaties and of the General Assembly Resolutions.

³ *Note:* In discussions, the spirit of the following two guidelines was considered to be included within other guidelines and therefore need not be drawn out into separate guidelines here. Any views on whether these guidelines should be retained, modified, or removed would be welcomed, and will be the subject of discussions of Expert Group D during the February meetings.

C. Identification of priority areas for future regulatory developments related to the long-term sustainability of outer space activities

54. There are a range of areas in which future regulatory developments could potentially improve the long-term sustainability of outer space activities.

55. These issues are not addressed in the guidelines of this report for various reasons. In some cases, the issue is intrinsically legal and best addressed by the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space. In other cases, international practice is not sufficiently established for this Expert Group to reach consensus on the best way to regulate the issue.

56. The first area identified for future regulatory development is the development of definitions. Regulation is generally most effective when there is clear understanding of the scope of the regulation. In managing the key issues affecting the sustainability of outer space activities, a consistently applied definition of “space debris” would be valuable. In addition, the increasing connection between ground infrastructure and space infrastructure indicates that definitions of “space activities” will become important in future. The conduct of Earth-based activities, such as radiofrequency interference, has significant potential to affect the sustainability of space-based activities. Therefore regulation of “space activities” will need to encompass both Earth-based and outer space-based activities if it is to be effective in ensuring the sustainability of outer space activities.

57. The second area identified for future regulatory development is the development of regulations relating to the ownership of space objects. The issue of ownership is not straightforward for two reasons. First, under existing international law, all objects in space are owned by a State, regardless of their funding source, functionality or integrity. Secondly, space objects increasingly have multiple owners. Hosted payloads are increasingly common, increasing the number of ownership interests in a single satellite. Space missions also blur lines of responsibility and ownership, as a single launch can now transfer the payloads of many different space actors into orbit (for example, launching a number of cubesats).

58. The third area identified for future regulatory development is to improve the practice of States in registering space objects. A variety of practices exist with regard to the quality and timeliness of information provided under the Registration Convention. This undermines the utility of the Registration Convention as a global information sharing mechanism.

59. The fourth area identified for future regulatory development is to improve the consistency of regulation globally in order to avoid a disproportionate number of space objects being registered in countries with the least demanding regulations on long-term sustainability of space activities. Inconsistencies in the current practice of States concerning licensing, registration, fees and insurance requirements may encourage “forum shopping” which may not encourage efficient practices and procedures in relation to long-term sustainability.