24 March 2011

Original: English

Committee on the Peaceful Uses of Outer Space Legal Subcommittee Fiftieth session Vienna, 28 March-8 April 2011 Item 11 of the draft provisional agenda* General exchange of information on national legislation relevant to the peaceful exploration and use of outer space

Draft Report of the Working Group on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space

Note by the Secretariat

Contents

		Page
I.	Summary of the work conducted by the working group under its multi-year workplan	2
II.	Overview of national space legislation	4
III.	Findings of the working group.	9
IV.	Conclusions	12
Annex		
	National space legislation: regulative categories (set of elements for consideration by States in enacting national space legislation)	14

V.11-81617 (E)





^{*} A/AC.105/C.2/L.280.

I. Summary of the work conducted by the Working Group under its multi-year workplan

- 1. In accordance with General Assembly resolution 63/90, the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space, at its forty-eighth session in 2008 established a working group on the agenda item entitled "General exchange of information on national legislation relevant to the peaceful exploration and use of outer space". The Working Group on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space was chaired by Irmgard Marboe (Austria).
- 2. The Working Group held a total of twelve meetings, six meetings during the forty-eighth session of the Subcommittee, from 31 March to 3 April 2009 and six meetings during the forty-ninth session of the Subcommittee from 26 March to 1 April 2010. The Working Group conducted its work in accordance with the workplan adopted by the Committee on the Peaceful Uses of Outer Space at its fiftieth session, in 2007, under the following structure:

2008: Request to Member States for national legislation relating to governmental and non-governmental space activities. Presentations by Member States of reports on their national legislation

2009: Examination, in a working group, of the responses received in order to develop an understanding of the manner in which Member States have regulated governmental and non-governmental space activities

Working group continues to examine responses received and begins drafting its report, including conclusions

2011: Working Group finalizes its report to the Legal Subcommittee

- 3. In 2009, the Working Group invited Member States to respond to seven main questions, prepared by the Chair, including the additional question on absence of national space legislation, contained in the Report of the Working Group at the forty-eighth session of the Subcommittee in 2009 (A/AC.105/935, Annex III). The Working Group also agreed that the Secretariat, in consultation with the Chair, should prepare, for consideration by the Working Group at its next session, a paper providing a schematic overview of existing national regulatory frameworks, based on information received from Member States. That schematic overview was presented in document A/AC.105/C.2/2010/CRP.12.
- 4. In 2010, the Working Group continued its examination of the responses received from Member States to requests for information on national legislation on space activities, it reviewed the achievements of the previous year and additionally it considered issues such as regulation by States of transfers of ownership of space objects and transfer of authorized space activities to third parties; the participation of private individuals in space flights; treatment in service-provider of issues of liability; and responsibility for collisions of satellites in outer space.
- 5. The Working Group, throughout its workplan, also considered the work carried out previously by the Legal Subcommittee and its respective Working Groups under the agenda items "Review of the concept of "Launching State" and "Practice of States and international organizations in registering space objects". The Working

Group noted the two General Assembly resolutions 59/115 of 10 December 2004 on the application of the concept of the "launching State", and 62/101 of 17 December 2007 on recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects.

- 6. The Working Group, in 2010, discussed the basic structure and methodology of its final report and agreed that the Secretariat, in consultation with the Chair, should prepare a draft report on the work of the Working Group for consideration and finalization by the Working Group in 2011. It also agreed to complete the schematic overview of national regulatory frameworks for space activities, with information provided by Member States during the 2010-2011 intersessional period.
- 7. The Working Group had before it the following documents:
- (a) Note by the Secretariat entitled "Information on national legislation relevant to the peaceful exploration and use of outer space", containing replies received from China, the Czech Republic, Germany, Mongolia, the Republic of Korea and Turkey (A/AC.105/932);
- (b) Note by the Secretariat entitled "Information on national legislation relevant to the peaceful exploration and use of outer space", containing replies from the Czech Republic, Germany, Morocco, Nicaragua, Turkey and Ukraine (A/AC.105/912);
- (c) Note by the Secretariat entitled "Review of existing national space legislation illustrating how States are implementing, as appropriate, their responsibilities to authorize and provide continuing supervision of non-governmental entities in outer space", containing a review of the national space legislation of Argentina, Australia, Japan, the Russian Federation, South Africa, Sweden, Ukraine, the United Kingdom of Great Britain and Northern Ireland and the United States of America (A/AC.105/C.2/L.224);
- (d) Report of the Secretariat entitled "Review of the concept of the 'launching State'", containing a synthesis of State practice in applying the concept of the "launching State", including the definition of "space activities"; jurisdiction over space activities; the safety of space activities; liability, including third-party insurance and financial responsibility requirements; indemnification procedures; and the registration of launches (A/AC.105/768);
- (e) Note by the Secretariat entitled "Information on national legislation relevant to the peaceful exploration and use of outer space", containing replies received from Austria, Estonia, Germany, Iraq, Japan, Serbia, Thailand and the United Kingdom of Great Britain and Northern Ireland (A/AC.105/957);
- 8. In order to facilitate the work of the Working Group, the following Conference room papers were also made available:
- (a) Conference room paper containing information received from the United States of America on national legislation relevant to the peaceful exploration and use of outer space (A/AC.105/C.2/2008/CRP.9);
- (b) Conference room paper containing information received from Brazil, Colombia, Germany and the Netherlands on national legislation relevant to the peaceful exploration and use of outer space (A/AC.105/C.2/2008/CRP.14);

- (c) Conference room paper containing information received from Poland and Saudi Arabia on national legislation relevant to the peaceful exploration and use of outer space (A/AC.105/C.2/2009/CRP.9);
- (d) Conference room paper containing information received from South Africa on national legislation relevant to the peaceful exploration and use of outer space (A/AC.105/C.2/2009/CRP.13);
- (e) Conference room paper containing information received from the Republic of Korea on national legislation relevant to the peaceful exploration and use of outer space (A/AC.105/C.2/2009/CRP.14);
- (f) Conference room paper entitled "National legislation and practice relating to the definition and delimitation of outer space: reply from Mexico" (A/AC.105/C.2/2009/CRP.15);
- (g) Conference room paper containing information received from Japan on national legislation relevant to the peaceful exploration and use of outer space (A/AC.105/C.2/2009/CRP.17);
- (h) Conference room paper containing information received from France on national legislation relevant to the peaceful exploration and use of outer space (A/AC.105/C.2/2009/CRP.18);
- (i) Conference room paper entitled "Information on national legislation relevant to the peaceful exploration and use of outer space" containing a reply received from the Netherlands (A/AC.105/C.2/2010/CRP.11);
- (j) Conference room paper entitled "Information on national legislation relevant to the peaceful exploration and use of outer space" containing a reply received from Tunisia (A/AC.105/C.2/2010/CRP.14).

II. Overview of national space legislation

- 9. The Working Group noted that national regulatory frameworks represented different legal systems with either unified acts or a combination of national legal instruments, ranging from administrative regulations to decrees and laws; that States had adapted their national legal frameworks according to their specific needs and practical considerations; and that national legal requirements depended to a high degree on the range of space activities conducted and the level of involvement of the private sector. The Working Group recalled that national regulatory frameworks represented different legal systems with either unified acts or a combination of national legal instruments and that States had adapted their national legal frameworks according to their specific needs and practical considerations.
- 10. The Working Group noted that national regulatory frameworks generally covered the following main areas: national jurisdiction for regulating space activities of governmental and non-governmental entities; procedures for authorizing and licensing national space activities; liability and indemnification procedures; registration of objects launched into outer space and establishment of national registries; and regulatory frameworks for national space agencies or other national entities mandated to carry out and supervise space activities.

11. The following list of national regulative frameworks is based on the information contained in the schematic overview of national space legislation (A/AC.105/C.2/2010/CRP.12):

Algeria

Space Activities are regulated in Algeria through a national governmental authority which is responsible for coordination of national space activities and among other tasks, for development of a National Space Programme, in accordance with the legislative instrument "Establishment of the Algerian Space Agency" of 2002.

Argentina

Two legislative instruments identified under Argentine law illustrate how the State of Argentina is implementing, as appropriate, its responsibilities to authorize and provide continuing supervision of non-governmental space activities: National Decree No. 995/91 which creates the National Commission on Space Activities, (CONAE) and National Decree No. 125/95 on the Establishment of the National Registry of Space Objects Launched into Outer Space. Decree 995/91 provides that Space Activities be monitored, managed and administered by CONAE.

Australia

Space activities are regulated in accordance with the provisions of the Space Activities Act, No. 123 of 21 December 1998. The scope of application of the act includes the launch and attempted launch of a space object into outer space, the return and attempted return of a space object from outer space and the operation of a launch facility. The jurisdiction of the Act includes activities carried out from Australian territory, including external territories, and activities carried out by Australian nationals, including Australian nationals outside Australia.

Belgium

Space activities in Belgium, in particular launching, flight operations and guidance of space objects carried out by natural or legal persons in the zones placed under the jurisdiction or control of the Belgian State or using installations, personal or real property owned by the Belgian State, are regulated by the Law on the activities of launching, flight operations and guidance of space objects, of 17 September 2005 and the Royal Decree of 19th March 2008 called for the implementation of certain provisions of that law.

Brazil

Law 8.854 of February 10, 1994, establishes the Brazilian Space Agency (AEB) and provides that the activities of the licensees are controlled, monitored and supervised by the AEB. Brazil's legislation requires a license for a launch from Brazilian territory. A license will only be granted to legal persons, associated or affiliated with business or legal representation in the country.

National space activities in Brazil are regulated through legislative instruments of various levels, such as Law 8.854 of February 10, 1994, Law 9.112 of October 10, 1995, Decree 1.953 of July 10, 1996, Administrative Edict 27 of June 20, 2001, Administrative Edit n.5 of February 21, 2002 and Resolution N0.51 of 26 January 2001. These are aimed at supervision and authorization by the state of space launches from Brazilian territory.

Canada

Authorization and supervision of national space activities in Canada is performed in accordance with the Canadian Space Agency Act (1990, c. 13), which establishes the functions of the Canadian Space Agency.

Chile

Advice in all matters concerning the identification, formulation and implementation of policies, plans, programmes, measures and other activities relating to space, as well as coordination of centre for government organizations involved in this field, is done by the Chilean Space Agency in accordance with the Supreme Decree No. 338, on the Establishment of a Presidential Advisory Committee known as Chilean Space Agency.

China

Activities in the field of the launch of space objects from the territory of China, as well as those jointly launched abroad by China and other states, are regulated by "Measures for the Administration of Registration of Objects Launched into Outer Space" of 8 February 2001 and "Interim Measures on the Administration of Permits for Civil Space Launch Projects", of 21 December 2002. Special provisions are also included for registration of space objects owned or launched by Hong Kong Special Administrative Region and Macau Special Administrative Region.

Colombia

In accordance with Decree 2442, of July 2006 on the creation of the Colombian Commission of Space (CCE), this national entity is involved in consultation, coordination, orientation and planning with the purpose of guiding the execution of a national policy for the development and application of space technologies and to coordinate plans, programs and projects in the field.

France

French Space Operations Act, No 2008-518 of 2008 establishes a regulative framework for space launching activities, commanding of a space object, transfer of a space object or transfer of control over it. The Act deals with a broad range of aspects of national space activities and applies to activities from national territory or from means or facilities falling under French jurisdiction. French natural or juridical persons and juridical persons whose headquarters are located in France are covered.

Germany

Act to give Protection against the Security Risk to the Federal Republic of Germany by the Dissemination of High-Grade Earth Remote Sensing Data (Satellite Data Security Act — SatDSiG) of 2007 deals with regulation of operation of high-grade earth remote sensing systems and in this regard establishes a prerequisites for legal qualification of such matters as jurisdiction, authorization and supervision.

Japan

Space-related legislative framework of Japan includes Fundamental Act of Outer Space (Law No. 43 of 27 August 2008), Basic Space Law (Law No. 43 of 28 May 2008) and the Law concerning Japan Aerospace Exploration Agency

(Law No. 161, of 13 December 2002). These legal instruments deal with the overall governmental planning and coordination of conduct of national space activities.

Netherlands

National space activities, including the launch, the flight operation and the guidance of space objects in outer space, are regulated through legislative instruments of various levels namely, Decree containing rules with regard to a registry of information concerning space objects (Space Objects Registry Decree) of 13 November 2007, Rules Concerning Space Activities and the Establishment of a Registry of Space Objects (Space Activities Act) of 24 January 2007, Order concerning licence applications for the performance of space activities and the registration of space objects, of 7 February 2008, as amended by Order of 16 April 2010. Space activities that are performed in or from within the Netherlands or else on or from a Dutch ship or Dutch aircraft are covered.

Norway

Act on launching objects from Norwegian territory into outer space (No. 38, 13 June 1969) deals with launching of objects into outer space from the Norwegian territory, including authorization and supervision of these activities by State.

Republic of Korea

Space Development Promotion Act of 1 December 2005 and Space Liability Act (Law 8714 of 21 December 2007) constitute a legal base for regulation of space activities in the Republic of Korea. These legal instruments establish a broad framework for national space activities.

Russian Federation

The Russian Federation has various legislative and regulatory instruments governing specific aspects of space-related activities. However, the principal instrument of legislation on space activity in the Russian Federation is the Law on Space Activity, Federal Law No. 5663-1 of 20 August 1993, as amended by Federal Law No. 147-F3 of 29 November 1996. Activities pursued or undertaken by organizations and citizens of the Russian Federation and activities pursued or undertaken by foreign organizations and citizens under the jurisdiction of the Russian Federation are covered. Federal Law No. 128-FZ of 8 August 2001 establishes procedures for licensing of certain activities.

South Africa

The primary South African legislative instrument governing the regulation of both governmental and non-governmental space-related activities is the Space Affairs Act, No. 84 of 2 July 1993, as amended by the Space Affairs Amendment Act, No. 64 of 6 October 1995. Juridical persons incorporated or registered in South Africa that launches from the territory of another State or that participate in space activities entailing international obligations for South Africa or affect South Africa's national interests are covered.

Spain

6058 Royal Decree 278/1995, dated 24 February 1995, deals with quasi territorial and personal jurisdiction over launches carried out from Spain or Spanish facilities, as well as establishes a national register of objects launched into outer space.

Sweden

The two Swedish legislative instruments regulating space activities undertaken by governmental and non-governmental entities, are the Act on Space Activities (1982:963) and the Decree on Space Activities (1982:1069). Activities from Swedish territory or by Swedish nationals elsewhere are covered. The provisions of the latter instrument serve as a complement to those of the former. Specifically excluded from the application of the Act are the mere receipt of signals or information in some other form from objects in outer space and the launching of sounding rockets.

Ukraine

The Law of Ukraine on Space Activity, No. 503/96-VR of 15 November 1996 indicates that it is intended to establish the general legal basis for pursuit of space activity in Ukraine and under the jurisdiction of Ukraine outside its borders and that its provisions shall apply to all types of activity relating to the exploration and use of outer space, including space activities that are defined as scientific space research, the design and application of space technology and the use of outer space. Consequently, the provisions of the Law would also apply, as appropriate, to the space activities of Ukrainian non-governmental entities.

United Kingdom of Great Britain and Northern Ireland

As is stated in the text of its preamble, the Outer Space Act 1986 of the United Kingdom of Great Britain and Northern Ireland, which came into force on 31 July 1989, was enacted specifically to confer licensing and other powers on the Secretary of State to secure compliance with the international obligations of the United Kingdom with respect to the launching and operation of space objects and the carrying out of other activities in outer space by persons connected with the UK. That Act applies to all activities carried out on British territory, or elsewhere undertaken by all UK nationals and bodies incorporated under the law of any part of the UK.

United States of America

The United States applies a regulatory regime consisting of a number of complementary legislative and regulatory instruments. The conduct of commercial launch and re-entry operations by non-governmental entities carried out in the USA or by US nationals elsewhere, is regulated by the Commercial Space Launch Act of 1984, 49 United States Code (USC) 70101 et seq. (as amended, inter alia, by the Commercial Space Act of 1998) and the Federal Regulations, 14 Code of Federal Regulations (CFR) parts 400-499, promulgated in terms of this Act. The Communications Satellite Facilities, First report and Order, 22 FCC 2d 86 (1970), Appendix C, declared the US Communication Acts of 1934 to be applicable to private operators undertaking space communication activities. The Land Remote Sensing Policy Act of 1992 prescribes a licensing procedure for private remote sensing activities.

III. Findings of the Working Group

- 12. The Working Group noted the importance of the responsibility of States to ensure that Outer Space is used for peaceful purposes. It recalled the obligations contained in the United Nations Treaties on Outer Space to exchange information on the nature, conduct, locations and results of space activities, in particular by establishing national registries and submitting registration data to the United Nations. The Working Group also referred to the common understanding that States should accede to and implement the Outer Space Treaty, The Rescue and Return Agreement, the Liability Convention and the Registration Convention.
- 13. The Working Group considered nine questions which are presented below together with their corresponding findings.

Reasons for States to enact national space legislation or the reasons for the absence of such legislation

- 14. In considering the reasons for States to enact national space legislation, the Working Group noted that common grounds for national legislation were the need to fulfil obligations under treaties to which a State had become a party, the need to achieve consistency and predictability in the conduct of space activities under the jurisdiction of the State and the need to provide a practical regulatory system for private sector involvement. The need for improved national coordination and the integration of a wider range of national activities had also provided incentive for regulatory frameworks at the national level.
- 15. The Working Group noted that in some cases it was difficult to draw a precise line to distinguish governmental activities from non-governmental activities and that that could be a reason for States not to enact national space legislation despite their involvement in space activities that could entail international responsibility and international liability. The Working Group also noted, however, that some States saw a need to regulate space activities of a governmental or public character in order to establish a reliable and organized legal framework for national space activities.
- 16. The Working Group noted that several States did not regard themselves as space-faring nations and for that reason they had thus far not considered enacting national space legislation. It was observed, however, that the increasing number of private actors carrying out space activities could lead to involvement by such States as well. Furthermore, States taking part in space activities of international organizations needed to take into account the international legal framework of space activities. Even if it was up to each State to determine how to assume its international responsibility for national space activities, certain regulations at the national level could be in the interest of the State itself.

Scope of space activities targeted by national regulatory frameworks

17. The Working Group noted a broad variety of activities, such as the launching of objects into outer space, the operation of a launch or re-entry site, the operation and guidance of space objects, in some cases the design and manufacturing of spacecraft, the application of space science and technology such as that used for Earth observation and telecommunications, and exploration activities and research.

18. The Working Group noted the differences in how States regulated national space activities to reflect the differences between performing launch operations or mainly operating space objects in outer space. The Working Group also noted the difficulty in defining the term "operation" of a space object. In view of the complex nature of space activities, the Working Group observed the existence of multiple licences, whereby the operator of a space object often needed authorization and a licence from more than one State.

Scope of national jurisdiction over space activities

19. The Working Group noted that most national regulatory regimes required authorization to be obtained for space activities carried out from the national territory. Most regimes also required authorization to be obtained for certain launches outside the national territory in which nationals were involved, such as citizens and non-governmental entities established or incorporated under the laws of the State in question. The respective States considered that to be an important means of ensuring that space activities were in compliance with the respective standards and rules, wherever those activities took place, including on the high seas. Coordination between the States or actors involved would avoid duplication. The Working Group noted that, with a view to balancing public and private interests, in some cases a more complex jurisdictional system was applied in order to regulate private sector involvement.

Competence of national authorities in the authorization, registration and supervision of space activities

- 20. The Working Group noted that, in most States, there were different national authorities involved in those procedures, ranging from space agencies and other similar authorities up to ministerial-level authority, in some cases involving different governmental entities for different activities requiring a licence. The existence in some cases of separate procedures for the licensing of operators conducting space activities and for the authorization of specific projects and programmes was noted. The Working Group noted that there was a broad variety of means of registering space objects with a national registry, including through a government ministry or through a space agency or similar authority.
- 21. With respect to the establishment of a national register, the Working Group noted that some States had more than one register and some States were currently reorganizing their national registries. The Working Group noted that in many cases an authority different from the one responsible for keeping the national registry was in charge of transmitting the relevant information to the United Nations Register of Objects Launched into Outer Space.

Conditions to be fulfilled for registration and authorization

22. The Working Group noted that ensuring the safety of space activities was an important policy underpinning most national space laws, in particular laws governing the launch of objects into outer space. Most launch-licensing regimes included measures to ensure that the launch did not create a significant risk of personal injury, environmental damage or damage to property. Conditions concerning safety and technological standards were also closely linked to States' concern about meeting space debris mitigation requirements. Other conditions related to the professional and financial qualifications of the applicant. In addition,

national security and foreign policy interests were usually involved in authorization and licensing procedures.

Regulations concerning liability

- 23. The Working Group noted that the Convention on International Liability for Damage Caused by Space Objects contained a liability regime with no ceiling. However, several States had established ways of seeking recourse from operators, which was achieved in most cases by introducing a national liability regime for space operations, if necessary, in addition to general tort law or environmental liability. The Working Group noted the existence of a broad range of solutions for liability obligations and indemnification procedures, as well as insurance requirements.
- 24. Often, the general liability and insurance requirements were laid down in laws complemented by a secondary level of regulations that went into greater detail. The Working Group noted the various approaches taken by States to regulate indemnification of liability incurred by a State, in cases where a State had included in its national legislation defined ceilings for the limitation of liability of space object operators. The Working Group observed that it was in the interest of all States engaging in space activities to protect themselves against international liability. For that reason, national requirements to that effect should be an incentive for States to establish relevant national regulatory regimes.

Compliance and monitoring

25. The Working Group noted that most States applied procedures for the supervision and monitoring of licensed space activities, whether a system of in situ inspections or a more general reporting requirement for the fulfilment of obligations under a licence. Most national regulatory regimes operated with a set of administrative measures for minor violations and a sanctions regime, including penal sanctions in some cases, for more serious offences.

Regulation by States of transfers of ownership of space objects and of transfers of authorized space activities to third parties

26. The Working Group considered in particular the issues of transfer of ownership and control of space objects in orbit and of transfer of licences for space activities. Of concern to the Working Group was the effect on international law of changes in the operation of space objects, rather than the private or commercial law aspects of such changes. The issue of change in status of ownership or control of a space object was closely linked to the jurisdiction of the States concerned, in particular where non-governmental actors were involved.

The participation of private individuals in space flights and the treatment in service-provider contracts of issues of liability and responsibility for collisions of satellites in outer space

27. The Working Group noted that some States had national regulations governing the activities of private individuals in space flights. The Working Group also noted that some States were preparing regulations concerning liability issues in service-provider contracts, in particular in connection with global positioning and navigation services.

IV. Conclusions

- 28. Based on the findings in Chapter III above, the Working Group observed the importance of appropriate means of ensuring that outer space was used for peaceful purposes, and that the obligations under international law and those specifically contained in the United Nations Treaties on Outer Space were implemented.
- 29. Consistency and transparency with regard to the authorization and supervision of space activities, that space activities are carried out in a safe manner preventing harm to third persons and property, and the mitigation of space debris were considered important factors in the implementation of a national regulatory framework by States for the authorization and supervision of activities in outer space of non-governmental entities under their jurisdiction. States could also consider establishing a regulatory framework for national space activities of a governmental or public character, as appropriate.
- 30. The Working Group agreed that the following elements could be considered by States in enacting regulatory frameworks for national space activities. Those elements correspond to the set of regulative categories in Annex I to the present report:

Scope of application

- (a) The scope of space activities targeted by national regulatory frameworks may include the launching of objects into and the re-entry from outer space, the operation of a launch or re-entry site, the operation and guidance of space objects and, if appropriate, the design and manufacturing of spacecraft, the application of space science and technology, and exploration activities and research.
- (b) The scope of national jurisdiction over space activities could include space activities carried out from the national territory of a state and space activities carried out elsewhere in which nationals, both its natural and juridical persons, are involved, provided, however, that if another state is exercising jurisdiction with respect to such activities, the state may forebear from duplicative requirements.

Authorization and licensing

- (c) The conditions for authorization should be consistent with the States' international obligations and commitments.
- (d) The authorities and procedures as well as the conditions for granting, modifying and revoking a license should be set out clearly to establish a predictable and reliable regulatory framework.

Continuing supervision of activities of non-governmental entities

(e) States should establish procedures for continuing supervision and monitoring of authorized space activities, which could include, for example, a system of in situ inspections or a more general reporting requirement for the fulfilment of obligations under a license; the regulatory regime should include enforcement mechanisms, such as a set of administrative measures for minor violations and a sanctions regime, which could provide for penal sanctions in some cases, for more serious offences.

Registration

(f) States should establish a national registry of objects launched into outer space over which they retain jurisdiction and control. They should request the information necessary from those under their jurisdiction so that they may properly register objects launched into outer space in accordance with the Registration Convention and recommended in General Assembly resolution 62/101.

Liability and insurance

(g) States should ensure that liability for damage caused by space activities is covered by an appropriate liability regime. States could consider introducing a right of recourse against the operators of space activities if the States international liability has become engaged. In order to ensure appropriate coverage of the damages claims, States could introduce insurance requirements and indemnification procedures, as appropriate.

Safety

- (h) The conditions for authorization should help to ensure that space activities are carried out in a safe manner and minimize risks to persons, the environment or property, and do not lead to harmful interference with other space activities.
- (i) States should consider incorporating into their legislation conditions concerning safety and technological standards which meet or exceed space debris mitigation guidelines.

Transfer of ownership or control of space objects in orbit

(j) States' procedures for authorization and continuing supervision should provide appropriate measures to ensure continuing supervision in the event of the transfer of ownership or control of a space object in orbit.

Annex

National space legislation: regulative categories (set of elements for consideration by States in enacting national space legislation)

Regulative Category	Examples of Corresponding United Nations Treaties and Principles on Outer Space, Other Related General Assembly Resolutions and Guidelines	Elements
Scope of application	n/a, (partly Art. VI OST international responsibility for "national activities")	activities (ratione materiae) jurisdiction (ratione loci/personae)
Authorization and licensing	Art. VI OST GA resolution A/RES/59/115	licensing procedure change of status: modification/ suspension/revocation of license conditions for granting licenses connect to other relative categories: registration, liability, safety
Continuing supervision of activities of non-governmental entities	Art. VI OST	mechanisms of supervising role and competencies of supervising authorities (during normal operation and in case of incidents)
Registration	Art. VIII OST; Art. II, IV REG; GA resolution 1721 (XVI) B; GA resolution A/RES/62/101	establishment of national registry obligation to submit information to competent authority submission of data to the UN
Liability and insurance	Art. VI, VII OST; Art. II, III, LIAB	obligation of insurance and financial responsibility; amount of insurance coverage (minimum requirements) state indemnification
Safety	Art IX OST; NPS Principles; COPUOS Space Debris Mitigation Guidelines	avoidance of harmful interference with activities in the peaceful exploration and use of outer space, as stipulated in article IX of the Outer Space Treaty; design and technical requirements, safety assessments and risk analysis; responses to emergency situations
Transfer of ownership or control of space objects in orbit	Art. VI, VII, VIII OST, REG, LIAB, GA resolution A/RES/62/101	requirement of permit for selling of satellites to (foreign persons)