

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

Unedited transcript

776th Meeting
Monday, 7 April 2008, 3 p.m.
Vienna

Chairman: Mr. V. Kopal (Czech Republic)

The meeting was called to order at 3.09 p.m.

The CHAIRMAN: Good afternoon distinguished delegates, I now declare the 776th 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 afternoon.

We will continue and hopefully conclude our consideration of agenda item 10, Examination and Review of the Developments Concerning the Draft Protocol on Matters Specific to Space Assets to the Convention on International Interests in Mobile Equipment. We will continue our consideration of agenda item 11, Capacity-Building in Space Law. We will also begin our consideration of agenda item 12, General Exchange of Information on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space.

There will be a technical presentation this afternoon by a representative of the United States entitled "Overview of United States Laws Governing Space Activities".

Are there any questions or comments on this proposed schedule?

I see none.

Examination and review of the developments concerning the draft Protocol on Matters Specific to Space Assets to the Convention on International Interests in Mobile Equipment (agenda item 10)

Distinguished delegates, I would now like to continue and hopefully conclude our consideration of agenda item 10, Examination and Review of the Developments Concerning the Draft Protocol on Matters Specific to Space Assets to the Convention on International Interests in Mobile Equipment.

I do not have any delegation inscribed in the list of speakers on this particular item. Is there any delegation that would like to speak or any observer?

I see none of them.

So we have just concluded our consideration of agenda item 10, Examination and Review of the Developments Concerning the Draft Protocol on Matters Specific to Space Assets to the Convention on International Interests in Mobile Equipment. We have concluded with this consideration.

Capacity-building in space law (agenda item 11)

Distinguished delegates, I would now like to continue our consideration of agenda item 11, Capacity-Building in Space Law.

And I have on my list of speakers the distinguished representative of Japan. You have the floor Sir.

Mr. K. MIYAZAKI (Japan): Thank you Mr. Chairman. Mr. Chairman, distinguished delegates, on behalf of the Japanese delegation, I am honoured to address the forty-seventh session of the Legal Subcommittee of COPUOS.

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.



I will report on Japan's efforts related to capacity-building in space law.

Mr. Chairman, needless to say, continuous training in capacity-building are fundamental for advancing the study of space law. The Japan Aerospace Exploration Agency, JAXA, encourages students in the Asia-Pacific region to participate in the Manfred Lachs Space Law Moot Court which is organized by the International Institute of Space Law.

Since 2001, JAXA has supported the winning teams of the Asia-Pacific region round by providing each other(?) fare(?) to the World Finals held at the International Aeronautical Conference.

Many students in the Asia-Pacific region are interested in studying space law. That interest is effective in the high participation at the regional level of the Moot Court every year.

The Manfred Lachs Space Law Moot Court provides valuable opportunities for students interested in the study of space law to interact with each other and gain practical experience in the application of space law.

JAXA is determined to continuously contribute to space law education. We hope JAXA's sponsorship will help young students to exchange a wealth of knowledge, _____(?) their views and extend their capability in order to advance the study of space law in the future. Thank you Mr. Chairman and distinguished delegates for your kind attention.

The CHAIRMAN: Thank you very much distinguished representative of Japan for your brief report on Japan's efforts related to capacity-building space law. We welcome particularly the Japan Aerospace Exploration Agency encouraging students in the Asia-Pacific region to participate in the Manfred Lachs Space Law Moot Court Competition and that JAXA has supported since 2001 the winning teams of the Asia-Pacific regional round. And we are also happy to learn that JAXA is determined to continue to contribute to space law education. Thank you very much distinguished representative of Japan.

Is there any other delegation wishing to speak on this particular item, it means item 11, Capacity-Building in Space Law?

I see none.

We will, therefore, continue and hopefully conclude our consideration of agenda item 11, Capacity-Building in Space Law, tomorrow morning.

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

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

I have some delegations inscribed in the list of speakers on this particular item and I give the floor to the first of them, it means to the distinguished representative of Ukraine.

Ms. N. ZUBACH (Ukraine) (*interpretation from Russian*): Chairman, thank you. On behalf of the Ukrainian delegation, allow me to briefly inform you about the Ukrainian space law system.

Ukraine was amongst the first, 12 years ago, on 15 November 1996, to adopt a special law on space activities regulating the beginning of Ukraine's space activities within and outside its boundaries under Ukrainian jurisdiction.

Currently, and bearing in mind new directions of space activities and the need to clarify and to further develop space law institutes, as well as the harmonization of national legislation with international legislation, we are preparing an updated law.

Individual aspects of space activities are governed by other Ukrainian laws. The Constitution of Ukraine, Article 92, contains a provision regarding the fact that the main principles for exploring outer space are governed exclusively by Ukrainian legislation.

In accordance with this provision related to the regulation of space activities, there are another 10 non-exclusively space-related laws. Such laws, *inter alia*, govern the relationships between property rights in outer space, the role of States, in providing and organizing management for space activities, the organization in carrying out of entrepreneurship, taxes, customs, innovations, privatization in the field of space activity. The conditions for the protection of intellectual property rights as well as how they are used, all these legal norms, despite the fact that they fall under various types of legislation in their aggregate compose Ukraine's space legislation.

Thus, in accordance with Ukraine's Land Register, ones containing space facilities belong to the Government and they cannot be transferred to public or private property. The law on entrepreneurship limits space activities in the field of outer space by non-State economic actors. It has been established that activities in the field of development testing, manufacturing and the use of launcher rockets can be carried out only by State enterprises and organizations.

Also, the State enterprises and communication institutions which are permitted to engage in activities of technical servicing and use of primary networks, in addition to local networks of the satellite telecommunications systems as part of the overall network.

The role of the States in organizing space activities over certain monitoring over these activities by all enterprises is reflected in its Licensing Institution.

In accordance with the Ukrainian law on licensing of certain types of economic activity, developing testing, manufacture, exploitation of launcher rockets and spacecrafts and their components, as well as ground-based space infrastructure and its components, equipment including in the space satellite system field, are part of economic activities which falls under this law.

In accordance with Ukrainian law and the priority directions for innovative activities in Ukraine, we are carrying out testing of technology which, by 2013, will contribute to the innovative activities of the Ukrainian space sector.

The legislation of Ukraine contains a number of regulating provisions regarding civil agreements for spacecrafts as well as others. On issues of space activities in Ukraine, we have adopted 16 Decrees by the President of Ukraine on the regulating and setting up of standards and norms. And various levels, intergovernmental, inter-institution, close to 100 international agreements, Memoranda of Understandings have been reached which are all part of Ukraine's space legislation.

We should note that this year we have signed two agreements, the first on 25 January of this year with ESA, and the 31 March with the United States of America in the field of collaboration, in the field of the use of outer space for peaceful purposes. This year we intend to sign close to 10 agreements.

Our delegation is very interested to witness(?) any information of other delegations of our national space legislation. We consider this to be useful in spreading useful experience and positive experience and strengthening relationships between national space legislations. This is why we consider it useful to include this in the agenda of the next session of the Subcommittee. Thank you.

The CHAIRMAN (*interpretation from Russian*): Thank you representative of Ukraine for your statement. You have informed us and our Subcommittee on the legislation of your country, starting with the special law on space activities of 1996. You further informed us that you are now preparing a new version of this law. You followed this with a description of other laws in Ukraine including on 10 non-exclusively _____(?) -related laws.

You then drew attention to entrepreneurial activities in the space field by non-State economic actors in accordance with Ukrainian law on licensing of certain types of economic activity. You informed us of the existence of a licensing institute in your country. You then referred to a civil legal agreement and was also important that at various levels your country is forging links and agreements with other countries, including a number of recent ones with the United States of America.

I believe that there is no need that this agenda item will be included in the agenda of the following session of our Subcommittee because there is a need to discuss it over the next four years. Thank you. I am referring to working plan item. Thank you.

(*Continued in English*) Is there any other delegation wishing to speak? Yes, I see the distinguished representative of Canada to whom I give the floor.

Ms. K. JANSON (Canada): Mr. Chairman, the Canadian delegation is grateful to have this opportunity to make this presentation and show Canada's national legislation on space activities with other delegations.

Canada, unlike some other countries like the United States or Australia, does not have a comprehensive Outer Space Act establishing a normative structure for Canadian space activities. Rather, Canada's national legislation on outer space is gathered throughout a few statutes enacted by the Canadian Parliament as well as through regulations that have been passed under those _____(?) statutes.

(Continued in French) Two questions related to space and the laws on air space which was adopted in 1954. This Law, which governs civil aviation in Canada and enables the Minister of Transport of Canada to establish a corresponding regulatory structure.

The main body of regulations with regards to activities in Canada's air space is the called the Canadian Aviation Regulations. From the Canadian Aviation Regulations, two regulatory provisions are applicable to space-related activities, namely the launch of rockets. These provisions are the following.

Article 602.43 which provides that no one can launch a rocket in Canada other than a model rocket or a rocket of a type used in a fireworks display. Unless duly authorized by the Minister _____ (*not clear*) and Article 602.44 which provides that the Minister of Transport may issue an authorization to launch a rocket in Canada where the launch of the rocket is in the public interest and is not likely to affect aviation safety.

(Continued in English) Mr. Chairman, the second historically of the Statutes that allow the Government of Canada to regulate activities of its nationals in relation to its activities is the Radiocommunications Act. This Act grants authority to the Minister of Industry of Canada to regulate all matters relating to communications by radio in Canada, including the power to issue regulations as necessary, for Canada to meet its international obligations, to issue radio authorizations in Canada and to issue certain licences in respect of the utilization of specified radio frequencies within a defined geographic area.

As this Act applies geographically not only in Canada, but also to any spacecraft that is under the direction and control of a citizen or resident of Canada or a corporation incorporated as resident in Canada, it effectively empowers the Minister of Industry of Canada with authority over all communications between Canadian spacecraft and the Earth, no matter where the station operator is located around the globe.

Entered into force on 1 May 2000, the Civil International Space Station Agreement and Voluntation(?) Act is the third Statute chronologically in Canada's regulatory legal framework on outer space and has been enacted by the Parliament of Canada in order to implement the Intergovernmental Agreement between Canada, member States of the European Space Agency, Japan, the Russian Federation and the United States of America on the International Space Station.

The purpose of the Act, as stated in its Article 3, is to ensure that Canada's obligations under the Intergovernmental Agreement shall be fulfilled. In order to fulfil that purpose, this Act provides authority to the Governor General and Council to make regulations that the Governor and Council considers necessary for carrying out the purposes of this Act and giving effect to the Agreement including the Code of Conduct and a Memorandum of Understanding or another implementing arrangement that the Agreement refers to and also extend the application of the Criminal Code of Canada outside of Canada to crew members of the International Space Station. To Canadian crew members committing an offence that would, if that offence was committed in Canada, constitute an indictable offence under the Criminal Code of Canada, if that offence is committed on or in relation to a flight element of the Space Station or on any means of transportation to or from the Space Station and also to foreign crew members committing such an offence if the offence threatens the life or security of a Canadian crew member or is committed on or in relation to or damages a flight element provided by Canada.

Mr. Chairman, last but not least, in Canada's regulatory framework on outer space, the Remote Sensing Space Systems Act was enacted in order to address specific concerns raised by switching from State-owned remote sensing systems to privately owned ones. The Remote Sensing Space Systems Act gives broad powers to the Minister of Foreign Affairs of Canada to regulate the operation of remote sensing systems from Canada. It prohibits(?), in fact, the operation of remote sensing systems from Canada or by Canadian nationals outside Canada except under the authority of a licence issued by the Minister. The Act provides for a set of minimal conditions attached to any licence issued by the Minister under the Act and empowers the Minister to specify additional conditions relating to the communication of raw data and remote sensing products as the Minister sees fit. It also empowers the Minister to interrupt or to restrict the operations of a remote sensing system where the provision of remote sensing services if there is reason to believe that such activities would be injurious to Canada's conduct of international relations or inconsistent with Canada's international obligations.

It empowers the Minister of National Defence of Canada to interrupt or to restrict the operation of a remote sensing system where the provision of remote sensing services, if there is reason to believe that such activities would be injurious to the defence of Canada or the safety of Canadian forces and it empowers the Minister of Foreign Affairs, the Minister of National

Defence and the Minister of Public Safety and Emergency Preparedness to make orders giving the Government of Canada priority access to the remote sensing data and services if certain conditions are met.

Finally, the Act provides authority to the Government to make appropriate regulations and to designate inspectors to ensure compliance with the Act.

Mr. Chairman, finally in addition to providing a legal framework to Canadian activities in outer space, the Parliament of Canada also provided for the creation of a space agency with the mission to carry out the Government of Canada's activities in outer space. The Canadian Space Agency Act, enacted in 1990, brought many divisions dealing with outer space within various departments of the Government of Canada together to form one single entity with the mandate to promote the peaceful use and development of space, to advance the knowledge of space through science, and to ensure that space science and technology provides social and economic benefits for Canadians. The Canadian Space Agency is under the responsibility of the Minister of Industry who is also responsible to coordinate the space programmes and policies of the Government of Canada.

The Canadian Space Agency carries out its activities in relation to all matters concerning space over which Parliament has jurisdiction and that are not by oversuance(?) of law assigned to any other department, board or agency of the Government of Canada. The CSA is headed by a President appointed by the Government for a term not exceeding five years who is responsible for the day-to-day operations of the Agency.

The Act also establishes an Advisory Board whose members include persons from the space science community and the private sector, including the space industry, and whose mandate is on the request of the Minister of Industry to advise the Minister on any matter relating to space.

Mr. Chairman, the Canadian delegation thanks you for this opportunity to share Canada's national legislation on outer space.

The CHAIRMAN: Thank you distinguished representative of Canada for your thorough information about the national legislation and other regulations and also about the structure of the Canadian Space Agency. You started by the Canadian Statute called the Aeronautics Act which was enacted in 1954. You then continued by mentioning the Radiocommunications

Act which regulated all matters relating to communications by radio in Canada.

You continued by the Civil International Space Station Agreement Implementation Act that was adopted in order to implement the Intergovernmental Agreement between the group of Canada's that have established the International Space Station.

You then continued by the adoption of the Remote Sensing Space Systems Act which was enacted in order to address specific concerns raised by the switching from State-owned remote sensing to privately owned ones.

Finally, you mentioned that the Parliament of Canada also provided for the creation of a space agency with the mission to carry out the Government of Canada's activities in outer space. And you then informed us about the substance of the Canadian Space Agency Act which was enacted in 1990.

Once again, thank you very much for this contribution.

Distinguished delegates, I now have on my list of speakers the distinguished representative of the United States of America and it will be then followed by a special presentation prepared by this delegation. Thank you very much. The distinguished representative of the United States of America has the floor.

Mr. M. SIMONOFF (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 this agenda item will help the members of this Subcommittee understand the different approaches that countries have taken regarding this subject. We hope that members will be able to learn lessons that they may be able to apply in the future.

The United States has prepared a paper presenting an overview of United States space legislation and we have made this paper available to all delegations as Conference Room Paper No. 9. In addition, the United States delegation includes an esteemed attorney, Franceska Schroeder, with the law firm of Vichon(?) Richardson. Ms. Schroeder is representing the American Astronautical Society and with the permission of the Chairman, she will now present as a technical expert, an overview of United States national space-related legislation. Thank you.

The CHAIRMAN: Thank you distinguished representative of the United States for your contribution and, at the same time, for your introduction of the following presentation. But before giving the floor to the distinguished speaker, Ms. Francesca Schroeder, I would like to ask the Subcommittee if there is any other speaker wishing to speak at this moment.

I see none and, therefore, I will now kindly request Ms. Francesca Schroeder to make the technical presentation of the United States.

Ms. F. SCHROEDER (United States of America): Thank you Mr. Chairman and thank you fellow delegates for giving us this opportunity to present an overview of United States laws governing space activities.

Mr. Chairman, unfortunately we are having a minor technical problem with advancing the slides. Very good, problem solved.

By way of introduction, I would like to say that this presentation will cover four principles but it is not covering all of the laws that relate to space activities but, as I said, four principles law as outlined here on this slide.

United States law applies to governmental and non-governmental space activities through, *inter alia*, the Commercial Space Launch Act, the Land Remote Sensing Policy Act, the Communications Act of 1934, and the National Aeronautics and Space Act and these Acts address any national obligations of the United States and promote exploration and the use of outer space.

Next slide please. Thank you. The first Act that we will discuss is the Commercial Space Launch Act, commonly referred to by the letters CSLA. The Act itself is found at Title 49 of the United States Code at the sections noted here on the slide. The CSLA is administered by the Office of Commercial Space Transportation, which is part of the Federal Aviation Administration, which is part of the United States Department of Transportation. The purposes of the CSLA are to safely open access to space and encourage private sector development, simplify and expedite issuance and transfer of launch and re-entry licences, promote safety, both of the public and of private property, and to strengthen and expand space transportation infrastructure.

Next slide please. The CSLA is, in part, a licensing regime and the licensing requirements are set

forth on this slide. The FAA licence is required for launch and re-entry in the United States, for launch and re-entry by United States citizens outside of the United States, for launch and re-entry by United States citizens outside the United States and outside territory of a foreign country unless the foreign country's government has an agreement with the United States on jurisdiction over the launch or operation in question. And lastly, a licence is required for launch for re-entry by a United States citizen in a foreign country if the United States has jurisdiction by agreement with the government of a foreign country with respect to that launch. And when applying for a licence, the FAA requires that the applicant come to the office for a pre-application consultation which will enable the parties to discuss the scope of the licence, the activities being sought or to be undertaken and to discuss particulars of the licensing requirements and the licensing process.

Next slide please. There are other requirements of the CSLA as outlined here briefly. The licence application that is submitted by the applicant is subject to a policy review, safety review and also a review of the environmental impact of the launch activity or re-entry activity. The CSLA requires that the FAA be given information so that the Registration Convention may be complied with. There is a requirement with respect to orbital debris mitigation and as we see commercial space flight advancing to personal space flight, there are also requirements relative to flight crew qualifications, training, safety and a waiver of claims is required against the United States, meaning that claims against the United States would be waived.

Now the CSLA, as many of you know, also includes insurance and pernatual(?) responsibility requirements. The licensee must obtain third party liability insurance or demonstrate financial ability to pay maximum probable loss arising from third party claims. The maximum probable loss is established for each licence by the FAA and the maximum amount is US\$500 million, usually the amount is, in fact, less than that but the maximum is US\$500 million and US\$100 million for loss or damage of United States Government property.

The United States Government is to pay damages that exceed the amount of third party liability insurance up to US\$1.5 billion which has been adjusted for inflation since that number was first enacted which was in 1988.

I also should note that the United States Government's promise to pay claims is subject to Congressional appropriation, in other words, that

money is not already allocated by the United States Government, it must be allocated at the time the request is made and the request for payment is approved by the Congress.

Also in this risk allocation regime, the licensee must include a reciprocal waiver of claims in its contracts with all of its contractors and sub-contractors.

The next regime that we would like to discuss is called the Land Remote Sensing Policy Act of 1992 and it is found at Title 15 of the United States Code at the sections identified on this slide. The Land Remote Sensing Policy Act is administered by the National Oceanic and Atmospheric Administration of the Department of Commerce. Its purposes include to stimulate commercial marketing for unenhanced remotely sensed data, the furthering of the long-term role of commercialization of land remote sensing and to promote international trade and access to unenhanced data on a non-discriminatory basis.

The Land Remote Sensing Policy Act also includes licensing and oversight responsibilities that are implemented by NOAA. A licence is required to operate a private remote sensing satellite system and when the applicant makes the application, the applicant must provide NOAA with orbit and data collection characteristics and any deviations therefrom. Included in the application also must be proper post-mission disposal and, finally, Government approval is required for any significant or substantial agreement with a foreign entity.

Now the Land Remote Sensing Policy Act also comes with certain data-sharing obligations again to promote the sharing of unenhanced data. To the extent consistent with United States national security foreign policy and international obligations, the licensee is to make available to the government of any country unenhanced data related to territory under jurisdiction of that government. The licensee is also to make unenhanced data designated by the Secretary of Commerce available to all users without preference or special arrangement regarding delivery, pricing or technical considerations and the licensee may make that available at reduced prices for non-commercial purposes such as educational purposes or research purposes.

The next regime that this overview presents is the Communications Act of 1934 which is found at Title 47 of the United States Code beginning with section 151 and continuing for many, many sections. The Communications Act is administered by the

Federal Communications Commission and it includes licensing and operating requirements for satellites and associated ground stations. The purposes of these provisions are to avoid radio frequency interference, to coordinate commercial satellite operations in the United States and to coordinate international satellite operations and use of the frequency spectrum along with the National Telecommunications and Information Administration and other United States agency, through the International Telecommunication Union in accordance with the ITU Radio Regulations.

The Communications Act also includes orbital debris mitigation requirements and the purposes of these mitigation requirements are to preserve continued affordable access to space, to continue the provision of reliable United States space-based services and to help ensure the continued safety of persons and property in space and on Earth. To that end, an applicant is required to submit a medication plan along with its licence application and it must include end of life operation requirements consistent with ITU requirements and ensure discharge of energy sources.

The last regime that we will cover is the National Aeronautics and Space Act of 1958, commonly referred to as the Space Act, and it is found at Title 42 of the United States Code at the sections identified on this slide. The Space Act authorized the creation of NASA and broadly its objectives and responsibilities are international cooperation, and I would like to add some words on that point. It is worth highlighting that Section 205 of the Space Act provides that NASA may engage in a programme of international cooperation in its work pursuant to international agreements. This Section provides legal authority for the conclusion of treaties and other international agreements on behalf of the United States subject to the foreign policy guidance of the President, as exercised on a day-to-day basis by the Secretary of State. This authority has enabled NASA to take advantage of opportunities for space cooperation. It is an important authority that governments should consider when drafting legislation creating national space agencies.

Another means for ensuring space agencies have appropriate authority to conduct cooperative space activities under international law is to conclude legal framework agreements for space cooperation at the governmental level. NASA and the State Department have sought to conclude such framework agreements with a number of nations. In fact, the most recent agreement was concluded 10 days ago between the United States and Ukraine.

Other objectives and responsibilities of the Act that we would like to highlight here include expanding knowledge of Earth and space, disseminating information on NASA activities, encouraging the commercial use of space and use by the United States Government of commercially provided services and hardware, improving the usefulness, performance, speed, safety and efficiency of aeronautical and space vehicles, establishing studies on the benefits from and problems involved in the use of space for peaceful and scientific purposes, conducting aeronautical and space activities and arranging for participation by the scientific community in scientific measurements and observations.

The Space Act also includes very important liability and insurance provisions which are highlighted here. Subject to certain restrictions, NASA may provide liability insurance for any user of a space vehicle, which would include the Space Shuttle. It may provide that the United States will indemnify such user against claims by third parties for amounts in excess of insurance which may be limited to claims resulting from other than the actual negligence or wilfulness conduct of the user. And similar provisions are available for experimental aerospace vehicles. Also NASA may reciprocally waive claims on behalf of the United States Government in cooperative agreements and these are commonly referred to as cross-waiver provisions.

There are other statutory provisions relevant to the commercial use of space that, for brevity, we have not outlined in detail but have noted on this slide. One is found at Title 15 of the United States Code and it relates to access to NASA and DOD space-related facilities by non-Federal entities on a cost reimbursable basis. This is only for specific facilities but such a provision, such a scheme is available.

The next is a patent law issue found at Title 35 of the United States Code which addresses United States patent laws that apply to inventions made in space or on a space object under United States jurisdiction and control.

And the last found at Title 42 of the United States Code and it addresses acquiring space science and Earth science data from commercial providers.

And that concludes the overview, Mr. Chairman, and I believe our delegation is available to take any questions that the group may have.

The CHAIRMAN: Thank you very much Franceska Schroeder for your technical presentation on

the United States laws and regulations governing space activities. This presentation was already distributed in written form as advised by the distinguished representative of the United States so that any delegations had the opportunity to read this text over the weekend. I think this was very helpful because the national legislation of the United States is fairly complex and includes many aspects. Nevertheless, I believe that your presentation enabled us to better understand this very complex matter and I thank you once again for it.

Is there any question or comment to this paper and to this presentation?

I see none.

So, I, myself, would like to have some minor questions relating to this matter and if you allow me to say it I would be ready to do so.

First of all, I would like to ask about the regulations concerning the space debris because you mentioned here some rules and practice of the United States in this respect. But, of course, now recently the guidelines were adopted in the Scientific and Technical Subcommittee and also guidelines were elaborated by the Committee of Space Agencies, do you intend somehow to innovate your existing rules on this matter with regard to the substance of the guidelines just adopted? This is my first question.

My second question concerns Section 309 on Page 14. You speak here about the Space Act which establishes a comprehensive liability regime for experimental aerospace vehicles and you also defined what experimental aerospace vehicles are. However, I would like to ask what is the difference in this respect, it means in respect of a comprehensive liability regime, between the experimental aerospace vehicles and other vehicles.

And my third question would be, the United States legislation on space activities, as I already said in the beginning of my intervention, is fairly complex, without any doubt, and you know why it is, it is because the historical development and also because the extensity of the space activities performed by the United States. But, of course, from the legal point of view it is fairly difficult. So is there any intention somehow, either in the near future or in the more distant future, to codify the national law of the United States relating to space activities in a single document or in a small group of documents, if possible? Thank you very much.

Ms. F. SCHROEDER (United States of America): Thank you Mr. Chairman. I would like to defer to one of my colleagues.

Mr. M. SIMONOFF (United States of America): Thank you Mr. Chairman. I think we will share responsibilities for answering these very good and thoughtful questions. We appreciate the fact that our presentation has provoked these questions and we are happy to share our experience and information on this.

I am going to answer the first question with respect to space debris and the last question with respect to the complexity of the law then I will defer to my colleague, Jason Steptoe of NASA, to talk about the question relating to NASA's Statute.

With respect to the first question on space debris mitigation, the United States law was in the process of working on the Space Debris Mitigation Guidelines, which were ultimately adopted by COPUOS and endorsed by the United Nations, already had in mind the regulations which had been promulgated by the Federal Communications Commission and by the Federal Aviation Administration. So our national regulations with respect to space debris already are consistent with the Space Debris Guidelines because we wanted to make sure when we were working on them that nothing in our regulations would be inconsistent and would need to be changed. So currently we do not have any plans on changing the Debris Mitigation Guidelines because our guidelines actually, if anything, our regulations are more stringent than the Guidelines that were adopted last year by COPUOS and put more specific requirements on the operators.

With respect to your last question, it is true that the United States does have a complex series of laws which were, as you suggested, adopted organically over time as industry developed but currently there is no intention of recodification of United States. I suppose some delegates may know, sometimes opening up an existing Statute can become a messy business so we are happy with the structure as it exists even though it is a bit complex, we feel that experts in the legal profession in the United States, such as Ms. Schroeder, have mastered those complexities and are able to know which Statute and which provision to turn to depending on the issue involved.

Now, with respect to the second question, I am going to turn to my colleague, Mr. Steptoe, who can provide information on that.

Mr. J. STEPTOE (United States of America): Thank you Mr. Chairman. I would like to say first of all thank you for your very in-depth reading of this paper. A lot of people in the Government put considerable time into this to make it as clear as possible though it is not exhaustive or comprehensive by any means but we appreciate the attention you paid to it.

Your question regarding Section 309, if I understood correctly, you were asking about experimental aerospace vehicles and were you thinking in terms of the sub-orbital vehicles?

The CHAIRMAN: Well, there is a definition of this particular kind of aerospace vehicles, experimental. It is an object intended to be flown in or launched into orbital air, sub-orbital flight for the purpose of demonstrating and so on and so on. But, of course, they are not only experimental as space vehicles but usual space vehicles so where is the limit between the experimental and the usual space object?

Mr. J. STEPTOE (United States of America): Right. I just wanted to make sure there was no misunderstanding about this provision which is from the NASA Act and the experimental vehicles that we read about dealing with sub-orbital or personal space tourisms and the like.

This provision, Section 309, is primarily for demonstrating technologies in several NASA programmes of recent vintage such as the X-33 Programme, the X-34 Programme, which was a test bed for single stage to orbit, X-37, or Scram(?) Jet, these were all technologies that were developed in cooperation with industry. This is essentially authority for industry, as well as NASA, to place funding on experimental vehicles that could have future applications. And this is a new procedure for NASA. All previous military and civilian space vehicles have been developed exclusively with government funding. So, for example, the family of expendable launch vehicles and the Space Shuttle and as well the new Constellation Programme, which we talked about in our delegations opening statement for the return to the Moon and for servicing of the Space Station. These are all developed under traditional Government procurement programmes where the Government retains rights in the technology and so forth.

The Section 309 that you have highlighted is unique authority that has only been used in connection with three programmes I mentioned but remains available and, in fact, has been used recently for a two-

stage solid rocket expendable launch vehicle by the ATK Corporation which will be launched, I believe, this year and has again Government and private blend of financing that can render some of these new technologies possible.

I hope I have answered your question.

The CHAIRMAN: Thank you very much. I thank both representatives of the United States for answering my questions. And I ask you, ladies and gentlemen, if you have some comments or questions on this particular item.

I see on my list of speakers the distinguished representative of France.

Mr. _____(?) (France) (*interpretation from French*): Thank you Chair. Chair, let me thank Madam Schroeder for that presentation first and foremost. It was very clear in her explanation of the American domestic law in this regard and she was very short in presenting this despite the great complexity of that system.

Just a remark, if I may, to emphasize the importance of having some kind of provision along the Commercial Space Launch Act lines. This is the provision that has to do with the guarantee that the United States Government provides for launch activities established by the Government of the United States, above maximum probable loss and mandatory insurance, which, of course, operators must have.

It is a system that we have already pointed out the interest of and which, to my knowledge, only exists under United States law. It has an advantage, it both provides support for operators activities and, at the same time, respects victims defence, potential victims. Fortunately, so far there have not been.

Now this mechanism really is perfectly adapted to the Convention on Liability and its demands and whose aim is to create a kind of a government safety net in space activities. Hence, it is a provision I think really needs to be emphasized.

And in this connection, let me make another remark. French law currently being debated in Parliament should be mentioned. The Bill has already been adopted by the Senate and will be voted on, perhaps passed, next Wednesday by the French Assembly Nationale. They will be voting then on this Bill dealing with space activities.

This Bill has a similar provision, similar to the United States one, that is a State guarantee with a cap and it is a mechanism which, in my opinion, again protects the operators and, of course, protects any possible victims, all of which comes under the respect of our Liability Convention.

The CHAIRMAN (*interpretation from French*): Thank you very much distinguished representative of France for that contribution, a contribution which brings up a very interesting point and of that interest not only to the United States delegation. Let me thank you for the information you have given us on current French legislative preparatives and a law which may come into force following next week's vote. Thank you very much.

(*Continued in English*) I have another delegation on my list of speakers, that of the Federal Republic of Germany.

Mr. J. REICHHARDT (Germany): Thank you Mr. Chairman. Mr. Chairman, the Federal Republic of Germany is involved in large space projects, both on national level and within the framework of the European Space Agency. The Federal Republic of Germany is committed to implementing its international obligations in its national legislation. It has specialized legislation focusing on fundamental issues linked to space activities, including registration, licence, procedure, ITU frequencies and orbital slot utilization rights and remote sensing.

The practice of the Federal Republic of Germany has been to register space objects in the Annex to the National Aircraft Register and German Luftpatrole(?).

The Telecommunications Act, the German Telecommunications Gazette, ensures the implementation of its national law of the obligation encumbered upon Germany through its participation of the ITU. In particular, Paragraph 56 of the Act addresses the licensing procedure requested for the transfer of the ITU utilization rights or frequencies and orbital slots.

The need for a specific legislation regarding authorization and licensing of satellite-based remote sensing systems and the distribution of data acquired through these means has risen from the evolution of the structures of investment of space-related projects. They increase participation of private actors in the newest remote sensing projects and in particular the huge amounts of private capital investments through

public/private partnerships, require a clear and transparent legal framework.

Germany adopted a new Act that entered into force on 1 December 2007. It is entitled "The Act Safeguarding Security Interests in the Distribution of High-Resolution Satellite Data", short form, "Satellite Data Security Act". This Act has two purposes. First, it aims to safeguard the interests of the Federal Republic of Germany in connection with the distribution and commercial marketing of satellite-acquired Earth remote sensing data especially in international markets. Second, the Act creates a transparent legal framework as well as safe and calculable terms for companies involved in satellite data marketing. The Act implements a licensing procedure for the distribution of remote sensing satellite data generated by high-grade remote sensing satellite systems.

In order to ensure national security and foreign policy interests, before the distribution of this data, the operator of high-grade remote sensing satellite systems and the data providers have to be licensed. The operator has to ensure that the satellite system cannot be commanded by unauthorized persons and both operator and the data provider have to ensure that data cannot be accessed by unauthorized persons before this data are provided to any customer.

Principle 12, Paragraph 1 of the United Nations resolution 41/65, the Principles Relating to Remote Sensing from the Earth from Outer Space, and the Maintenance of International Peace and Security, are taken into account the sensitivity check and the autorotation(?) (*not clear*) procedure.

The provision of the Satellite Data Security Act is favourable to commercial dissemination, creates the factor of large database accessible to all third persons on a non-discriminatory basis.

Mr. Chairman, the Satellite Data Security Act is published and explained in the German Journal of Air and Space Law 2008, Page 40, and an official English translation, together with a detailed commentary, will be published in Volume I of the Journal of Space Law 2008. We will, in the course of this week, distribute copies of the English translation and delegations will in a few days find them on the table at the back. Thank you very much Mr. Chairman.

The CHAIRMAN: Thank you distinguished representative of the Federal Republic of Germany for your contribution by which you informed us about the specialized legislation of the FRG, focusing on fundamental issues linked to space activities, including

registration, licensing, procedure, ITU, frequencies and orbital slots, utilization rights and remote sensing. You particularly drew our attention to the Telecommunications Gazette, the Telecommunication Act and to the Satellite Data Security Act. And I also thank you for your indication that the Satellite Data Security Act is published in the German Journal of Air and Space Law of 2008 on Page 40 and following. Thank you very much.

Is there any other speaker from among the delegations? I now recognize the distinguished representative of Colombia.

Mr. R. J. SERRANO(?) (Colombia) (*interpretation from Spanish*): Thank you very much Chair. Colombia, in order to make a positive contribution to this challenge that this item is for us, would like to make very brief mention of our main legislation, our national legislation dealing with outer space. We do not have just one law but there is a whole series, there is a whole regulatory framework. Most of it has to do with telecommunications stemming from models given by the ITU as well as others dealing with Earth observation satellites and so on.

But let me concentrate on the Colombian Space Committee. Let me begin by saying that this body was really the product of historical necessity, not that we have a huge space programme, but because Colombia is a user and a very intensive major user of technologies that stem from peaceful uses of outer space. And that is the context in which we thought that it would be advisable to create a body to coordinate all of these activities.

Second element, to give you more background about the creation of that body, has to do with the participation of Colombia on a regional basis which we always thought was very important in developing space uses for the Latin American region. In 2002, Colombia hosted the Fourth Americas Space Conference during which many important topics were dealt with, among them the need for every country of the region to set up respective regions or agencies of space affairs and our own Commission was, in fact, the product of national necessity but also part of a regional effort since we have always insisted that regional efforts always be aimed at providing specific benefits to different nations in the region.

Decree 2422 of 2006 set up the Colombian Space Commission. There are seven preambular parts and 11 operative, signed by 12 different Ministries and by the President of the Republic. I am not going to go

into all the consideranda(?) here, all the preambular parts would be too long, but just let me say that these can be found in the publication from this body called Analysis, and which I would be willing to provide to this gathering for consultation. Apologies for not having it in English at this time. Perhaps the Secretariat could give us a helping hand here by providing a future English version so we might better disseminate this to delegates. For the time being it is only in Spanish.

The most important preambular consideranda(?) here is that peaceful use of space technologies are an important factor for economic, social and cultural development and also help contribute to meeting the needs in many different fields of population such as education, health, peace, security, safety, environmental protection, management of natural resources and so on.

And a second consideranda(?), we have the theme of international cooperation, fundamental for a country like Colombia. International cooperation within a multilateral framework like the United Nations and regional organizations and bilaterally with space agencies or technical and scientific institutions are all a means of crucial importance to countries like Colombia. That is the second consideranda.

Third, it is necessary to establish a mechanism to help orient national policies for the development and use of space technologies. It is very important, Chair, because it is not just a physical body as such, it is a coordinating entity of different institutions that all work in the field of space.

Now, in the operative part. In this Decree, it states in Article 2 that a Commission is created, the CSE, as an inter-sectoral consultative body for consultation orientation planning in terms of national policies for the development and implementation of space technologies, also helping to draw plans, programmes and projects in this field.

Further on, Article 4, here we have a list of the different tasks and coordination in Article 7, Technical Committee of Space Affairs is set up as the body in charge of drawing up decisions of the CSE. Afterwards, we have several Articles, 11 in all, as I said, and then the signatures of the different Ministries. This Decree dates from 2006, nearly 50 years after the founding of NASA.

Moreover, we have here a series of implementation agreements. Number one regulates the CSE. The second one designation of the Secretariat of

the CSE. Number three, policy lines on a national basis. It is, in other words, the Commission helps draw up the Colombian Space Policy. Number four, action plan for the CSE for 2007-2010. Seven different working groups are set up here under number five, support for projects in Colombia, and lastly number six, consolidation of Colombian infrastructure on space data.

This is, Chairman, very briefly summed up, the text that reflects our effort in order to consolidate, in order to establish a framework for these efforts in Colombia, and I believe it is a very laudable effort. It gives us a structure to carry out this kind of activity in Colombia under(?) and we are in a period of being still learning, we are still evolving and will be able to meet challenges as they might arise. We can create new structures or additional ones, for the time being we have this one. It has not been problem free but it has been satisfactory and it has allowed us to set up a very favourable, I would say, atmosphere in Colombia to these efforts and I think we can optimistically look forward to the future and countries like Ecuador, Guatemala are more or less following the same road. And when we all met during the Space Conference, we have all tried to share this experience with their countries and other countries and perhaps achieve a kind of a multiplier effect with this very laudable undertaking. Thank you.

The CHAIRMAN: Thank you distinguished representative of Colombia for your, as you said, brief but I would add substantive contribution to our discussion. In this contribution, you informed us about the development of national legislation in your country, or better to say about again, as you said, a framework of this regulation. And you emphasized that Colombia is a user of the benefits of space activities and that you very much tend to develop participation in these activities and in their regulation in the framework of cooperation of the region on a regional basis. You then proceeded with information and explanation of the Decree of 2006 on the establishment of the Space Commission, as you called it. And you addressed also a request to the Secretariat, if possible, to distribute an information about the Colombian Space Commission because the text is now only available in Spanish so perhaps, if possible, at least an abbreviated information on this text could be distributed to the delegations speaking and using the Spanish as their working language. Thank you very much once again distinguished representative of Colombia.

I do not have any other speaker on the list of speakers. Is there any other delegation wishing to

speak or to put questions relating to the special presentation that has been made during this afternoon?

I now give the floor to the distinguished representative of Bolivia.

Mr. _____(?) (Bolivia) (*interpretation from Spanish*): Thank you Chair. Let me make one observation, raise one question to the other delegations that have been talking about their national legislation in this field. The question is this. What is the relation between your national legislations, your domestic law and the five United Nations treaties which are in effect for most countries because I tend to see these national efforts being kind of isolated from the United Nations treaties. So what are the links here with the treaties, these domestic bodies of law and these treaties, the treaties, of course, stipulate a series of obligations, duties and so on in order to explore and make use of space. And I ask this question for the reason that we are interested to see how these different national legislations have been drawn up. I mean, were they directly inspired by the international treaties or are they totally separate? This is the kind of angle that I am trying to clarify with this. Thank you

The CHAIRMAN: Thank you very much very much distinguished representative of Bolivia for your intervention by which you particularly put a question of mutual relations or links, if you wish, between the domestic legislations and the United Nations space treaties, addressed to the delegations that have spoken or to all delegations, this I did not understand. All. Thank you very much.

So you have heard this question and any delegation wishing to reply is kindly invited to do so. Is there any other speaker, first speaker, then answer? Yes, the distinguished representative of the United States.

Mr. _____(?) (United States of America): Thank you Mr. Chairman. The United States Statutes that were discussed were not specifically inspired by the outer space treaties but we do consider ourselves to be fulfilling our certain obligations of the outer space treaties through much of this legislation. In particular, Article 6 of the Outer Space Treaty requires States Parties to authorize and supervise the activities of nationals of non-governmental entities in outer space. So, for example, with respect to the Federal Aviation Administration licensing requirements with respect to launch that Ms. Schroeder discussed, the United States considers itself to be fulfilling the authorization and supervision requirements to that legislation.

And with respect to our own governmental activities, there is not necessarily a direct link between a specific treaty requirement but the NASA Act essentially regulates or has provisions with respect to United States governmental activities, civil activities in outer space.

So we hope that is somewhat helpful for our colleague from Bolivia. With respect to the regulation of non-governmental activities, we think the crucial provision to look at is the Article 6 provision and legislation which should be implementing the Article 6 requirements. Thank you.

The CHAIRMAN: Thank you distinguished representative of the United States of America for your kind answer to the question that was raised by our distinguished colleague from Bolivia.

I now recognize the distinguished representative of Ukraine.

Ms. _____(?) (Ukraine) (*interpretation from Russian*): Chairman, thank you. In answer to the Bolivian question, in my statement, I did not(?) state that Ukraine was a party to four United Nations agreements on outer space. They were ratified and are part of our national legislation of Ukraine and our domestic legislation is based and is promulgated from the framework of this.

The CHAIRMAN (*interpretation from Russian*): Thank you distinguished representative of Ukraine for your answer. This was an answer to the question put to us by the distinguished representative of Bolivia.

(*Continued in English*) Yes, I now recognize the distinguished representative of the Russian Federation.

Mr. _____(?) (Russian Federation) (*interpretation from Russian*): Chairman, thank you. As our discussion has again partly returned to the United States presentation on national legislation in space activities, I would like, through you, to put two questions to the American delegation regarding their presentation.

The first question. The _____(?) (*not clear*) of the United States delegation referred to the fact that in accordance with national legislation, the maximum possible liability in all cases of space activities is one and half billion dollars, taking inflation into account. I have the following question and

perhaps the United States delegation will be able to answer. Does this correspond to the Liability Convention, the Convention on International Liability for Damage Caused by Space Objects, especially Article 2 where it refers to absolute liability which, as we interpret it, means that there is no maximum liability as established by the Convention.

The second question. Of late there has been quite significant development in space activities and this has led to a number of questions from the point of view of the preservation of the environment. We are well familiar with this problem. And we would like to ask the United States delegation whether they, in their national legislation, have any norms and standards which regulate questions of the protection of the environment in conducting space activities. Thank you.

The CHAIRMAN (*interpretation from Russian*): Thank you distinguished representative of the Russian Federation for your statement which included two questions addressed to the representative of the United States of America. The first one was the relationship to the Liability Convention. The second one concerned the protection of the environment.

(*Continued in English*) Yes, may I ask the distinguished representative of the United States to answer now or later on?

Mr. _____(?) (United States of America): Thank you Mr. Chairman. We can try to answer now to the extent ...

The CHAIRMAN: Please take into account the question that was already put by our distinguished colleague from France. He was the first who requested. No? You did not? Sorry. Excuse me, here two questions from our distinguished colleague from the Russian Federation.

Mr. _____(?) (United States of America): Thank you Mr. Chairman and I will start and if my colleague, Ms. Schroeder, has anything to add, I may invite her as well. But with respect to the first question, the liability amounts that were discussed, that are presented in the Statute, have to do with the relationship between private actors and the United States Government. The United States has no limit on liability, as the Liability Convention states. There is absolute liability and so one point five billion is more an allocation among the United States versus the private and if the liability was in excess of that amount, internationally, the United States would assume all of the liability beyond that amount. So it is absolute

liability, as provided in the Convention and we will, in the event of such an unfortunate incident, abide by those obligations. Of course, we hope that there never comes a time where we ever have to worry about liability under the Liability Convention.

Secondly, with respect to environment, it was not clear to me whether our Russian colleague was referring to the space environment or to the environment on Earth but I will mention both in my response.

With respect to the environment on Earth, there is a whole series of United States national legislation on environmental impact assessments, our National Environment Policy Act and other Statutes, which we did not discuss in the presentation here, but which would be applicable and which would need to be complied with, with respect to environment on Earth.

With respect to the space environment, again we would refer to our Debris Mitigation Regulations which were discussed and addition to the national, with respect to governmental activities, the internal debris mitigation requirements. So, for example, with respect to the Orbital Debris Mitigation Guidelines which were adopted last year by COPUOS and endorsed by the United Nations General Assembly, all of our space activities and all national activities regulated by the United States we consider to be consistent with the Orbital Debris Mitigation Guidelines. Thank you.

The CHAIRMAN: Thank you distinguished representative of the United States for your answer to both questions that were submitted by the distinguished representative of the Russian Federation.

Is there any other answer or comment? Yes, I recognize the distinguished representative of Colombia.

Mr. R. J. SERRANO(?) (Colombia) (*interpretation from Spanish*): Very briefly. The delegate from Bolivia raised the question and we all participated but let me just answer him by saying that in the _____(?) case of Colombia, there is a direct link with the international treaties in our domestic legislation. This was a national initiative, of national scope. I think we should talk more about a relation to the resolution of the General Assembly of the year before last where it mentions encouraging the passing of national legislation in the space field. That might be a specific link in itself.

The CHAIRMAN: Thank you very much distinguished representative of Colombia for your

intervention. I believe that your question is pertinent, that indeed the issue of mutual relations of international law and national legislation is a very important aspect and that we should pay attention to this aspect during our discussion.

Any other question or comment or simply information about the national legislation of your countries?

I see none for the time being.

So I believe that in this way, we have to terminate the discussion on this particular item. I believe that the discussion has been very useful and particularly I once again would like to express our gratitude to the delegation of the United States for preparing a thorough document about this point and also for the special presentation that was provided for us by Ms. Franceska Schroeder. And also I thank all delegations which intervened on this issue at this meeting this afternoon.

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, tomorrow morning.

And I would now like to adjourn this meeting, but before doing so, I wish to remind the delegates of our schedule of work for tomorrow morning.

We will meet promptly at 10.00 p.m., 10.00 a.m., sorry. Maybe at 10.00 p.m. also because so far as I know we will have had a reception so maybe the reception will last as long as to 10.00 p.m. but please do not take it seriously.

At that time, we will continue and hopefully conclude our consideration of agenda item 11, 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, and I hope that other delegations will come and submit to us information about the legislations of their own countries. And we will also begin tomorrow our consideration of agenda item 13, Proposals to the Committee for New Agenda Items.

Are there any questions or comments on this proposed schedule?

I see none.

Yes, I have still an announcement, or better to say the Secretariat has an announcement for you. Please, you have the floor.

Mr. N. HEDMAN(?) (United Nations Office for Outer Space Affairs): Thank you Mr. Chairman. Yes, the Secretariat has been asked to make an announcement that the Western Europe and Other States Group, the WEOG Group, will have a meeting tomorrow morning, Tuesday 8 April, at 9.00 a.m. in Conference Room VII. Thank you Mr. Chairman.

The CHAIRMAN: Thank you, Mr. Secretary, for the announcement. Is there any other question or comment?

I see none.

The meeting is adjourned.

The meeting closed at 4.42 p.m.