

**Committee on the Peaceful  
Uses of Outer Space  
Legal Subcommittee**

*Unedited transcript*

811<sup>th</sup> Meeting

Friday, 26 March 2010, 10 a.m.

Vienna

*Chairman: Mr. A. Talebzadeh (Islamic Republic of Iran)*

*The meeting was called to order at 10.11 a.m.*

**The CHAIRMAN:** Good morning distinguished delegates, ladies and gentlemen, I now declare open the 811<sup>th</sup> meeting of the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space.

I would first like to inform you of our programme of work for this morning.

We will continue our consideration of agenda item 7, Matters Relating to (a) the Definition and Delimitation of Outer Space, and (b) the Character and the Utilization of the Geostationary Orbit.

We will also continue our consideration of agenda item 10, Capacity-Building in Space Law.

We will continue and hopefully conclude our consideration of agenda item 11, General Exchange of Information on National Mechanisms Relating to Space Debris Mitigation Measures.

Time permitting, we also continue our consideration of agenda item 12, General Exchange of Information on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space.

At the end of the plenary, there will be two technical presentations by the representative of the United States on "The Regulatory Role of the Federal Aviation Administration", and by the representative of France on "Law, Decrees and Technical Regulations of Space Operations of France".

We will then adjourn the meeting so that the Working Group on Agenda Item 7 can hold its third meeting under the chairmanship of Mr. José Monserrat Filho of Brazil.

Are there any questions or comments on this proposed schedule?

I see none

I would like to remind delegates that an informal plenary meeting for exhibitions for exhibitors on the exhibitions deliberations, the fiftieth anniversary of COPUOS and the fiftieth anniversary of human space flight will be convened by the Secretariat of the United Nations Office for Outer Space Affairs today at 2.00 p.m. in Room MOE19, 'M' Building.

**Matters relating to (a) the definition and delimitation of outer space, and (b) the character and utilization of the geostationary orbit (agenda item 7)**

Distinguished delegates, I would like to continue our consideration of agenda item 7, Matters Relating to (a) the Definition and Delimitation of Outer Space, and (b) the Character and Utilization of the Geostationary Orbit.

I do not have any speakers on my list.

Are there any delegations wishing to make a statement under this agenda item?

I see none.

In its resolution 50/27 of 6 December 1995, the General Assembly endorsed the recommendation of the Committee on the Peaceful Uses of Outer Space that, beginning with its thirty-ninth session, the Committee would be provided with unedited transcripts in lieu of verbatim records. This record contains the texts of speeches delivered in English and interpretations of speeches delivered in the other languages as transcribed from taped recordings. The transcripts have not been edited or revised.

Corrections should be submitted to original speeches only. They should be incorporated in a copy of the record and be sent under the signature of a member of the delegation concerned, within one week of the date of publication, to the Chief, Conference Management Service, Room D0771, United Nations Office at Vienna, P.O. Box 500, A-1400, Vienna, Austria. Corrections will be issued in a consolidated corrigendum.



We will, therefore, continue and hopefully suspend our consideration of agenda item 7, Matters Relating to (a) the Definition and delimitation of Outer Space, pending the adoption of the report of the Working Group and conclude our consideration of agenda item 7, (b) the Character and Utilization of the Geostationary Orbit, this afternoon.

**Capacity-building in space law (agenda item 10)**

Distinguished delegates, I would now like to continue our consideration of agenda item 10, Capacity-Building in Space Law.

I have no speakers in my list.

Are there any delegations wishing to make a statement under this agenda item?

I see none.

We will, therefore, continue and hopefully conclude our consideration of agenda item 10, Capacity-Building in Space Law, this afternoon.

**General exchange of information on national mechanisms relating to space debris mitigation measures (agenda item 11)**

Distinguished delegates, I would now like to continue and hopefully conclude our consideration of agenda item 11, General Exchange of Information on National Mechanisms Relating to Space Debris Mitigation Measures.

The first speaker on my list is the distinguished delegate of China. I give the floor to the distinguished representative of China.

**Mr. B. LI** (China) (*interpretation from Chinese*): Thank you Mr. Chairman. Mr. Chairman, the Chinese delegation believes that the protection of the space environment and to achieve the sustainable use of space resources will contribute to the peaceful exploration and use of outer space and to the maintenance of the legitimate rights of countries in this regard.

Based on this understanding, the Chinese delegation has always responsibly taken part in international cooperation to mitigate space debris and have adopted active national measures to reduce or mitigate space debris. We have followed the resolutions of the United Nations General Assembly and the Inter-Agency Debris Mitigation Coordinating Committee on the de-orbiting of spacecraft at the end

of their use and following the resolutions of the General Assembly and the Committee after the completion of the mission of SINOS(?) satellites, SINOS-2 satellites we have carried out de-orbiting operation of the satellites so that it entered the disused orbit, therefore providing safety to the orbits which are in use.

Mr. Chairman, in 2009 we have worked out regulations to govern the debris on-orbit in accordance with these regulations.

In 2009, China had adopted measures to control and manage space debris in accordance with these measures. The Science Department of the National CNSA is responsible for taking the responsibility of regulating the debris and it also responsible for building up the capacity for implementing the specific research projects implementing national space debris operations. We have implemented the Space Debris Mitigation Guidelines adopted by COPUOS as well as other relevant guidelines adopted by IADC and other international organizations. These measures provided for measures with regard to spacecraft, launch vehicles and other objects in the design, the evidence-finding launching operation and the decommissioning and the management of all phases of these projects.

And the measures also provide for that the users of spacecraft should adopt measures to ensure safety to prevent collision in orbit of spacecraft and to prevent break-up of spacecraft.

We have also set up a Space Debris Centre to provide a basis of data for the launching operation and the safety of spacecraft so as to implement a reporting system with regard to the risks of collision and break-up of spacecraft.

Mr. Chairman, with the implementation by relevant agencies and bodies of China of the above-mentioned measures, the control and mitigation of space debris in China will be further strengthened and a national mechanism in this regard will be more sound.

China supports the continued discussion on this item by the Legal Subcommittee so that countries can acquire useful experience through exchange of views so as to improve their national mechanism and actively follow-up the Space Debris Mitigation Guidelines. We are convinced that such a plan of action will lay a solid foundation for the proper solution of the issue of space debris.

Thank you Mr. Chairman

**The CHAIRMAN:** I thank the distinguished representative of China for your statement.

Are there any other delegations wishing to make a statement under this agenda item?

I see none.

We have, therefore, concluded our consideration of agenda item 11, General Exchange of Information on National Mechanisms Relating to Space Debris Mitigation Measures.

**General exchange of information on national legislation relevant to the peaceful exploration and use of outer space (agenda item 12)**

I would now like to continue our consideration of agenda item 12, General Exchange of Information on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space.

The first speaker on my list is the distinguished delegate of the United States. I give the floor to the distinguished representative of the United States.

**Mr. S. McDONALD** (United States of America): Thank you Mr. Chairman. We are pleased that this Subcommittee is exchanging information on national legislation relevant to the peaceful exploration and use of outer space. We think that the presentations made last year were quite informative and our continued discussions will help the members of this Subcommittee understand the different approaches that countries have taken regarding this subject.

We were especially pleased with the level of discussion in the Working Group which benefited from Professor Irmgard Marboe's leadership as the Chairman and we are looking forward to this year's Working Group sessions.

We would also like to inform the members of the Subcommittee that a representative from the Federal Aviation Administration, Laura Montgomery, will be making a presentation on United States regulation of commercial space transportation later this morning.

Thank you Mr. Chairman.

**The CHAIRMAN:** I thank the distinguished representative of the United States for your statement.

Are there any other delegations wishing to make a statement under this agenda item?

I see none.

We will, therefore, continue our consideration of agenda item 12, General Exchange of Information on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space, this afternoon.

**Technical presentations**

Distinguished delegates, I would now like to persist with technical presentations. The presenters are kindly reminded that technical presentations should be limited to 20 minutes or less.

Now I give the floor to Ms. Laura Montgomery of the United States who will make a presentation on "The Regulatory Role of the Federal Aviation Administration".

**Ms. L. MONTGOMERY** (United States of America): Mr. Chairman, good day, thank you for including the United States Federal Aviation Administration in the Legal Subcommittee's proceedings and discussions. It is an honour to be here.

Today I will address the regulatory role of the FAA in commercial space transportation, the Agency's authority, the state of the industry and our regulation of human space flight. The United States Government is divided roughly into three parts: Congress is the legislative branch and rights the laws; the Executive Branch carries out those laws; and the Judiciary judges us and our rules and decisions.

The FAA is one of three agencies in the Executive Branch that regulates commercial space. We oversee transportation. The Federal Communications Commission oversees space communications and the National Oceanic and Atmospheric Administration regulates remote sensing.

Administrative agencies are subject to the Administrative Procedure Act which governs how we issue regulations, usually after an opportunity for notice and comment from the public and authorizations such as licences and permits. The APA also governs how we conduct adjudications such as enforcement proceedings.

The FAA's Statutory Authority may be found at 49USC, Sub-Title 9, Chapter 701. Chapter 701

authorizes the Secretary of Transportation to authorize launch and re-entry and the operation of launch and re-entry sites as carried out by United States citizens or within the United States. It directs the Secretary to exercise this responsibility, consistent with public health and safety, safety of property and national security and foreign policy interests of the United States.

We are also charged with encouraging, facilitating and promoting commercial space launches and re-entries by the private sector.

Our statutory mission encompasses a variety of activities including launches of expendable and reusable launch vehicles, the operation of launch and re-entry sites and human space flight.

Launch sites, or space ports as they are popularly known, have many different features. Several are located on existing federal launch ranges, some are portions of airports that have been converted for space flight and one is located in the ocean.

We do not licence the activities of other United States Government agencies. The Department of Defence and the National Aeronautics and Space Administration conduct their own launches. If the Government carries out an activity for its own purposes, we do not oversee it.

The FAA has licensed over 200 launches since 1989 including five launches of the reusable Spaceship-1, the vehicle that ultimately won the X-Prize.

When we conduct a licence review, we address a number of different aspects of a proposed launch. Some of the highlights are that a policy review allows us to review a mission for its national security and foreign policy implications. We conduct a safety review to ensure that the safety of the public is not jeopardized.

As part of our safety requirements for both expendable and reusable launch vehicles, we impose positive safety controls, implement a system safety approach and establish maximum risk thresholds for different hazards.

Our environmental review allows us to determine environmental impacts.

To ensure that a launch operator is financially responsible for its activities, we require licensees to demonstrate financial responsibility to compensate for

the maximum probable loss from claims by a third party, for death, bodily injury or property damage or loss, and the United States Government for damage or loss to Government property. Should an accident happen, we will see payment for damages above the insured amount, subject to Congressional appropriations.

We require all participants in an unmanned launch agree to waive claims against each other. Crew on-board and space flight participants will have to waive claims against the United States Government.

Entrepreneurial efforts are complementing the work of existing commercial launch operators. Sub-orbital flights and low-Earth orbit operations have attracted the interest of new space entrants with designs on both payload services and access to space for private citizens.

In response to this activity, including an X-Prize for private commercial sub-orbital flight won by Scaled Composites, Congress passed the Commercial Space Launch Amendments Act in 2004. This made the FAA clearly responsible for oversight of commercial human space flight. The new Law establishes an informed consent regime for space flight participants. It is premised on the view that the space industry needs the same freedom to grow as the aviation industry experienced in its infancy and that people should be able to take risks if they want to and are appropriately informed.

The new Law gave us a number of useful definitions, perhaps the most important of which is space flight participants. Persons who travel on the new craft should not consider themselves passengers but participants in an adventure, similar to mountain climbers and parachutists.

The CSLAA provides the FAA responsibility for crew and space flight participant safety but it limits that responsibility for eight years unless there has been a death, serious injury or an event that could have led to a death or serious injury, a close-call in other words.

The Law prevents even individualized licensed conditions to protect passengers or crew, absent regulations. It does leave unchanged the FAA's ability to protect the public on the ground.

Crew and space flight participants must release the United States Government from liability claims. Also a holder of a licence or permit must inform any crew and space flight participants that the United States Government has not certified the launch

vehicle as safe and about the risks of the launch and re-entry and the safety record of that type of vehicle including government launches.

The FAA issued regulations in response to the CSLAA. Those regulations may be found at Part 460 of Title 14 of the United States Code of Federal Regulations and they govern human space flight including requirements for crew and space flight participants. Because members of the crew are instrumental in protecting the general public, the FAA considers them part of the flight safety system and thus needing requirements and protection on that basis. The crew must be trained and must demonstrate an ability to withstand the stresses of space flight.

A pilot and remote operator must possess an FAA Pilots Certificate with an instrument rating and receive training specific to the vehicle. A remote operator has the option of demonstrating a level of safety equivalent to a Pilots Certificate with an instrument rating and safety-critical crew must have a Second Class Airman Medical Certificate.

A launch operator must monitor and control environmental conditions and provide an adequate, redundant or secondary supply of oxygen for the flight crew. A launch operator must also prevent incapacitation of the crew due to cabin depressurization or fire. An operator must also take human factors into account in the design and operation of the vehicle and flight testing will be required.

Each crew member and each space flight participant must execute a reciprocal waiver of claims with the Federal Aviation Administration which will be signing on behalf of the United States Government.

Unlike payload customers, a space flight participant is not required by Federal Law to waive claims against a launch operator. For space flight participants, we require informed consent and training. We have security requirements and a prohibition on weapons.

The CSLAA also established an experimental permit regime for reusable, sub-orbital rockets flown for research and development, showing compliance with requirements for a licence or crew training prior to obtaining a licence. An operator may not receive compensation for these launches. The two main differences between a permit and a licence are that a permit must be granted more quickly and easily than a licence and a permit does not hold out a conditional offer to pay claims exceeding the required insurance, what is popularly referred to as indemnification.

As more nations expand into space and as commercial endeavours become more prominent, regulatory considerations become important. Expendable launch vehicles, reusable launch vehicles and aircraft pose different kinds of hazards and warrant different regulatory approaches.

I hope you find our experience useful and instructive. I encourage you to visit the FAA's website and please feel free to contact me with any questions.

Thank you Mr. Chairman.

**The CHAIRMAN:** Thank you Ms. Montgomery for your presentation.

Are there any delegations who has questions for this presenter?

I see none.

Thank you again for a very good presentation Ms. Montgomery from the United States.

I now give the floor to Mr. Julien Mariez of France who will make a presentation on "The Law, Decrees and Technical Regulations of Space Operations of France".

**Mr. J. MARIEZ** (France) (*interpretation from French*): Thank you Mr. Chairman, ladies and gentlemen, distinguished representatives. I am really very pleased indeed to be in attendance at this meeting. The Law, Decrees and the Technical Regulations that govern space operations in France are indeed the subject of my presentation.

At the outset, we should consider the French Space Operation Act. It dates back to 2008. The purpose of this Act is to set up a consistent national regime of authorization and control of space operations under French jurisdiction, those particular where the French Government has international liability by virtue of the treaties we are all familiar with. Of course, I would like to draw attention to the fact that the State is launching a number of space activities, first and foremost, launches from the Guyana Centre in Kourou but that France furthermore launches when satellite operators proceed to such a launch operation.

The main purpose or objective of this legal text is to ensure the best possible protection of the public of property, public health and the environment.

Let me give you some elements that guide us here. The Act, dating to the 3 June 2008, and the three Decrees that have to do with authorization setting forth the terms and conditions for authorization to be issued by the French Government. The second Decree text has to do with registration or safety at the Guyana Space Centre. And the third text is one that relates to the space data.

So in the wake of these Decree texts, we will soon be adopting, they are ready but not yet officially adopted, regulation texts, they are known as “Arête(?)” in France. We have technical regulations first by virtue of which the French operations will be authorized. This “Arête(?)” will be put to the European Commission by virtue of a 1988 Directive. The President of CNES will then be adopting a second “Arête(?)”. It has to do with the Safety Regulations for the Guyana Space Centre. And the third text will stipulate the Registration Regulations that need to be provided by space operators. And a very important date that should be uppermost in our minds, and that is why it appears in red, is the 10 December 2010, when the full authorization and control regime will come into force, meaning that all space operations, launches from the Kourou Centre or placing on orbit French satellites, that will occur after that deadline must be formally authorized by the Government.

Here, to give you a legal structure to back this up, I am showing, two transparencies showing how the law has implications and then the three “Arête(?)” below as a result of these changes.

On the authorization regime, *per se*, what are the four questions that might come to mind and that I will try to answer. Which space operations are concerned by the regime? What are the questions for the granting of an authorization? What are the different kinds of authorization? And finally, what is the procedure by virtue of which we will proceed to grant an authorization?

On the first item, that is the scope of our authorization regime, I think we could summarize as follows under three items. The three cases that are subject to authorization, the first being any operator aiming at launching a space object, a French national therefore or alien, operating from the French territory. At present, we have a French operator operating from the French territory in Guyana. The second case, a French operator launching a space object from a territory of a foreign State. And the third case would apply to a set of circumstances where a French individual would aim at launching a space object or, globally speaking, commands such an object being

placed on orbit in outer space. I think it is important to make this distinction for delegations here, since they may be customers or clients of Ariane-Espace, and the customers are not all subject to the French authorization regime.

Now, for the launching space, Ariane-Espace, or SPACE, would have the authorization but as will control is not being under French jurisdiction, the French State will not be controlling or authorization these satellites.

There are two more marginal cases, in addition to the three main sets of circumstances. These are transfer of on-orbit command. In keeping with French law, these should be authorized by the French Government. An authorization is required for a third party and also the case where a French operator wishes to take the command of a space object initially operated by a foreign operator.

What are the authorization conditions? The general principle that applies is that authorization will be granted by the Research Ministry in charge of outer space affairs in keeping with the following procedure.

First, there is an Administrative View conducted by the Ministry in charge of outer space affairs, making sure that operators possess moral, financial and professional guarantees sufficient to exercise that operation. Second, the Technical Review that the law has entrusted to CNES, by virtue of which CNES would be in control of the space systems and procedures to be carried out by the applicant in compliance with the Technical Regulations, as issued by the Ministry on the proposal or at the proposal of the CNES.

And I also point out, since this is important, that there is an insurance coverage or for additional coverage than that is to be borne by the operator.

What are the different kinds of authorizations or licences? The first being the Single Authorization. Any operator requesting this will have to show that the administrative guarantees are in place and that the system is in keeping with the Technical Regulations.

To streamline the procedure, the French law-maker has to provide a licensing systems operating at three levels. The operators licence. This in essence, enables the operator to be officially authorized for, for example, a 10-year period of time and to covering that period of time, the moral and financial administrative criteria are fulfilled. The second licence, which is linked to the first one, is the technical licence. This

one will provide certification for a maximum of 10 years or a given period of time that the generic systems in terms of their definition are in line with regulatory text and then the operator holding that licence will have to request all the same an individual authorization for each space operation but this procedure will be streamlined. The deadline will be shorter and the conformity will only refer to the difference, what you would call in the jargon, the qualified system, and the space object that is ready in terms of operation. The third case is a licence equivalent to authorization for a determined operation within a determined period of time. The operator will not have to apply on a case-by-case basis for an authorization for each operation during the validity of that licence. The French Government wish to restrict this authorization licence solely to placing on orbit. Any French launch cannot benefit from this type of licence. They will have to request an individual authorization in each case in addition to the technical licence, of course.

I think I have put it on this transparency but I do not want to spend more time on this. This was simply to give you an indication of the procedure by virtue of which space operations will be authorized. It all depends on the operator who then sends in a file to the Ministry responsible for space affairs. It would have to be supplemented if it is not complete. Then the investigation takes place. The Ministry has four months. I think that is easily seen from the transparency and the CNES will have two months to pronounce on the technical circumstances. It then reports to the Ministry. The Ministry gets back to the operator. The operator may makes comments on that "Arête(?)", that decision, and, of course, if the "Arête(?)" makes provision for refusal, that would particularly be the case and then the Ministry either bears this in mind or disallows this and then it issues the authorization for the space operator.

This is the breakdown if you were to request a simple authorization or a licence. If you hold a licence as a result of this breakdown, the simplified or streamlined procedure is as follows.

It is a two-month period for the Ministry to decide one month for CNES as there is no allowance for comments on the "Arête(?)". So that streamlines the procedure for authorizations in the context of a technical licence.

There is one major item which this new Decree systems introduces. In parallel with the authorization regime, the Government has instituted a preliminary regulation certification method. Any person developing a space system or major sub-system

may approach the CNES, very early on, so that the CNES can make sure that its sub-system is in compliance with all or part of the regulatory texts. This system is intended to make it possible for the Government to have some input very much upstream so that its authorization could then ensue rapidly unless there is an appeal, of course, from the operator. This is not a mandatory system. It is optional. And, of course, the preliminary certification that CNES provides could then be used by the operator when they formally put in a request for authorization to operate.

Once this authorization is granted, that is not the end of the procedure because there are controls that apply during the preparation and the actual performance of the operation. And there is a safety regime for launches carried out from the Guyana Space Centre.

The controlled regime all builds up on the principle that authorization will be issued at a given point in time of that space system development process, but once that authorization is issued, the Government must check during the onset of preparation that the space system that has been authorized is in compliance with the conditions that were spelled out in terms of the authorization process and, therefore, there will be control points to be defined by the operator and the Government jointly, making it possible to ensure up to the onset of the operation that conditions for issuance of authorization are still complied with. You have this control and there are several State authorities and CNES agents in command here and it could be carried out during the preparation but it also could apply during the actual operation.

On the special case of the Guyana Space Centre, we should point out that the President of CNES is entrusted with the general safety and security mission and that applies to the exploitation and the facilities of the Guyana Space Centre. He will have to prepare those security rules that apply to launch missions at the Guyana Centre and would have to make sure that they are complied with in all cases and that all entities are in line with this, the operator launching but also all businesses or all industrial players present on this Space Centre.

On the safety and security measures of the Technical Regulations, there are several of those. First, we have Technical Regulations for launch operations and there is a Best Practices Guideline tied to this. And we have Technical Regulations for Satellite Operations, On-orbit Command and Re-entry associated with the Best Practices Guidelines. There

are Safety Regulations, I have referred to the President of CNES, and a Good Practices set of Guidelines to be prepared by CNES in coordination with the space operators and the whole industry in France to have Codes of Good Practice and not place new constraints on either French or European industry. These Technical Regulations have not yet been adopted. I have said this before, I will not go into any detail in terms of what they contain. I will, however, be referring to some salient features of those Technical Regulations.

First, they shall be as close as possible to the European space industry's current practices regarding security of individuals and property. So as to not create new constraints, I would say, they shall impose objectives that need to be achieved by an operator for space debris, those of the COPUOS, of course. And, of course, they need to be compatible with specific regulatory texts that apply to launch ranges.

May I refer briefly to governmental space activities now? Space operations carried out CNES are not included in this regime. The CNES is furthermore controlled by the Government for these programmes. CNES operations were, therefore, not made subject to these measures. However, defence activities and scientific activities will *a priori* come under this authorization regime.

One of the last items I would like to refer to here is the liability regime since space law in France has divided up liability between the State and the operator. The purpose of this regime is that the operator, regardless of litigation, should always be liable to the same amount. In the first case, when the operator is sue and convicted by a domestic court, that operator will then appeal to the French State so that the guarantee can apply beyond a certain amount of damages. The operator will be liable up to a certain cap, beyond which the State guarantee will take over.

If it is the French Government that is sued on the basis of the 1972 Convention on Liability, that Government can then get compensation from the operator for the amount for which the operator is responsible and there must be appropriate insurance coverage for this.

My colleague, Mario Hucteau, spoke at great length just a few days ago on the following subject, so I will not be going into that and I have completed my presentation.

Thank you for your attention.

**The CHAIRMAN:** Thank you Mr. Mariez for your presentation.

Is there any delegates who have questions for the presenter?

The distinguished representative of China. I give the floor to the distinguished representative of China.

**Mr. Y. XU (China):** Thank you Mr. Chair. First of all, China would like to thank the distinguished delegate of France for his presentation. We do appreciate the efforts to make transparent and sharing with us the efforts in improving its national mechanisms in space law.

I listened very carefully to the French presentation. I think Mr. Mariez mentioned that there are several regulations which will be adopted in the future, in the near future. My interest(?) is just to the registration regulations. From my understanding that those kind of registration regulations is tailored to space operators. I wonder what kind of menu(?) will be the space operators because from the following presentation, it seemed that operators are not only limited to the orbit commander of the space object but also relayed to the space launching activities. For example, in the authorization functioning Charter there is mentioned that there will be a registration in the Ministry concerned. So I wonder kind of registration in the French law is mentioned that there will be a phase of registration. So maybe we can seek further information from our French colleague.

Thank you Mr. Chair.

**The CHAIRMAN:** Thank you distinguished representative of China for your question.

I give the floor to the distinguished representative of France.

**Mr. J. MARIEZ (France) (*interpretation from French*):** Thank you Mr. Chairman. I would like to thank the distinguished representative of China for the comments and the question and I am going to try and answer.

You are right, the French regime envisages regulation applying to registration. First of all, I think that was already presented here. CNES is authorized by the Government to maintain the National Registry for the Government. At the moment, a set of rules is still being finalized, according to which it is the operator, you are right, the operator will carry the

burden of providing CNES with all required information so that CNES and then the French Government might live up to their obligations in the area of registration.

As to the information that the operator will be required to provide to CNES, it includes all information envisaged in the Registration Convention plus two other types of information not envisaged by the Convention. On the one hand, the owner, designer and the operator of the space object and also information on the operational condition of the object in question, that is whether or not the space object is functioning or not and obviously the operator has the obligation to keep CNES updated as to any changes that might occur in regard to the status of the satellite. If the satellite or some instruments on the satellite stop functioning, it is the operator's responsibility to provide the necessary information to CNES.

I do not know if I have answered the question in a satisfactory manner. Would you like to follow up on that?

**The CHAIRMAN:** I thank the distinguished representative of France for your answer.

Is there any other delegation who has questions?

Of course, China and the Republic of Korea. I give the floor to the distinguished representative of China.

**Mr. Y. XU (China):** Thank you Mr. Chairman. Thanks for all the further explanation from our colleague from France. My question is limited to the registration in the authorization stages. It is not limited to the Registration Convention because from the French presentation there are phases in the whole process of authorization there will be in some stage you have to get the registration. And he also mentioned to implement the Space Operation Act in the future you will adopt Registration Regulations. And even from your Charter, the operator has to provide the information to the Ministry. And the other that it goes into the registration. You did not mention what kind of registration at that stage because they are not launched into outer space so there is no operator intermission(?) at that stage.

So my question is that what kind of registration in the authorization from you Ministry? That is my question.

Thank you Mr. Chair.

**The CHAIRMAN:** Thank you distinguished representative of China for your question.

I give the floor to the distinguished representative of France.

**Mr. J. MARIEZ (France) (*interpretation from French*):** Thank you Mr. Chairman. I may not have been sufficiently clear as to the registration procedure. What one needs to know is that the operator's obligation to provide information to CNES kicks in only after the beginning of operations. We cannot require any information on the operator prior to the start of operations but once operations have commenced, the operator has two months to provide all the required information to CNES.

And what CNES does is maintain the National Registry and then the information it receives goes into the National Registry as an update.

**The CHAIRMAN:** Thank you distinguished representative of France for your explanation. The next question, I think, is the distinguished representative of the Republic of Korea. I give the floor to the distinguished representative of the Republic of Korea.

**Mr. W. PARK (Republic of Korea):** Thank you Mr. Chairman. I enjoyed very much the presentations of the delegation of America and France. Coming back to the presentation of America, and concerning the space flight of people going up into outer space, the American law seemed to define that persons as participants instead of passengers. I wanted to know why American law classifies those people on a space flight as participants instead of passengers.

Another question relating to this one because we know that there are six or seven space authorities so far. Maybe the delegation from the Russian Federation may answer about the insurance relating of these space tourists.

Thank you.

**The CHAIRMAN:** Thank you distinguished representative of the Republic of Korea. I think your question related to the two presentations, Ms. Montgomery and the representative of France.

The distinguished representative of France, do you want to give the answer or your comments? No.

Ms. Montgomery, do you have comments?

**Ms. L. MONTGOMERY** (United States of America): Yes, Mr. Chairman and thank you for the good question Sir.

The choice of the language in the United States law to call a passenger a space flight participant was very deliberate and it reflects a philosophical decision to allow people to go to space even though it is still a risky endeavour. It is not as safe as flying on an airplane and yet people still want to go and it was decided that people should get to go but part of the change of language is to show that this is not as safe as flying on an airplane. The discussions, when the law was passed, made comparisons to the early aviation's era, what we call the Barn Storming Period, where people could go to a County Fair and get on a very small wooden airplane and fly around in it for a very short period of time and it was not regulated by the Government at the beginning of the last century.

There will be some Government regulation now and clearly to protect the people on the ground there has to be, but the Congress decided to give the early space industry the same freedom to grow as the early aviation industry had. So, therefore, instead of having as much safety as you have for flying across the Atlantic in an airplane, you get told how risky it is, that it is dangerous, that it is not certified as safe by the Government, and you get to go. We allow people to jump out of airplanes in parachutes, climb mountains, and many die every year doing those things, and if people want to do this, the decision was made to let them but to not let them think that it was very safe.

Thank you Mr. Chairman.

**The CHAIRMAN:** Thank you distinguished representative of the United States for your explanation and again thank you to the distinguished representative of France for a very good technical presentation.

Are there any questions according to the presentation of the representative of France?

The distinguished representative of Saudi Arabia. I give the floor to the distinguished representative of Saudi Arabia.

**Mr. M. A. TARABZOUNI** (Saudi Arabia): Thank you Mr. Chairman. But anyway I want to refer to the Korean question. It is actually asking the delegation of the Russian Federation what about the insurance of the passengers going into the Space Station and I would like to have the answer too.

Thank you.

**The CHAIRMAN:** And, of course, this is the question to the distinguished representative of the Russian Federation. May I have a question distinguished representative of the Russian Federation, do you have a comment or an answer?

Thank you distinguished representative of the Russian Federation. I give the floor to you please.

**Mr. V. Y. TITUSHKIN:** Thank you Mr. Chairman. As far as I know, the flights of so-called space tourists to the International Space Station are done in accordance with contracts concluded between these persons and the Russian Space Agency. I am not aware of legal or financial details of these contracts but, of course, they should provide a required degree of insurance and, of course, a required degree of personal safety of these persons. I do think that there are special provisions of that kind but I am not aware of any details.

Thank you.

**The CHAIRMAN:** Thank you distinguished representative of the Russian Federation for your explanation.

Do you have other questions or comments?

I see none.

Distinguished delegates, I will shortly adjourn this meeting so that the Working Group on Agenda Item 7 can hold its third meeting under the chairmanship of Mr. José Monserrat Filho of Brazil.

Before doing so, I would like to remind delegates of our schedule of work for this afternoon.

We will meet promptly at 3.00 p.m. At that time, we will continue or hopefully suspend our consideration of agenda item 7, Matters Relating to (a) the definition and delimitation of outer space, pending the adoption of the report of the Working Group and conclude our consideration of agenda item 7 (b), the Character and Utilization of the Geostationary Orbit.

We will also continue and hopefully conclude our consideration of agenda item 10, Capacity-Building in Space Law. We will continue our consideration of agenda item 12, General Exchange of Information on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space.

We will then adjourn the plenary meeting so that the Working Group on Agenda Item 12 can hold its first meeting under the chairmanship of Ms. Irmgard Marboe of Austria.

Are there any questions or comments on this proposed schedule?

I see none.

I now invite Mr. José Monserrat Filho of Brazil to chair the third meeting of the Working Group on Agenda Item 7.

This meeting is adjourned until 3.00 p.m.

Thank you very much for your attention.

*The meeting adjourned at 11.20 a.m.*