
**Committee on the Peaceful
Uses of Outer Space
Fifty-sixth session**

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664th Meeting
Friday, 14 June 2013, 10.00 a.m.
Vienna

Chairman: Mr. Yasushi Horikawa (Japan)

The meeting was called to order at 10:04 a.m.

The Chairman

I now declare open the 664th meeting of the Committee on the Peaceful Uses of Outer Space. Distinguished delegates, I would first like to inform you of our programme of work for this morning. We will continue our consideration of agenda item 4, General exchange of views, agenda item 5, Ways and means of maintaining outer space for peaceful purposes, and agenda item 7, Report of the Legal Subcommittee on its fifty-second session.

There will be three technical presentations this morning: by representatives of Italy entitled “Italian Master Course in Space Institutions and Policies”, by a representative of Japan entitled “Japan’s contributions to the International Space Station (ISS)”, and by a representative of Belarus entitled “National Space Program of the Republic of Belarus”.

During lunch time today, starting at 2:00 p.m., there will be a screening of two videos. The first one is entitled “Japanese space women”, and it is presented by Japan. The video is 5 minutes in length. The second video is entitled “Shenzhou-9”, and it is presented by China. The video is 10 minutes in length. The two videos will be repeated until 3:00 p.m. Delegations are cordially invited to the screening of these videos.

Delegations will recall that at this year’s session of the Scientific and Technical Subcommittee, the Subcommittee welcomed a proposal by the Government of China to establish a regional centre for space science and technology education to be hosted by Beihang University in Beijing, under the United Nations Programme on Space Applications. The Subcommittee also noted that the Office for Outer Space Affairs would facilitate an evaluation mission in that regard.

In its note verbale OOSA/2013/4, CU 2013/83, the Office for Outer Space Affairs extended an invitation to member States of the Committee to nominate a suitable expert to take part in a mission to evaluate the capacity of Beihang University to serve as

a host of a regional centre for space science and technology education.

Delegations that have already nominated an expert for this evaluation mission, or that intend to do so, are invited to join a meeting to consider the terms of reference of the evaluation mission, to be held in conference room C6 during lunch time today, from 1:00 p.m. to 3:00 p.m. The terms of reference of the evaluation mission have been made available to delegations in document A/AC.105/2013/CRP.15.

Are there any questions or comments on this proposed schedule?

I see none.

I recognize the distinguished representative of Greece. You have the floor.

Mr. Cassapoglou (Greece) Thank you very much. Good morning to everybody. Just please specify what floor. C6. What floor? Fourth or seventh floor? Seven. O.k. Thank you.

The Chairman Distinguished delegates. I would now like to continue our consideration for agenda item 4, General exchange of views. The first speaker on my list is the distinguished delegate of Chile. You have the floor.

Mr. A. Labbe (Chile) Thank you Mr. Chairman. As this is the first national statement my delegation is making, I’d like most warmly congratulate you on assuming the chair of the fifty-sixth session of COPUOS. My delegation can assure you once again the fullest support and cooperation from Chile in the work ahead. Chile endorses the statement made by GRULAC and in our national capacity, I would like to reaffirm our sincere gratitude to the director of the Office of Outer Space Affairs as well as to the secretariat for the valuable preparatory work for this session. On this occasion, I would like to say that our gratitude towards Dr. Mazlan Othman is very special as this is the last time we will be seeing her sitting at the podium. We do of course look forward to seeing her further. Dr. Othman, we wish you the absolute best, we are so grateful for all the wonderful work you have

done directing the Office. We wish you the best for future activity and I can assure you, you can always count on the support and esteem of Chile.

I would also like to congratulate the three new COPUOS members who are participating as full members today; Armenia, Costa Rica and Jordan. We also extend our congratulations with the fiftieth anniversary of the first spaceflight of a woman. We can't list all the women who have contributed to the presence of humanity in this great adventure but we will only refer to Valentina Tereshkova who was the first pioneer and the order of Bernardo Higgins was awarded her as recognition on behalf of my country.

My country acknowledges the common interest of humanity and the rights of all States to participate in the exploration and utilization of outer space with exclusively peaceful purposes with the firm conviction that the benefits of this are extended to human development. We observe strictly the principles that should govern activity of space and in the exploration and use of outer space. Chile stresses that the prevention of the arms race in outer space and a ban on placing or using arms in outer space could avoid great danger for international peace and security. And in that context, we stress the absolute importance of observing existing agreements on arms limitation and disarmament in outer space as well as the existing legal framework on the utilization of outer space.

Chairman, I would like to refer to the United Nations programme on space technology application. And in that connection, I would like to stay that, from the 12th to the 16th of November 2012, in Santiago in Chile, there was a practical United Nations course, together with Chile on technological applications for socioeconomic benefits. We believe that this was very successfully organized by the Chilean Centre for Natural Resources and the Office for Outer Space Affairs with more than 160 experts participating from 27 countries. The outcome was very promising. The main objective was attained and that is the international community has greater awareness and knowledge regarding spin-offs from space technology application in social and economic affairs. And in particular, for the less developed countries. And I would like to thank the director of the Office for Outer Space and the section on space technology application for their dedication and support for that activity.

Mr. Chairman, my country has continued to develop actions to consolidate and implement space policy for the medium- and long-term. We continue striving to reform space institutions and we have a project to bill underway that will be containing definitions on our real needs on observation, telecommunications and applications for agriculture

and other production sectors as well as for natural disaster management. Mr. Chairman, furthermore, regarding management in the case of disasters which is of importance for a country as you know very well yourself, is in the fire belt of the Pacific. We are working on improvement and capacity-building for space technology applications to be applied for prevention and mitigation. In May 2012, the national office for emergency in Chile which comes under the ministry of the interior and public security, was designated as national focal point for the United Nations information platform on information obtained from space, UN-SPIDER. And looking at the question of emergencies, I would like to say that my country is particularly grateful for the ongoing cooperation from our fraternal country Argentina, through the national institute for space affairs, which has helped us address serious problems such as forest fires and also water and snow reserves. We are very grateful to them because it is a very good example, furthermore, of how countries in our region continue cooperating in pursuing common goals.

And just briefly, Chairman, I would like to refer to FASat-Charlie, a Chilean satellite in orbit, which is part of the Earth observation satellite project. That satellite was launched on the 16th of December 2011 from the Kourou space base in Guiana. Chile notified the Secretary-General of the relevant elements in observance with the UN agreement on registration of objects launched into space that Chile is party to. FASat-Charlie is a satellite which now gives important support for civilian decisions to be taken in public and private institutions looking at mining, forest problems, agricultural studies, glacial observation and others. Furthermore, on space observation, I feel I should also mention the projects for installation of large astronomical observatories and radio telescopes in the north of Chile.

These are activities considered in the plan for astronomy development in our country worked on together with the national board for scientific and technical research. Chile believes that the adoption of guidelines is progress space debris controls. However, my country is somewhat concerned because of the frequent fall of space debris in the southern hemisphere and in the Pacific Ocean, especially with the relevant risks related to re-entry of debris into the Earth's atmosphere. Another subject of importance for my country is related to the geostationary orbit. We must be aware that this is a natural resource that is limited, that could become saturated. This could be a threat to sustainability to space activities. Considering that particular situation, once again it is necessary to create a regime that rationalizes and guarantees access to the geostationary orbit for all States irrespectively of

technical capabilities, especially taking into account the needs of developing countries.

For us, Mr. Chairman, it is particularly important that this topic could be retained as a subject for debate on COPUOS, its agenda. As to the delimitation and the definition of outer space, my delegation believes that the lack of a definition or delimitation can cause uncertainty regarding the relevant legal regime. With aeronautic and space law differing as to sovereignty of States and for that reason, we believe that there should be a clear indication as to the scope of both systems. The delimitation of outer space is fundamental, for example, define what activities come up under aeronautic or law and which under space law and to what extent, air space is under sovereignty of states and where it becomes the heritage of all mankind. This raises a whole host of philosophical, political and legal questions that we must address further.

Mr. Chairman, now I would like to refer to the document that you and the officiant and tireless secretariat Niklas prepared under A/AC.105/2002/CRP.4. This document now has a continuation in CRP.10, we noted, and Chairman, surely we'd like to congratulate you and Niklas for the excellent documents. We are among those States or that group of States that believe that it's of utmost importance to preserve, enrich and emphasize the relevance of space and a multilateral bodies. We have cooperated throughout history with COPUOS, we have actively participated in all processes that led to the establishment and implementation of legal and political instruments governing human activity in outer space. However, we are also a delegation with open eyes and we have seen that one way or another, for reasons I will not go into now, the activity of the committee and especially the Legal Subcommittee, had no products that are visible. With the policy shown in this document, nationally, we see that as the view that should be adopted, there are new activities, there's the impact of scientific and technological issues that's undeniable, there are new aspects, there is a new link between States that do not have great space capacity that do however, want to benefit from space technology which then enter into a functional economic relationship with those States who do have such technology and means.

I won't go into a whole analysis of this document, however, I would like to say Chairman, that my delegation would like, at some point of our agenda, to go into a detailed analysis of this text, especially, to look at aspects that would be of interest to us. A whole fresh view on the question of the presences of new stakeholders. On the presence on the private sector. on the presence of civil society in our activity. We don't need to just keep emphasizing over and over our

achievements of the past. We've got the treaties, we've got the UN resolutions, we want to perfect that, but what we want to do is take that and especially, the work of this Committee, and work with that, keeping in tune with the new reality. So, I'd like to congratulate you and Niklas for that work. This is the kind of contribution and stimulus that we need now at this time for the work of this Committee. Thank you.

The Chairman I thank the distinguished representative of Chile for his statement. The next speaker on my list is the distinguished representative of Saudi Arabia. You have the floor.

Mr. H. Altwajiry (Saudi Arabia) In the name of God the compassionate, the merciful, Mr. Chairman, distinguished delegates, peace, God's mercy and blessings be upon you. On behalf of my delegation, it gives me pleasure to see you reside over this fifty-sixth session of COPUOS. I am confident that your efforts and the cooperation of delegations with you will realise that it is our objectives in this context, we appreciate the efforts of a member delegation in realizing the vision of the peaceful use of outer space. Saudi Arabia will cooperate to achieve the success of this session in keeping with UN principles on outer space. We will also express our appreciation to Ms. Mazlan and OOSA for their efforts to realize the success of these sessions, I wish Dr. Othman all success upon her leaving of office.

Saudi Arabia has ratified the 5 UN treaties and principles concerning outer space. This reflects the consolidation of outer space law and the infrastructure in order to provide security and safety and prosperity for all the world and to avoid militarization and arms race in outer space. We urge countries to sign the treaties so that all countries with the participation of COPUOS to constantly review the situation and to ascertain how much they keep pace with developments in space activities, especially with the entrance of the commercial sector in space. We also believe it is important to comply with the Moon treaty. My delegation has participated in the open ended consultations concerning code of conduct on activities in outer space which took place in May and there was an initiative from the Europeans in order to enhance UN treaties and principles. This including new directives and guideline for security and safety in outer space as well as the capacity to predict activities so as to avert an arms race and also to diminish harmful intervention in outer space and to preserve the peaceful nature of outer space.

The different countries and organizations should work to reduce space debris in such a way as to avoid affecting developing countries. We believe it is important to urge countries to apply the guidelines to

reduce space debris. Here, we appreciate the efforts of certain countries which began indeed to take steps to reduce space debris in keeping with the guidelines. My delegation calls on those States and organizations which have space objects to constantly monitor these. And in the case of any space debris coming from that should do its own that is necessary to avoid this.

Saudi Arabia since the 20th Century has been benefitting from space activities; we have two stations for international communication, direct broadcasting. We have helped establish the first network, regional space network, ArabSat, in 1976. We also have a research centre, King Abdul Aziz Science and Technology City. We also have a station to receive and process satellite imagery in 1986 and we have numerous studies in the field of natural resources; agriculture, mining, mapping, water resources and disaster management. The King Abdul Aziz Science and Technology City has designed and built the first Saudi satellite, Saudi Sat-1. This was launched in 2000. This had carried 11 satellites and we hope to launch more satellites.

Saudi Arabia has concluded a number bilateral and multilateral agreements with many countries and international organizations in the field of space activities. My country is keen on following the development of knowledge, especially in the peaceful applications of space. We have a national plan in this respect, in order to implement development plans which provide safety, security and prosperity for our citizens and residents. The King Abdul Aziz City is implementing this plan in cooperation with the competent authorities in government and academic circles. In this regard, the King Abdul Aziz Science and Technology City has held a number of conferences and participated in many events in keeping with UN resolution 113/67 which stresses the importance of such cooperation and social awareness-raising. The King Abdul Aziz Science and Technology City has held a conference on space and international aviation towards the end of 2012. Seventy astronauts participated in that event. A space capsule was exhibited in keeping with the King Abdul Aziz Institution to encourage gifted people. We have a programme that allows students to undertake experiments in the International Space Station.

Mr. Chairman, my delegation supports the establishment of a new regional centre for science and technology education in Beijing in keeping with the decisions of the two Subcommittees. We believe that this will enhance capacity building in space science and technologies. We support UN activities for space applications. We especially stress those activities and programmes achieved by OOSA and its benefits have

been disseminated to cover all countries with special access to developing countries.

The definition and delimitation of outer space will allow us to avert disputes, especially in view of the commercial exploitation of outer space and the participation of the private sector as well as new emerging legal issues and this requires a study of the GSO and its uses and to apply the best ways and means, to realize a just and rational use taking into account, in particular, the needs of developing countries.

Mr. Chairman, in conclusion, our delegation extends its thanks to participating countries and hope that the objectives we seek will be achieved in a world of peace, security, stability and prosperity. We hope that our session will be crowned with success. Thank you Mr. Chairman.

The Chairman I thank the distinguished representative of Saudi Arabia for his statement. The next speaker on my list is the distinguished representative of Romania. You have the floor.

Mr. M. Piso (Romania) Thank you Mr. Chairman. Professor Yasushi Horikawa, let me express to you and to the delegation of Japan our satisfaction for seeing you again in the main chair of the Committee. I wish to extend the congratulations of my delegation to professor Filipe Duarte Santos from Portugal and to professor Piotr Wolanski from Poland for their activities as First Vice-Chair and Second Vice-Chair/Rapporteur.

I would also express the appreciation of the delegation of Romania to Professor Mazlan Othman. Mazlan was the only person who took twice the position of executive of the office and the only woman to do this since its establishment. Mazlan Othman was successful in the difficult task to re-shape the Office during and for the 2000's. I would like to address to Mazlan our warm congratulations.

Mr. Chairman and distinguished delegates, Romania is keeping the view, saying that any country might practically contribute to the space endeavour. Both the global character and the wide multi-disciplinary aspect of space activities clearly provide the possibility for most of the States and industries to become space actors. In the same time, the globalization of the industrial market, but also the possible global effects of natural threats put the States in the position of users and beneficiaries of results. With this view, this realm provides the basis for both wider international and industrial cooperation and also support for a longer-term sustainability of specific space activities.

As a European Space Agency Member State and a European Union Member State, Romania is participating to the European space research and development activities, but was also keeping and developing its own National Space Programme.

I will report that a new national space programme was launched in Romania during the last year. The purpose of this programme — called STAR — the acronym for Space Technology and Advanced Research — was to provide an appropriate longer term development (for the next 7 years of both scientific and industrial national capability of Romania in conjunction with the ESA progresses but also with the agreements concluding with space-faring countries and towards our global view of space development. This programme supports the participation to some ESA's programmes on science, robotic exploration, space technology and space applications, but also development and operation of micro-satellite missions and development of technologies, systems, sensors and equipment for space, aeronautics, and security research.

At the end of the last year, Romania joined a number of ESA programmes and I would like to mention the Euclid science mission, the Mars and other robotic exploration missions, the development of the upper stage of the new European launcher projects, the generation of the future European telecommunications satellite bus, the reusable in-orbit demonstrator, the development within the space segment for the ESA Global Monitoring for Environment and Security satellites called Sentinel and the meteorological Metop 3rd generation satellites.

I would like to mention that Romania is actively developing and utilizing the unique downstream services offered by satellite systems for space applications directed towards citizens, as telemedicine, disaster management, smart agriculture.

During the last two decades, Romania maintained a stable space policy by keeping three constant objectives this means participation to international space missions and programmes — in particular ESA, development of specific national projects and capacity-building at the national level.

Mr. Chairman, one of the space activities we are considering as priority for space technology concerns security — security for humankind at its largest meaning. In my opinion, all the four areas discussed by the expert groups, constituted by the Scientific and Technical Subcommittee, contain direct references to security issues.

In this respect, I would like to mention that Romania is one of the few countries which included

space within the legislation concerning critical infrastructures. During the last year, national law recognized critical infrastructures in several societal and economic areas, including space assets. In the same time, ROSA will develop research concerning the study of space assets as critical infrastructure.

I will also recall that Romania had organized the last May, together with ESA, European Commission and Eurisy, with the support of Romanian space industry, the second regional conference devoted to Global Monitoring for Environment and Security, in order to further contribute to GMES implementation at both political and industrial levels. The Conference conclusions emphasized the role of GMES — in the global community, and also mentioned the practical effects in development, this means one euro investment in this space application programme, is bringing four to ten euros in immediate societal development.

Mr. Chairman, space should be a global issue. Romanian space policy is not oriented towards national issues not only, but to integration not only in European, and in global efforts to explore and conquer space and to protect our Earth civilization. It was clear space efforts should be global. It was clear that even the most ambitious space powers were not already able to extend space exploration as all humankind initially expected during the first decades of the space era. We reached the Moon in seven years, but humans on Mars are still a legend for the next decades. It is crystal clear that space exploration and utilization will be successful if all nations and entities are developing coordinated efforts. And this might become the future role of the Committee, a role which will not be necessary assumed tomorrow, but that should be clearly considered and followed. It is also clear that industry, which is becoming more and more global will gladly follow this model. It was also clear that the new generation will probably be not happy if we, distinguished representatives, will not act for them and for their future and not only for the common present issues.

Mr. Chairman, I would like to mention that Romania is participating actively to global issues as they find through their partners and by international organizations as this committee, as the group on Earth observations, as the international astronomical federation. I would like also to ask for the permission to reiterate the fact that Romania, a country with tradition and development in the field of space science, space technology, space applications will continue to give space activities a driving role in the fields of national science and technology, development and security. Mr. Chairman, my delegation will ask you for taking the floor during this specific items of the agenda, we might be able to consider. Thank you

Mr. Chairman and distinguished delegates for your attention.

The Chairman I thank the distinguished representative of Romania for his statement. The next speaker is the distinguished representative of Libya. You have the floor.

Mr. R. Dukali (Libya) In the name of God the merciful, the compassionate, Mr. Chairman. At the outset on behalf of the Libyan delegation I would like to congratulate you sincerely on your re-election as chairman of COPUOS in this fifty-sixth session. I would like to express my deep pleasure at seeing you presiding over this Committee. I would like also to express my admiration and appreciation for the excellent manner in which you conduct the work of this session. The delegation of Libya is fully confident that with your wisdom and capacity and knowledge of the work of this Committee, will lead us to the best of results.

My delegation would like to hail the role played by the United Nations, especially the pivotal role of this Committee and the coordination and enhancement of international cooperation as well as global efforts towards the exploration of outer space as well as space activities and the bringing of benefits to people living on Earth with a view to overcoming the problems of climate change, disasters and the provision of, also, I would like to stress the provision of food and preserving the environment.

We would like to express our congratulations to the members of the bureau on their election and we thank them for the role they have played and efforts they have exerted in order to make this session a success and achieve the desired results. We would like to express to OOSA our appreciation and thanks for the role they have played and Ms. Othman and with a view to enhancing international cooperation in the peaceful uses of outer space and providing assistance to the developing countries in that respect. I wish Ms. Othman every success in her future endeavours.

So Chairman, recognizing the important role of space science and technology and applications in the sustainable development and in the social and economic fields, as well as in the preserver of the environment, the achievement of the Millennium goals, especially the management of resources, provision of food security, as well as other sources. In view of this, the delegation of Libya would like to stress the importance of enhancing international cooperation in use and of outer space and exploration of outer space in the service of peaceful uses of outer space as sustainable development for the benefit of all States regardless of their degree of economic, social or

scientific technological level. Paying special attention to their needs and priorities of the developing countries. This should be done on the basis of the principles, legal principles on the activities of States as well as the declaration on international cooperation in the exploration of outer space adopted by the General Assembly as well as other agreements and treaties adopted by the United Nations and relevant General Assembly resolution, especially that relating to the Vienna declaration on space and human development.

So Chairman, the delegation of Libya attaches special importance to the role played by the United Nations in enhancing international cooperation in the field of the peaceful uses of outer space for the benefit for humans and the development and codification of rules for the, all activities of outer space that will contribute to boost friendly relations among the States, through harnessing this kind of operation for the service of international peace and security as well as mutual interest and common interest to all States. We would like to stress in that respect the importance of enhancing the role of COPUOS according to the recommendations by the General Assembly. That will help us achieve the objectives of international cooperation in the field of the use and exploration of outer space for peaceful purposes.

This is all the more so with regard to the building of capacities and the application of space technology and the provision of assistance to developing countries in that respect. So, Chairman, the delegation of Libya realises the importance of international and regional cooperation in enhancing the role international law including space law. We have to adhere globally to the international commitments in that respect based on relevant and international agreements and relevant United Nations resolutions. This will pave the way for international cooperation in the use of outer space as well as carrying out space activities.

The delegation of Libya realizes the importance of developing international cooperation in regard to the capacity-building and increasing knowledge on outer space and the exchange of experience and the increase of assistance given by the United Nations and OOSA and member States and international organizations as well as the space agencies to all the States in order to enhance relations among the States. Of course there is a role also for academia in that respect. My delegation, Mr. Chairman, stresses the importance of more efforts at the national international level to limit the risks of use of nuclear power sources in outer space, especially in the geostationary orbit, as well as the low Earth orbit. We have to tackle all the problems including the legal problems relating to the collision of objects as well as other incidents and emergencies. We have to

lay binding international standards in order to reiterate space activities and preserve international peace and security.

The delegation of Libya, like many States of the world, especially the developing countries, has concerns about the increased population of space debris in outer space. We believe that we have to adhere to the guidelines on the mitigation and control of space debris formulated by General Assembly. Regional and international efforts have to be exerted in order to limit this problem. We have to intensify efforts to implement the mechanisms and take national measures voluntarily to mitigate and limit space debris.

The delegation of Libya stresses the importance of enlarging international efforts in order to avoid the collision of near Earth objects. We have to take measures in order to early detect these objects and track them precisely and limit and mitigate their affect and danger. We believe that we have to enlarge the global net to detect and describe this near Earth object and develop detection capabilities and information exchange mechanisms. Mr. Chairman, the delegation of Libya emphasizes the importance of enhanced international cooperation to limit the danger of this space debris and we have to use technology in order to manage these problems and achieve the desired objectives.

In that respect, we stress the important role played by the United Nations programme on the use of information to respond to disasters as well the relevant regional offices. We believe that we have to use rationally the geostationary orbit because this is a limited resource. Priority should be given to the activities would help us achieve the Millennium goals. That geostationary orbit should be devoted to all States taking into particular needs and in particular taking into consideration the particular needs of the developing countries. My delegation believes that we have reach a national consensus on the definition of outer space and air space. The aim is to avoid the legal problems that might arise as a result of difference of interpretation of relevant instruments that will enhance the sovereignty of States over their space and we should then be able to avoid the non-peaceful use of outer space because that will constitute a danger to international peace and security as well as a problem for the space environment and that will also have international cooperation in that respect.

The State of Libya, through its membership in this Committee COPUOS, Libya looks forward to making maximum use of the programmes and the efforts exerted by the OOSA with a view to enhancing the mechanisms and the relevant activities in that respect. We would like to make use of the surfaces of

outer space and use that for the sake of achieving development. Finally, I would like to thank you for your attention and I would like to thank, express once more again, our best wishes for success in this August committee. Thank you very much.

The Chairman I thank the distinguished representative of Libya for his statement. The next speaker on my list is the distinguished representative of Cuba. You have the floor.

Mr. M. Aguilera (Cuba) Mr. Chairman, distinguished delegates and guests. On behalf of the Government of Cuba, I would like to start off by extending special congratulations and gratitude to the director of the office, Dr. Mazlan Othman, for her selflessness and devotion to the COPUOS family. The family will always remember her and we wish her the best in her future. Cuba appreciates and supports the work done by the Office for Outer Space Affairs and I'd like to take this opportunity to stress the efforts of the Secretariat for the organization of this session.

My delegation would like to congratulate all member of the Committee and in particular, the delegation of Russia for the celebration of the fiftieth anniversary of the first woman's flight in outer space. My delegation would like to congratulate you Chairman on assuming the chair for the fifty-sixth session and we can assure your will to contribute to your management to help achieve the aims we have set for ourselves. Before addressing the items of the agenda, my delegation would like to extend condolences and solidarity to the Governments and peoples of those countries that were affected by extreme events between the different sessions of the Committee generating loss of human life and material loss, including hurricanes in the Caribbean, hurricane Sandy in particular, earthquakes in China, Iran, Afghanistan and Soloman Islands, the meteorite in the Chelyabinsk region in Russia, tornados in the United States and the recent floods affecting various countries in the European Union.

Facts such as those, show how important it is to strengthen the use of space technology for peaceful purposes in order to protect human life and our planet. Mr. Chairman, Cuba welcomes Costa Rica, Armenia and Jordan, congratulating them for becoming members of COPUOS. My delegation fully endorses the statement made under this item by the distinguished Ambassador Guatemala speaking on behalf of GRULAC. And we will thus now only refer to a couple of points. Cuba defends the sovereign principle of all States to participate in exploitation and use in outer space for purely peaceful purposes with the conviction of the benefits for human development. In that context, my delegation reaffirms its decision to continue

contributing to space research and applications for peaceful use of outer space. As well as our adherence and full observation of the principles and agreements governing activities of space in the exploration and utilization of outer space. Cuba believes that the development of space science and technology are of significant importance for the present and future of humanity as reflected in the final declaration of Rio+20.

My country attaches particular interest to the use of space technology in disaster prevention as well as danger, vulnerability and risk assessments. My delegation stresses the importance of international, interregional cooperation for science and technology progress to be made available to all countries, especially those countries in development through programmes and activities, capacity-building in science and technology and in that same context I would like to appeal for an end to put to the air blockade of the United States Government against our country for more than 50 years with negative effect on the use of space technology progress for the benefit of our people. Cuba stresses that the prevention of the arms race and the ban on placing or using arms in outer space is of vital importance for international peace and security.

The reason we stress the utmost importance of observing existing agreements on arms limitations and disarmament in outer space as well as the existing legal framework regarding the use of them. We repeat our position based on the principle of the elimination of all nuclear weapons and abolishing the arms race in outer space. For that, we believe that we need to continue further negotiations in a multilateral framework with legislation banning militarization and placing of nuclear weapons in outer space. In view of my delegation, there's nothing that is more practical and pressing than to address that crucial problem including all international organizations involved, including COPUOS. My delegation would like to reaffirm the need to continue strengthening the legal framework for outer space with a view to guaranteeing space activities being harmless, secure and transparent.

My delegation attaches particular importance to an analysis of various topics on the current work programme on the matter of questions related to Earth observation with satellites. Special attention should be devoted to indiscriminate uploading of satellite images that are high resolution on the Internet, especially where there is a risk for national security of countries. And we furthermore condemn once again the vast network of spy satellites to obtain information to the detriment of other countries and not for the benefit of humanity.

Regarding space debris, the Subcommittee should find a solution to the mandate under resolution 6597 of the United Nations General Assembly requesting that further attention be devoted to the problem of collision of space objects, including those using nuclear power sources because of the high risk for humanity as well, has a harmful effect on the environment. Cuba attaches top importance to the question of the use of the geostationary orbit which is of importance for the developing countries and we expect to see the question discussed further here in the committee. For that purpose, we support the proposal made by other delegations for the creation of working groups or panels that are intergovernmental, that are technical and legal on the equitable use on the geostationary orbit. On the question of nuclear power sources in outer space, my delegation believes that in the light of progress made in the Scientific and Technical Subcommittee, we need to review the principles for the use of such sources so that steps can be taken for the elaboration of a binding instrument guaranteeing responsible use.

Mr. Chairman, before concluding, once again we would like to reaffirm our support of the principle of access to outer space in conditions of a quality benefitting all States without any discrimination and we reaffirm our conviction as to the need to preserve outer space for solely peaceful purposes. COPUOS' endeavours are of the essence for that purpose. Thank you.

The Chairman I thank the distinguished representative of Cuba for his statement. The next speaker on my list is the distinguished representative of the Republic of Korea. You have the floor.

Mr. H. Cho (Republic of Korea) Thank you Mr. Chairman. Let me begin by congratulating you for your excellent leadership in steering our deliberations since the last session. I am confident that, under your able guidance, our discussions in the current session will also make tangible progress in our common endeavours.

Taking this opportunity, I would like to extend my deep appreciation to Dr. Mazlan Othman for her dedicated service as Director of the Office for Outer Space Affairs over the past years. I wish her all the best in her future endeavours.

Mr. Chairman, the COPUOS has played a crucial role in ensuring the peaceful uses of outer space and promoting a variety of benefits for the whole humanity. As the space technology gets sophisticated, the importance of the COPUOS in our sustainable development grows higher than ever before. In this vein, we hope that the contributions of the Committee

to our efforts to foster sustainable development in connection with the outcome of the Rio+20 Conference and the post-2015 development agenda will be further enhanced.

Mr. Chairman, since mid-1990s, the Republic of Korea has successfully developed multi-purpose satellites named KOMPSAT and Science and Technology Satellite series called STSAT. After the successful launches of KOMPSAT-1 in 1999 and KOMPSAT-2 in 2006 respectively, KOMPSAT-3 was successfully launched in May last year. Equipped with a high-resolution electro-optical camera, KOMPSAT-3 has been providing high spatial resolution image data over the world. These image data are now being used for various purposes such as environmental monitoring, precision agriculture, disaster management, natural resource conservation and geo-information system, to name just a few.

KOMPSAT-5, the first Korean radar satellite carrying the synthetic aperture radar payload, will be launched in the second half of this year. It will extend the national application scope of satellite remote sensing by providing weather-independent Earth observation data with a very high spatial resolution. Since 2010, Korea has been running a geostationary satellite for communication experiment, ocean-colour monitoring, and meteorological observation. The meteorological image sensor covers a wide range of the Asia-Pacific region encompassing over 30 countries, where more than 20 billion people are living. The very high temporal image data acquired almost in real time have contributed to the improved weather forecasting and climate change studies, particularly in the Asia-Pacific region.

As part of the Science and Technology Satellite series named STSAT, STSAT-3 has been being developed since 2006. STSAT-3, to be launched soon, will carry Multi-purpose Imaging System for surveying our Galaxy and for measuring the temperature change of the earth surface.

Developing a Space Launch Vehicle has also been a priority for Korea. In January this year, Korea celebrated its first successful launch of the Korea Space Launch Vehicle. Its payload successfully reached its mission orbit and is currently observing space and measuring space environment. The Republic of Korea will also develop a 3-staged space launch vehicle system equipped with liquid rocket engine systems. If this Program is successfully completed, the Republic of Korea will pursue its Lunar Exploration Program using this space launch vehicle. The objective of the Program is to launch a lunar orbiter and a lander, and see the lander land on the moon surface in the near future.

Mr. Chairman, the Republic of Korea has been active in further promoting cooperation with our partner countries in space field. The Korea Aerospace Research Institute, or KARI, has hosted its annual International Space Training Program since 2010. The fourth Program was held from early this year with the participation of 27 experts from 14 countries. The training program includes the course-works on satellite systems, satellite applications, space science and space policy, among others. We will continue this training program, hoping that it will contribute to promoting the utilization of space technology for peaceful purposes in the participating States.

In addition, the KARI has provided satellite data and other informational products to support disaster relief and mitigation efforts of the globe, since it joined the "International Charter Space and Major Disasters" in July 2011. The Republic of Korea has participated in various regional space activities as well. We have provided data from the KOMPSAT for the regional disaster monitoring initiative called Sentinel Asia, and the KARI hosted the 5th Joint Project Team Meeting for Sentinel Asia in November last year with 80 participants from 15 countries. We will continue our collaboration with other partner countries in the region to further enhance regional cooperation in space activities including the UN ESCAP-led activities and the Asia-Pacific Regional Space Agency Forum which celebrates its 20th anniversary this year.

In conclusion, my delegation would like to reiterate that we will continue to make our contributions to the efforts of the international community to make use of outer space peacefully for the humankind, and stand ready to further strengthen international cooperation to this end. Thank you.

The Chairman I thank the distinguished representative of Republic of Korea for his statement. The next speaker on my list is the distinguished representative of Viet Nam. You have the floor.

Mr. V. L. Do (Viet Nam) Thank you Mr. Chairman, Distinguished Delegates and Representatives, on behalf of Vietnam Delegation, I would like to express our sincere thanks for all efforts made by Mr. Chairman, Director of Office for Outer Space Affairs and Secretariat, the Chairmen of Scientific and Technical Subcommittee and Legal Subcommittee, its subsidiary bodies and working groups so that this 56th session can be organized successfully. We also strongly believe that under leadership of Mr. Chairman and heads of institutions of our Committee we will fulfil our agreed plans.

Allow us to take this opportunity to express our high appreciation of Dr. Mazlan Othman contribution

to success of our committee and we wish her happiness and well in the future.

In this occasion, we also warmly welcome very nice milestone event of the first woman cosmonaut Dr. Valentina V. Tereshkova, who took the space flight on 16 June 1963. This historic 50th anniversary will encourage our young generation in general and woman in particular to explore space for peaceful use.

Mr. Chairman, distinguished delegates, Viet Nam Government and Vietnam space technology community are very committed in promotion of space technology for economic and social development. We have launched two communication satellites, which help our people in remote areas to access information. Last month we launched the first Vietnam Research and Education Satellite for earth observation and environment monitoring. In addition to that, we are in the process to improve our space and IT infrastructure for effective processing of satellite images to serve earth observations and environment monitoring. In this opportunity we would like to thank Japan, France, Belgium, USA, and Russia for valuable contribution and support in the above mentioned issues.

For effective promotion of space technology and international cooperation, we realize that we should improve our legal institutions. By that, we highly appreciated activities of Legal Subcommittee to help, support, and share experience with us to draft our first Law on promotion of space technology for peaceful purposes. In addition, we are in preparation process to join UN Outer Space Treaties and to sign Frame Work on Agreement and MOU with some governments and institutions on the issue.

Mr. Chairman, distinguished delegates, all of us acknowledge very clearly that we are facing with challenges such as food security, energy security and climate change. We also note that space technology is very effective tool to help us to solve problems to tackle with those challenges. In this regard, we appreciated very highly missions of our Committee and we do hope our committee has realistic and practical action plans to fulfil these missions.

We would like to take this opportunity to inform you that during last time The Asia-Pacific Regional Space Agency Forum has been promoted effective cooperation on space technology for participants of the region. This Forum has encouraged participants in the region to share experiences as well valuable thoughts and insight. This year, the 20th session of The Asia-Pacific Regional Space Agency Forum will be held from 3 to 6 December in Ha Noi, Viet Nam. This session will be jointly organized by the Vietnam Academy of Science and Technology as well as the

Ministry of Education, Culture, Sport, Science and Technology of Japan and Japan Aerospace Exploration Agency. We warmly welcome you and invite you to participate in the forum in Hanoi, Vietnam. Thank you Mr. Chairman, delegates and representatives for your attention.

The Chairman I thank the distinguished representative of Viet Nam for his statement. The next speaker on my list is the distinguished representative of Luxembourg. You have the floor.

Ms. M. Hofmann (Luxembourg) Mr. Chairman, ladies and gentlemen, first, let me to thank you for the opportunity to speak to you as representative of Luxembourg in its observer status. In my statement, I shall concentrate on 3 items. First, the Government of Luxembourg intends to apply for the membership status in the COPUOS. This step would enable to stay in permanent contact with your activities which would enhance the exchange of mutual information.

Second, Luxembourg is not a large country but it hosts one of the significant operators in the area of space communications. The SES owns and runs a fleet of 53 GSO satellites which serve in the area of broadcasting, telecommunication, and offers various corporate and governmental solutions. The SES-6 was launched from Baikonur, Kazakhstan only on 4 June this year. Furthermore, Luxembourg shares — together with Switzerland — the present presidency in the European Space Agency.

Third, Luxembourg, together with the SES, supports numerous educational projects, typically in the area of space communications and the law of outer space. In the framework of the agreement between the University of Luxembourg and the SES, a SES Chair in Satellite Communications and Media Law was established in 2011 which I have the honour to chair. The Chair offers master education — in English — in the area of European and International law of Space communication and prepares the students to start working in the specialized law firms or international and European institutions. This year, our team participated for the first time in the Manfred Lachs moot court and our students won the second position in the European round.

In the research area, we concentrate on the regime of use of the geostationary orbit and the management of frequency spectrum. We have started organizing annual international multidisciplinary workshops on legal and technical aspects of space communications. The first book analysing the development after WRC-12 appeared only two weeks ago. The second workshop devoted to dispute settlement procedures in space communications took

place in May this year, and the next one, most probably devoted to the question of liability for navigation services is planned for 2014. Mr. Chairman, ladies and gentlemen, Luxembourg intends to apply for membership in COPUOS. I am convinced that it will be a right step in the right direction.

The Chairman I thank the distinguished representative of Luxembourg for her statement. The next speaker is the distinguished representative of World Space Week Association. You have the floor.

Mr. R. Timmermans (WSWA) Thank you very much, Mr. Chairman, for the honour to address the COPUOS General Assembly. My name is Remco Timmermans, Executive Director for the World Space Week Association.

I would like to take this opportunity to thank the committee for hosting the historic panel of women in space on Wednesday. It is important to hear the often very personal stories of the people that help progress humanity in outer space. It is the passion expressed by these people that will continue to trigger new generations of space explorers. With the help of women spaceflight heroes like Mrs. Tereshkova and Liu Yang I am sure many youth around the world will be inspired for a career in technology and international cooperation.

As you know, Article I of the Vienna Declaration of UNISPACE III in 1999 recommended many steps to foster the peaceful uses of space. Recognizing the need to inform the public about these uses, Article II recommended that the UN General Assembly declare October 4 to 10 annually as World Space Week. The General Assembly made that declaration, inviting all member states to celebrate each year the contributions of space to the betterment of the human condition during World Space Week.

After the declaration, working closely with OOSA, our Association focused solely on the task of encouraging the global space community to celebrate World Space Week. The community responded with enthusiasm. Space agencies, aerospace companies, planetariums, schools and many other organizations began holding events during World Space Week. They did so not only to be part of a unique international celebration of space, but to gain leverage in space outreach and education. This leverage comes from synchronization: by holding events at the same time, events reach a larger audience through media coverage of the world-wide celebration.

Since its first occurrence in 2000, World Space Week has become the largest annual space event on Earth. Last year's celebration had 685 events in 66 nations, the largest number of participating

countries ever. We are pleased that this event continues to grow, 14 years after it was born here in Vienna at UNISPACE III. We congratulate this committee and all delegations for this achievement, because your support has enabled the growth and impact of World Space Week. We especially appreciate the cooperation and support of OOSA under the leadership of Dr. Othman.

Yet, we do not rest. In spite of this success, many people across society today still do not understand the benefits of space to their lives, and many students have not been inspired by space to excel in school. Keeping in mind the vision of the Vienna Declaration, World Space Week can address these needs through greater participation and resulting media coverage. With this in mind, we will strive to grow this event to a new level.

In close cooperation with our partners, the International Astronautical Federation, World Space Week will host a panel discussion on the future of space education and outreach at the International Astronautical Congress in Beijing later this year. I would like to thank the distinguished representative from China for his acknowledgement of World Space Week as a key contributor to this important congress. With our presence at the congress, we will ensure to meet these expectations and contribute to its success for China and the world.

The Association is a non-profit NGO, driven solely by voluntary action by those who support the great work of this Committee. Volunteers from across the globe and voluntary contributions have enabled the success of this event. Major sponsors of the past year were EADS Astrium, the Secure World Foundation, the Heinlein Prize Trust, and actor Tom Hanks.

Our goal is ultimately to make the celebration of World Space Week part of the annual plan of every space organization globally and to ask all teachers throughout the world to use space to inspire students that week. With support of partners like the International Astronautical Federation and Secure World Foundation we hope to attract participation of many sectors of society. Indeed, space benefits all and everyone should learn about it and celebrate it.

Mr. Chairman, the vision of the Vienna Declaration is today an event of great scale and of value to the committee in communicating its important work to the general public. I am pleased to share this report with you today and would like to encourage the committee and all its distinguished delegates present here today to continue to work with us on spreading the excitement about space with millions of youth, students and the general public. Thank you very much.

The Chairman I thank the distinguished representative of World Space Week Association. The next speaker on my list, I recognize the distinguished representative of Greece. You have the floor.

Mr. V. Cassapoglou (Greece) Thank you Mr. Chairman. I use the possibility for the full members to have the floor when we are list of speakers from full member States is finished and then the observers States or entities follows. So, in view, so it is not an intervention, but I ask from the morning to speak on this number 4 agenda item, General exchange of views to make a reference to the organizational problems we have within the Committee and the two Subcommittees. We discussed on this specific issues last April and I would like to add in the plenary some ideas we have because it is a need to upgrade the functionality and the effectiveness of our Committee and two Subcommittees.

Mr. Chairman, we have said the way in which we are working over the last couple of years has shown us there is, as it were, operations which are somewhat less than optimized given the economic crisis having an impact on everyone not just the U.S., Europe, the whole world. Spending more than one week, 5 working days is, I would say something very painful for our pocketbooks. The Ministries of Foreign Affairs just don't have enough money to pay for weekends in Vienna. It's very important to recognize. So start off with I think that we have to limit the duration of our meetings from Monday to Friday evening. There are some States which are very close to Vienna prefer rather than to pay 3 days of hotel per diem, to pay an air ticket to the colleagues in question, then have people go home to their capital and then return Monday morning. To save on these, at least half the per diem that we otherwise be paid for Vienna accommodations. We need to streamline the agenda, in the plural.

There are ever so many items in the agenda of this Committee as well as the other body which could be created differently, could be designed to unfold differently. I don't know how we should go about this but the need for reorganization, administrative reorganization is blatantly clear. Possibly we should try to see how we could go forward on this. I remember the first time in 1996 you proposed a reorganization of the system which prevailed before and now we have this system which we have been following for years now.

The time has now come, I really believe to do something about this. Possibly we should set up a small working group to reorganize things. Something along those lines because it is really very expensive for all Governments to spend weekends here in Vienna and

then if there are entities which are not members which come here and to, it they stage technical presentations from whatever and say to us well without paying anything, what with the cost of interpretation, cost of operation of the conference rooms, all of those expenditures, we could possibly tell them they should cut their presentation short, limit them to 5 minutes. And distribute them .I don't want to refer to give representatives or organization, one trade, one commercial and one other one. They spend to so much of our time making their presentations. Well, they should make those presentations either in writing or electronically so that we could be posted to the advance of their activities. But here we have a political forum, a parliamentary sort of format. And we really have to seek to affect savings.

Firstly, man hours must be saved and that should be followed by savings at all levels. So, through you Chairman, I would like to ask that the chair pronounce ruling on this or elicit an exchange of views in the room so that we can see how we can indeed operate changes in the Committee and its two Subcommittees in the very near future. Thank you very much for your attention. Yes, one further point. The views of my country, I'd like to point out, are shared by other European and non-European countries as well. Thank you.

The Chairman I thank the distinguished representative of Greece for his intervention. The next speaker is the distinguished representative of France. You have the floor.

Ms. Paradis (France) Thank you Mr. Chairman, ladies and gentlemen, colleagues, at the outset, Chair, I would like to express once again this year for the satisfaction to see you heading this fifty-sixth session of the Committee on the Peaceful Uses of Outer Space and you can count on full and active participation on our part, contribute to debates constructively and in a consensus seeking way. I would also like to thank the director Ms. Mazlan Othman as well as the teams from the OOSA for the quality of their preparatory work for this COPUOS session as well as at that of the two Subcommittees session sitting 2013. A part from this fifty-sixth session of the Committee, I would also like to express to Ms. Othman our full gratitude and to say that we sincerely thank her for her dedication and professionalism throughout all the years she has headed the Office for Outer Space Affairs.

This session has been marked by a very outstanding event indeed organized by OOSA, that of the celebration of fiftieth anniversary of the first flight of a woman in outer space, that of Ms. Tereshkova. Was really an honour for all of us to meet her and to hear her personal story which was historic and moving

as well as that of various women fully committed in outer space. I'd like to take this opportunity, Chairman, to read the message penned for this purpose by Ms. Claudie Haigneré. It is a true honour to say in response to the event of the 12th of June. COPUOS speaks shortly to state I am profoundly grateful for the personal stories shared at this event, especially that of Ms. Tereshkova. We would like to recognize her determination, courage, 50 years ago made it possible for her to be successful in conducting this incredible flight in solitary in spite of the daunting physical conditions and technical conditions prevailing at the time. We were able to overcome new frontiers for all of mankind. I would also like to say that this will open the door to other women, indeed. And who have dared to work in outer space, this over and above various prejudices which have prevailed. And we would also like to say that we continue to share the challenges and emotions of this extraordinary epic journey which is the source of responsibility for astronauts. And indeed, Ms. Tereshkova gave us a very inspiring contribution and made many women hope to become astronauts. I would like to say thank you to her and for the organizers of this event.

France has also contributed to the celebration by proposing the projection yesterday of the documentary developed by the CNES on women in outer space. The title of this is "No Gravity" Chairman, my delegation would like to join fully support the statement made by the EU as pronounced by the representative of the EU in Vienna during the debates this session. We are indeed very attached to the universalization, the improvement of the implementation of the rules or the context of space conventions with respect the three major principles which must govern space activities with freedom of access to outer space for peaceful purposes, the preservation of security and integrity of orbiting satellites and taking into account of the right of legitimate self-defence on the part of States.

For this reason, the French delegation attaches special importance to the work of COPUOS and is satisfied to know the quality of the reports of the Scientific and Technical Subcommittee and the Legal Subcommittee as well. The Committee is also playing a very considerable role when it comes to stepping up international cooperation in outer space activities, encouraging more nations to join this work. We are happy to note the succession of Costa Rica, Armenia and Jordan in 2012 and we take note of the candidatures of Ghana and Belarus who have expressed the wish to join our Committee. France is, furthermore, particularly attached to the principle of long-term sustainability of activities in outer space and support the related initiatives. Given the important challenges and threats relating to the proliferation

space debris, it is the security of space activities. The integrity of satellites, of the International Space Station and of the men and women on board which can at any point in time be put on the line.

In other words, it is the use of outer space which is in of itself threatened. Since this is a central theme for discussions, we fully support that from the very beginning, the work of the working group on the long-term sustainability of activities in outer space. The first results of this working group and its four expert subgroups is discussed during this plenary session, highly awaited because this deals with very important subjects having to do with the sustainable development of Earth, space debris, space meteorology and the regular aspects of these issues.

Chairman, France is very sensitive to the issues having to do with sustainable development, water and global warming which are very important on the agenda of COPUOS. In partnership within Europe and bilaterally as well, France conducts for many years now, very active and ambitious space policy, contribute to the development of space tools and service of science and sustainable development of our planet. This is a very important challenge indeed. We are working continuously with our partners to implement a space applications and harness them to perform the work of its necessary for achieving concrete requirements of this planet. The international charter and space and major disasters initiated in 1999, ESA, and it is a member agency is hosting 15th member this year. Roscosmos has joined this club of space agencies rapidly providing a response following a major disaster. In the interest of spirit of general spirit of the health and benefit of the population's difficulties and this involving various players in humanitarian activities, civil security and UN agencies.

I would also like to stress the importance of the working rule of this Committee in stimulating the general exchange of information on national legislations when it comes to the exploration of peaceful uses of outer space. France as you know has developed specific legislations regard pursuant to the major UN international outer space treaties according to which any launching operation or orbiting control operation with satellite conducted by, operated by, French operator or from our national territory must be subject to prior authorization issued by the French Government after a CNES vetting. France pays tribute to the very good quality accomplished during the meetings of the Legal Subcommittee on national legislations. They have given us a practical tool that we have to use and update. While we hope that this text indeed has very high visibility, the General Assembly

and we support without reservation, that draft resolution that will be presented during the session.

Indeed, we would also like to refer to the project of the code of conduct on activities in outer space. At the very beginning we support this initiative to promote on the basis of voluntary measures of confidence and transparency the security of outer space activities whether they be civilian or military. We are happy to note the substantive exchange initiative that took place last May in Kiev. Intend to continue to actively participate in discussion in this text and hope to be able to do this very soon in upcoming consultations which I hope will be as broad based as possible.

And finally Chairman, the thematic issues in COPUOS and the very heavy agenda of this Committee and its Subcommittees have been dissociable for us from the issues of method and organization of our work. This has extensively been referred to at the last Legal Subcommittee in particular. The streamlining observation of our work is ever more important given the fact that the long-term sustainability in outer space issues are going to be mobilizing us ever more in the upcoming sessions. You may count on our delegation's support in the work to come. Thank you very much.

The Chairman I thank the distinguished representative of France for her statement. The next speaker is the distinguished representative of the Space Generation Advisory Council. You have the floor.

Mr. C. Vasco (SGAC) Thank you, Mr. Chairman. The Space Generation Advisory Council would like to congratulate you on your great success in your position. We also take the opportunity to thank Mazlan Othman for her support throughout all these years to the young professionals and students in the space sector whom we represent. We wish the best in her coming endeavours.

Mr. Chairman, we appreciate having the opportunity to report on our activities, as we have been very busy since the last meeting. The past 12 months for SGAC have seen a continued growth of the organization. Each year, we strive to serve our purpose of acting as the international enabler for the next generation of space sector leaders, to contribute their opinions to the space policy debate. In the past year, we have done this by: contributing to conferences for young professionals and university students, producing more intellectual space contributions from the young perspective through our year-round project groups and by giving unique opportunities to young professionals and students to be heard internationally

SGAC not only attended various conferences all around the world, but also organized two major events:

our annual Space Generation Congress and the Space Generation Fusion Forum. SGAC celebrated its 11th annual Space Generation Congress in Naples, Italy last September. The event was one of the most successful congresses up to date. 130 young adult delegates from 44 different countries congregated to discuss pertinent space topics as well as to hear from today's international space sector leaders. Our featured speakers included heads of various international space agencies, and distinguished specialists from industry, academia and space non-profit institutions.

For example, SGAC had the pleasure and honour of hosting the leaders of the national space agencies of Japan, Germany, Canada, Mexico and Italy. The reports from the discussions were released in January, and the perspectives of the delegates were shared here in February at the Scientific and Technical Subcommittee. At this point we are proud to note that some of the reports generated at our Congress have recently been accepted at the 2013 International Astronautical Congress in Beijing, China.

The organization considers the Space Generation Congress 2012 to be a great success not only in respect to the event-generated content but also because SGAC succeeded in offering 28 scholarships to young adults from 15 countries to attend. The highly qualified recipients of these came from Australia, Canada, China, Germany, Ghana, Iran, Italy, Japan, Korea, Nigeria, Poland, Spain, Uruguay and USA — emphasizing our truly global network

SGAC is looking forward to another excellent congress in 2013 in Beijing, China. We will soon open the call for applications to our 2013 event, and sincerely hope that all delegations will encourage young professionals and university students in their space sectors to apply. The second big event for SGAC this year was the 2nd Space Generation Fusion Forum, hosted by the Space Foundation. The Fusion Forum was held in conjunction with the National Space Symposium last April 7 and 8 in Colorado Springs, USA. It gathered a competitively chosen group of around 50 top young adults with government, industry and academic backgrounds. Intense, interactive panel discussions among these selected young adults were moderated by today's international space sector leaders and gathered the perspectives of tomorrow's space leaders on key space issues. The results of the Space Generation Fusion Forum will be reported in a technical presentation by SGAC here at the UNCOPUOS, as well as at other international conferences.

SGAC is also proud to report on the continuation of the Global Grant Programme, this year awarding 6 scholarships to people from all over the world to

attend the Space Generation Fusion Forum. SGAC brought a total of 8 delegates to attend this big event, and supported their participation at the 29th National Space Symposium. These candidates came from Canada, France, Germany, India, Japan, USA and Vietnam.

By facilitating access and providing funding to world events, SGAC is continuing to fulfil its primary goal set out for it at the UNISPACE-III conference in 1999 to enable the next generation of international space leaders to share its perspectives on space. In numbers, SGAC awarded a total of 47 scholarships to people coming from more than 20 different countries around the world in 2012. It is our goal to continue being able to offer such opportunities to our members. In addition to helping our members to attend these conferences to contribute their views, SGAC further developed its year-round volunteer-led projects and created 4 new projects groups in 2012. These projects have produced excellent contributions to the space community.

The SGAC group on Space Technologies for Disaster Management has focused its energy in the past year on communication tools to attract new volunteers and create awareness for the role of space technologies before, during, and following disaster events. The team of volunteers is actively using social media and self-made videos to keep their members and followers informed of current events in the disaster management field and to generate awareness for important topics. Active members have also participated in the Space Generation Congress in Naples, the recent Space Up conference in Paris and will be present at the IAC and SGC in Beijing. They will co-host a one-day workshop with the Youth for Global Navigation Satellite Systems group on GNSS for Disaster Management.

The Near Earth Object (NEO) group, which continues to contribute and support the work of COPUOS Action Team 14, held the 5th annual edition of its successful "Move an Asteroid" technical paper competition series, recently opening the applications for a new edition of the competition. The winner will present not only at the Space Generation Congress but also at a dedicated 2-hour NEO event during IAC which is organized by the NEO group to bring the topic of planetary defence closer to the delegates. Further, the group is preparing for its 2nd edition of the Find An Asteroid Search Campaign, during which, in collaboration with IASC — the International Astronomical Search Campaign, SGAC teams participate in an online hunt for asteroids in telescope images. Last year, SGAC teams discovered 3 new main belt asteroids. Last but not least, the NEO group

actively contributed to the 2013 Planetary Defense Conference which was held in April in Arizona.

The Space Safety and Sustainability (SSS) project group, under SGAC, continued to expand on its projects in space safety and sustainability related endeavours. The SSS group currently runs both technical and policy projects that address the topics of Active Debris Removal (ADR). The SSS project group through its yearly projects have presented their research at several conferences including the 63 International Astronautical Congress, 2012 Beijing Space Sustainability Conference and more recently the 6th European Conference on Space Debris and the 6th IAASS Conference "Safety is not an Option". The SSS group together the IAASS once again organized a technical paper competition on space safety, which granted the winners a fully paid trip to the 6th Annual IAASS Space Safety conference.

The SGAC's Youth for Global Navigation Satellite Systems group continued to support the public education and outreach of the importance of GNSS systems with many activities in the works. The YGNSS group is updating the "Global Navigation Satellite Systems (GNSS) and youth", brochure with the next version to be available in other languages. The brochure defines GNSS, explains how it works and describes its applications. It also discusses the compatibility and interoperability of the different GNSS systems; and provides information on training and capacity building opportunities for young adults. The YGNSS group will collaborate with the Space Technologies for Disaster Management group to host a workshop in September 2013 in conjunction with the Space Generation Congress, providing a hands-on, interactive discussion to educate students and young professionals on how GNSS is used in disaster management.

Established in 2012, Space Law Project Group's current major research project is reading the entire preparatory works of the 1967 Outer Space Treaty, consisting of draft articles, summary records, verbatim records, and other documents from the UN General Assembly and of COPUOS and its two subcommittees. Eight members are actively researching these documents via the OOSA online database, and will present their work and its implication on current issues in space law at various international academic and professional forums, including this year's IAC in Beijing.

The Small Satellites Project Group (SSPG) has been represented in different conferences, including the 9th IAA Small Satellites Symposium for Earth Observation, Berlin, (where a paper was presented), the European Interparliamentary Space Conference (EISC)

Workshop in Redu (Belgium). The Small Satellites Project Group also plays an important role on social media, selecting the most relevant news within the Small Satellite community, and sharing them with SGAC network and the public in general, with the aim to inform and promote the use of small satellites.

The Commercial Space Project Group was founded as a new year-round project in 2013 to create a young generation think tank on commercial facets and entrepreneurship aspects of space. Working closely with the Federal Aviation Administration (FAA) Center of Excellence for Commercial Space Transportation and the International Academy of Astronautics (IAA) Study Group on Public/Private Human Access to Space, the project group will release 4 publications on industry and market aspects in Europe, China and Germany. It is also continuing the Emerging Commercial Space Paper competition to its second year, which will enable the winner to participate in the International Astronautical Congress.

Apart from our project groups, SGAC also participated this year in many other activities and in partnership with other organizations such as the International Astronautical Academy (IAA), which opened for the first time in their history their study groups to young professionals and students in the space sector from SGAC. SGAC has also spent the past year strengthening its strategic partnerships and institutional ties. Since June 2012, SGAC has developed new formal relationships, documented through a Memorandum of Understanding with Austrian Space Forum, ARCSTEE (African Regional Centre for Space and Technology Education in English), SpaceTec Partners. Further cooperation have already been drafted, and will be signed in the coming weeks.

SGAC is on an exciting trajectory and all the successes would be impossible without kind and generous assistance of the organizations who support our activities. We would like to thank all international partners of SGAC who contributed to the organization in the past year, and in particular our platinum and gold level partners; the Secure World Foundation, NASA, The Space Foundation, Lockheed Martin, DLR, Society of Satellite Professionals International SSPI, Analytical Graphics Inc. AGI

In conclusion, Mr. Chairman, the SGAC community has been very active since last June. As an organization, the output generated in 2012 and 2013, shows that SGAC is still gaining strength, now 14 years since its inception at UNISPACE-III. The organization, with more than 4000 people in its network from over 100 countries is looking forward to continuing this upward trajectory for SGAC in the coming year, and invites all Member States to support

their young people in participating with us on the world stage.

Thank you, Mr. Chairman.

The Chairman I thank the distinguished representative of the Space Generation Advisory Council for his statement. We will continue our consideration for agenda item 4, General exchange of views this afternoon. Distinguished delegates, I would now like to continue our consideration for agenda item 5, Ways and means of maintaining outer space for peaceful purposes. Are there any delegations wishing to make a statement under this agenda item at this time?

I see none

We will therefore continue and hopefully conclude our consideration for agenda item 5, Ways and means of maintaining outer space for peaceful purposes this afternoon.

Distinguished delegates, I would now like to continue our consideration of agenda item 7, Report of the Legal Subcommittee on its fifty-second session. The first speaker on my list is the distinguished delegate of Germany. You have the floor.

Ms. C. Lechtenborger (Germany) Mr. Chairman, Distinguished Delegates, we highly appreciate the comprehensive report concerning the last session of the Legal Subcommittee of this year's April.

Germany is very pleased about the progress and achievements made for several issues which we consider important. Firstly we want to thank the chairwoman Irmgard Marboe and the whole "working group on national legislation relevant to the peaceful exploration and use of outer space". With the last session of the Legal Subcommittee (LSC) the text of the set of recommendations has been agreed and recommended to be submitted as a separate draft resolution for consideration by the General Assembly at its sixty-eight session. We strongly support this procedure since we consider this set of recommendations an important step forward to a common understanding and orientation for the development of national legislation. We are pleased that during the last session of the Legal Subcommittee several activities with respect to capacity-building in space law were reported and are documented now.

Germany is very active in that field and was proud to present the second Volume of the Cologne Commentary on Space-Law (CoCoSL) in the frame of an evening reception. Presently, first initial work on the follow-up volume has been started. In accordance with several statements which request for intensification of exchange and cooperation between the Scientific and

Technical Subcommittee (STSC) and the Legal Subcommittee we also support this suggestion. To intensify the interaction with the Scientific and Technical Subcommittee, we suggest a presentation of the status of work of the working group on long term sustainability of outer space activities and its four expert groups at the upcoming session of the Legal Subcommittee in Spring 2014.

Besides that some delegations might remember that at the last session of the LSC in April this year, Germany distributed a non-paper, proposing a revision of the agenda of this subcommittee that would help make its work more structured and efficient. We see the upcoming presidency of the Western European and Others Group (WEOG) in 2014/2015 as a unique opportunity for us to forward the underlying ideas and essentially propose a new, simplified agenda structure comprising: general exchange of views, status and application of the five United Nations treaties on outer space by States and international intergovernmental organizations, status and application of the non-binding instruments developed in UNCOPUOS and other legal instruments relevant to outer space by States and international intergovernmental organizations, review of international mechanisms for cooperation in the peaceful exploration and use of outer space, capacity building and information on activities of non-governmental organizations and governmental organizations.

These items would incorporate the substance of all existing items. In addition we propose the subdivision of the session into two parts, so that one week — preferably the first one — would be dedicated to expert groups' discussions of issues chosen in the previous session. The second week would then principally be reserved for the exchange between government representatives. We initiated respective discussions on the basis of our non-paper during the Legal Subcommittee session and will continue elaborating on our proposal. The current version of our paper has benefited a lot from input provided by other delegations and ESA member States. It has been discussed as well at the 77th Session of ESA's International Relations Committee (IRC) in May 2013. We are very grateful and would like to thank for all the valuable comments received and the encouraging overall support that was expressed for our ideas. We would highly appreciate any further comments and strongly hope for your continuing support. Therefore, we would like to intensify the consultation process with interested States during the next week.

Mr. Chairman, Distinguished Delegates, We thank you for your kind attention.

The Chairman I thank the distinguished delegate of Germany for her statement. The next speaker on my list is the distinguished representative of Austria. You have the floor.

Mr. W. Thill (Austria) Thank you Mr. Chairman. Austria welcomes the work of the Legal Subcommittee at its 52nd session and fully endorses its report. Austria would like to express its appreciation to the chair of the Legal Subcommittee, Dr Tare Brisibe, as well as to the Director of the Office of Outer Space Affairs, Dr Mazlan Othman, and her dedicated team for their excellent work.

Mr. Chairman, at the outset I would like to highlight that Austria considers this year's session of the Legal Subcommittee as particularly successful, as the Subcommittee agreed on the text of the recommendations on national legislation relevant to the peaceful exploration and use of outer space. Let me briefly recall that the Legal Subcommittee dedicated several years of intensive work on the agenda item "National legislation relevant to the peaceful exploration and use of outer space". At the end of its 51st session in 2012, the Legal Subcommittee was able to endorse the final report of the Working Group on the work conducted under its multi-year workplan. The discussions of the Working Group had enabled States to gain an understanding of existing national regulatory frameworks, share experiences on national practices and exchange information on national legal frameworks. The success of this work is due to the many valuable contributions of delegations and the constructive spirit in which our discussions took place. The endorsement of the final report demonstrated once again that the Legal Subcommittee is able to deliver highly useful results.

The only remaining issue was the set of recommendations on national space legislation developed by the Working Group. As you may recall, these recommendations were endorsed by the Legal Subcommittee at its 51st session, but had to be further consulted in order to accommodate terminology and translation issues. The Chair of the Working Group, Professor Irmgard Marboe, conducted these consultations in the intersessional period so that the Legal Subcommittee was able to finalise the recommendations at its 52nd session. Furthermore, the Legal Subcommittee recommended that the text of the recommendations be submitted as a separate draft resolution for consideration by the General Assembly at its 68th session. Austria strongly supports the idea of a separate General Assembly resolution, as this would ensure the visibility of the work done by COPUOS. Moreover, a resolution on national space legislation would perfectly complement the existing General

Assembly resolutions relating to specific space matters. Austria, therefore, hopes that the Committee will submit the set of recommendations as a separate draft resolution to the General Assembly for consideration.

I would also like to highlight the agenda item “Status and application of the five UN treaties on outer space”, where specific pertinent legal issues related to the treaties on outer space were raised, in particular the notions of “fault” and “damage”. Furthermore, we continued the conceptual discussion on the Moon Agreement, in the context of which we also considered the relationship between different treaties on outer space. The Chair of the Working Group, Jean-Francois Mayence, announced a written summary of the discussions we had so far on these issues for next year's session. We are looking forward to this summary, which will help us further structuring our debate on these issues.

The Legal Subcommittee also started its deliberations on the new agenda item “Review of international mechanisms for cooperation in the peaceful exploration and use of outer space”. The first exchange of information has shown that this agenda item promises to produce highly useful results. We congratulate Professor Setsuko Aoki for her election as a chair of the Working Group and are looking forward to commencing the work in the Working Group next year.

Finally, I would like to mention the proposal by Japan of a new agenda item on the general exchange of information on practices in relation to non-legally binding instruments for outer space activities, which was co-sponsored by several States, including Austria. Under such an agenda item we would be able to exchange information on the implementation of UN principles, declarations, and resolutions in a systematic way. Despite strong support among member States it was unfortunately not possible to include this new item in the agenda for the Legal Subcommittee next year. We understand that certain concerns still have to be addressed and hope that we will be able to find a consensus during this session of the Committee in order to start the substantive work already at the next session of the Legal Subcommittee next year.

Mr. Chairman, there are still many other important challenges in the field of space law that have been raised during the discussions of the 52nd session of the Legal Subcommittee such as space debris, commercialisation of the space sector or nuclear power sources. In order to contribute to legal certainty there is a need to further address these issues with a view to strengthen existing legal regimes and to discuss the need for new regimes. Austria is convinced that productive work in this sense will be achieved in the

upcoming sessions of the Legal Subcommittee. In concluding, allow me to emphasise that the Austrian delegation will continue to provide strong support to the work and the deliberations of the Legal Subcommittee as well as to the Office for Outer Space Affairs. In this spirit we are looking forward to productive and rewarding future sessions of the Legal Subcommittee. Thank you, Mr. Chairman.

Mr. Chairman I thank the distinguished representative of Austria for his statement. The next speaker on my list is the distinguished representative of the Czech Republic. You have the floor.

Ms. M. Smuclerova (Czech Republic) Thank you Mr. Chairman, distinguished delegates, the Czech Republic welcomes the results achieved by the fifty-second session of the Legal Subcommittee and fully endorses its report. The Czech Republic would like to express its appreciation to the chairman of the Legal Subcommittee, Dr. Tare Brisibe, as well as to Office of Outer Space Affairs for their excellent work.

The COPUOS Legal Subcommittee is a unique international body of universal nature dealing with international space law. It therefore plays a fundamental role in strengthening and updating the legal framework securing equal and free access to the outer space and the sustainability of space activities. In order to pursue this primary responsibility, there is a need to further address new challenges in the field of space law as well as to support its effective implementation in the national legal orders. It is therefore our common interest to engage in substantive considerations of these issues before the Subcommittee.

The Czech Republic commends the significant work of the Working Group on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space under the excellent guidance of Ms. Irmgard Marboe. We fully align with the decision of the Legal Subcommittee to submit the set of recommendations as a separate draft resolution for consideration by the General Assembly at its sixty-eighth session as it would help to raise the general legal conscience of the recommended minimum normativity with respect to national regulatory frameworks. As a State aiming to develop national space-related legislation, the Czech Republic equally welcomes the overall analysis of the current state of national regulatory frameworks provided by the final report as well as the decision of the Subcommittee to maintain the database of national space legislation and its updated schematic overview.

The Czech Republic welcomes the fruitful discussion in the Working Group on the Status and Application of the Five United Nations Treaties on

Outer Space that has raised interesting questions related to the registration matters, in-orbit transfers of ownership of space objects or the issue of jurisdiction and control. We believe that the adaptation and functional reinterpretation of the international legal framework with respect to practical needs raised by the multiplication of actors and diversification of activities in the outer space is the prerequisite for its viability and legitimacy.

One of the main challenges to the sustainability and security of the outer space is the mitigation of space debris. The total amount of space debris in orbit continues to increase and it has a growing impact on operational spacecraft. The Czech Republic advocates for strengthening, both in law and practice, of the effectiveness of the COPUOS Guidelines and commends the general awareness of this major concern voiced during the fifty-second session of the Legal Subcommittee. We particularly highlight in this respect the importance of the cooperative interaction between the Legal Subcommittee and the Scientific and Technical Subcommittee since the concord between the scientific and technical reality and the legal normativity is desirable.

The Czech Republic welcomes the compilation of proposed draft guidelines of expert group B on space debris, space operations and tools to support collaborative space situational awareness and of the expert group D on regulatory regimes and guidance for actors in the space arena of the Working Group on the Long-term Sustainability of Outer Space Activities and looks forward to the final report. This work will greatly contribute to the debate in the Legal Subcommittee under Item related to the general exchange of information and views on legal mechanisms relating to space debris mitigation measures. The Czech Republic supports a multilateral and consensual approach to treat this highly challenging topic.

Mr. Chairman, before concluding, let me express the support of the Czech Republic to the efforts to enhance the efficiency of the Legal Subcommittee via the optimization of its working methods and its substantive frame in order to make full use of its role as “guardian” of the modern space law.

Thank you, Mr. Chairman.

Mr. Chairman I thank the distinguished representative of the Czech Republic for her statement. Now would you wait for a moment distinguished representative of UNIDROIT. I will give the floor first to the distinguished representative of Greece. You have the floor.

Mr. V. Cassapoglou (Greece) I would like to apologize through you to UNIDROIT, my colleague

from UNIDROIT, I really appreciate he has indeed put a lot of work developing the space protocol but sometimes we legal experts understand what we mean best it is a matter of regulations. It is not a matter of State sovereignty. Thank you for giving me the floor Chairman.

Through you I would like to express my gratitude to Nigeria, my colleague for his excellent work over the last couple of years. Unfortunately I wasn't here for the first year of his term of office but I have certainly been able to appreciate his contribution to the management, the administration of the work of our Subcommittee of the Legal Subcommittee, I mean. Through you I also wanted Chairman to thank and congratulate most cordially the OOSA team for the electronic library that has been set up more than three years ago now which is ever so invaluable when it comes to delving into the archives. And I would like to express not just our congratulations but really thank them as well because they have given us a wonderful tool here for legal research.

Chairman, I would also like to warmly welcome Armenia, Jordan and Costa Rica to our ranks. And I'd like to put two questions, well, one actually. For upcoming candidatures, the candidates had to at least be party to the sixty-seven treaty. It seems very strange to me indeed that one can be a full-fledged member of the Committee at the same time being legally bound to a compliant to UN outer space convention law. I've come out with statistics, these will be published in a month's time, having to do with the participation of full members of the Committee who have not acceded or even ratified to the sixty-seven treaty. And I'm not even referring to the two other very basic conventions which is registration and liability. For me, it's really a question that we should be very strict about, severe possibly, I should rather say when it comes to accepting candidates.

I completely agree with what has just been said by my colleague from France as well as Germany as regards to the need to restructure and to streamline the work, especially that of the Legal Subcommittee. I'm not sure that we should really allow the Legal Subcommittee to work for two weeks at a stretch. There's States that are simply incapable of participating because of the economic crisis it penalizes them to be excluded. When State cannot participate for economic reasons it is not just the case of my country and its present state but there are many other States; African States who can't even sit in for one or two days because of these economic considerations. And this is all the more valid because since 1979, you can count the number of years, since 1979, we have not produced one single international

instrument, one single treaty. We have been sitting back on the success of our laurels of the 1986 and the other declarations of principle, well thank goodness we have those.

But since then, we haven't really done any treaty making whatsoever. So we'll keep peddling round and round trying to justify our existence and from the impractical terms, we just can't keep going like this. As the representative of the Czech Republic has just said, this is a very old proposal, it has been presented by our Professor Lubos Perek and Vladimir Kopal, so that for the most acutely important subjects should have structural cooperation between the two Subcommittees. Whether they be talking about space debris or space traffic as well as the use made in outer space radiofrequencies. The three elements that we as legal experts cannot usefully delve into in a satisfactory fashion without having competent input from engineers. I remember excellent experience we had when the Chairman of the S and T Subcommittee and Legal Committee, when Science and Technical Subcommittee was Professor Rex who produced a text and because of Greece's insistence for three years stretch, we were able to label this report the Rex Report. So, institution is very important, either have joint meetings or some inter-connection between the two Subcommittees. When it comes to the development to the promotion of legal texts, even if they are not binding, texts on the three points which I believe that our distinguished colleague from Germany has just stressed as well. That's what I wanted to say at this point under this item of the agenda. What I would also like to stress is that we really have to truly respect the criteria that we are speaking amongst legal experts and we have to speak amongst engineers. A couple of years ago, a representative of a major space power could not or was unfamiliar with the distinction between a ratification and accession to a treaty. Well, we do need legal experts.

I had the privilege in my life to participate in the Legal Subcommittee's work and I was able to rub shoulders with eminent individuals indeed. Oskar Schachter for example, and Alfred Manfred Lachs for the new generation at the time, Manfred Lachs was someone extraordinary, unfortunately we don't have people of that stature here anymore. I think we have to come back to those days. We're not just engaging in a diplomatic routine affairs, we are dealing with something which is a cause for mankind as a whole. And I really believe that we must not lose sight of that fact. Thank you very much Chairman. Thank you once again to colleagues who have had patience to bear with me.

Mr. Chairman I thank the distinguished representative of Greece. Now I will give the floor to the distinguished representative of France. You have the floor.

Mr. G. Dufresne (France) Thank you Mr. Chairman, I can be brief. I know that when France duly says they will be brief it's not but I will be. Just a couple of comments by way of reaction to the proposal from our colleague from Germany and also to comments in the room to consultations on the agenda of the Legal Subcommittee. Yes, there is indeed a first proposal for clustering of topics. We think that's a good approach for an agenda that can be one that is dynamic and in keeping with what we do here in COPUOS and not one that is just a stratification of our concerns, so, that's a good step, it would require a consensus and to make optimum use of our work and time.

This is a preparatory phase because any change to the agenda would call for an opinion from the Committee. Consultations of course would be welcome, there's quite a bit of work to be done, we would encourage delegations interested to take part, we will be very eager to participate with our own comments. Then two other points. On the draft resolution, the ad hoc draft, on the great work done by Professor Marboe, we support that unreservedly as we've said several times. A last comment on method. There has to be an interaction between the two Subcommittees; the Scientific and Technical and the Legal Subcommittee, but we'd like to recall that top priority as we see it would be the first positive outcome but we shouldn't put the cart before the horses but we have to look at certain specific topics in the Subcommittee in the Legal Subcommittee, but we also have to concentrate on the [...].

Mr. Chairman I thank the distinguished representative of France for his statement. Now I go back to the distinguished representative of UNIDROIT. You have the floor.

Mr. J. A. Estrella Faria (UNIDROIT) Thank you very much Mr. Chairman. UNIDROIT appreciates the invitation to attend the fifty-sixth session to attend COPUOS and the opportunity give to us to report on the progress made to implement the space protocol to the convention on international interests in mobile equipment, so-called Cape town Convention. Space protocol, Mr. Chairman, was adopted in Berlin on 7 March 2012 at the conclusion of a conference generously sponsored by the Government of the Federal Republic of Germany. Four States have since signed a protocol and tender notifications on accessory are needed for it to enter into force.

As reported to the Legal Subcommittee, the conference established a preparatory commission to act as provisional authority of the future international registry. I am pleased to report that the first session of the preparatory commission was held at UNIDROIT seat in Rome in 6 and 7 May 2013 and the commission is composed of the following countries; Brazil, People's Republic China, Czech Republic, France, Germany, India, Italy, Russian Federation, Saudi Arabia, South Africa and United States. The preparatory commission sessions also attended by several observers, in particular, representatives of the ITU who continued to express interest in the possibility for ITU to become the supervisory authority of the future registry similar to the role performed by ICAO as regards aircraft registry. We also counted that the number of participants represented is of the financial and commercial world.

Mr. Chairman, by 2011, worldwide space revenue across both public and private sectors collectively totalled 288.77 billion dollars. Commercial space activities with revenues totally 217 billion collective represent three quarters of this global economy. Private financing often supplements public funding and has become an integral part of domestic space policies in some countries. However, private funding requires a favourable legal framework. Now with fifty-seven States parties, the Cape town Convention has been a remarkable success in providing a sound and efficient basis for international finance of high-value equipment. As of 31 December 2012, we counted 379,000 registrations made in international registries since its entry into force in 2006 against 93,000 aircraft objects including airframes, air craft engines and helicopters. The level of efficiency and enhanced legal certainty created by the Cape town Convention system is such that all expert credit agencies that participated in aircraft sector understanding, negotiated under the auspices of the OECD, currently grant the reduction of up to ten per cent of the minimum premium rate if the aircraft operators is based in a country that has ratified the Cape town Convention and implemented it in an acceptable manner.

A study conducted in 2009 has estimated it by raising the credit rating of aircraft purchases. The aircraft protocol may lead to reduction of the cost of financing new aircraft that is likely to result in overall savings of more than 100 billion between now and the year 2030. Taking into account the expected fleet renewal needs during that period. The main beneficiaries, Mr. Chairman, have been airlines in developing countries. In such the protocol has also helped to renew aircraft fleet and improve aviation safety. Mr. Chairman, we expect similar benefits also

to fall from the space protocol as more and more countries look to private investment to promote certain space activities within the framework of their international obligation, national policies, the space protocol offers a new and efficient tool to assist the private sector, tap the resources of private investment and financial markets.

The successful completion of the space protocol, the first space-related treaty more than 30 years owes a great deal to the continuous support provided by this Committee, especially through its Legal Subcommittee to our efforts to reach out to the broad membership of the United Nations, particularly the developing world. I should like to place on record the sincere gratitude of my organization and its member States to this body. UNIDROIT looks forward to continuing to work closely with UN COPUOS members in the process of securing the early implementation of the space protocol and wishes this Committee every success in its deliberations. Thank you Mr. Chairman.

Mr. Chairman I thank the distinguished representative of UNIDROIT for his statement. We will continue and hopefully conclude our consideration of agenda item 7, the Report of the Legal Subcommittee on its fifty-second session this afternoon. Distinguished delegates, I would now like to proceed with the technical presentations. Due to time pressure, please keep presentations short. The first presentation on my list is by Ms. Valentina Pontetti and Mr. Alessio Rossi of Italy entitled "Italian Master Course in Space Institutions and Policies". You have the floor.

Ms. V. Pontetti and Mr. A. Rossi (Italy) Mr. Chairman, distinguished delegates, it is a great honour for us to be in front of such a prestigious, international Committee of the United Nations like the one we have here today. We are very proud to have this unique occasion to present ourselves and the space Master Programmer that we are attending in Rome, Italy. Master in Space Institutions and Policies. Indeed, we two represent a class of 23 students all today at this session, especially guests. The Space Master Programme is organized by the Italian Space Agency, Italian Society for International Organization and the Italian Research Council.

The Space Master Programme has also benefit from the collaboration of European Space Agency, European Space Policy Institute, European Commission, the Finmeccanica group and the Italian Ministry of Defence. The aim of the Space Master Programme is advanced training from space expert from legal, economic, political and industrial perspective. It allows professionals able to operate the national and international space community. The

Master course is focused on multi skilled professionals act to achieve two goals.

First, to meet the demands of the space sector; whether in Governmental, industrial or academic fields. Second, to work effectively in an international and wide ranging space environment. The current fifth edition of Master Programmes gathers group of students from different backgrounds, skill and areas. The majority of us belong to the under thirties age group and have an educational background based on international relations disciplines. The others are older, come from legal, economical, engineering and social sectors. The jobless have a slightly higher number than the employed. We are really international Master Programme with people coming from different cultures and languages; Italian, French, Brazilian and Russian. These different backgrounds allow us to push through international challenges coming from space global project. It announces our networking opportunities.

The Master aim is to develop a capacity-building in the present space sector. We understood space requires comprehensive multidisciplinary skills in order to provide solution for the main space issues at a global level. For these purposes, a number of topics is covered by the different backgrounds of the teacher and delivered lectures. This space educational format consists of the 5 modules; space law, policies and international relations, industrial, socioeconomic, technical and scientific. The key word of the Master is inter-disciplinary. The complexity of space sector require an intern-disciplinary innovative approach which create connections among the various disciplines and actors. Thanks for the expertise and experience of different space actors, we are able to analyse the different aspects of space system at national and international levels. Representatives from several national space agencies, countries and regional entities are invited to give lectures on their space governance, programmes and activities operating with the Space Master Programme.

The first module is the space law. Our analyses started with the United Nations General Assembly resolution number 18 of 1963. We assessed the five main treaties of international space law. We examined European affairs with European treaties. In particular, the Lisbon treaty. The relation between European Union and European Space Agency, European Space Policy. Finally we detailed the common law and State practice including the national legislation. From one side, the policies international relation module is focused on defining key words of the international relationship field. International relations, cooperation, coordination, negotiation and governance. On the other side, the review of the five

pillars of space policies and relations. International, regional, intergovernmental organization, European space policies, national space agencies, bilateral and multilateral relations, national space policies and all of these subjects cooperating the best way they can create the best form of global collaboration.

Mr. Chairman, distinguished delegates, the industrial module provides capabilities for a full space programme management whose target is the achievement of the success of the final product. A management programme is constituted by the techniques and skills required to obtain a winning space project. A good management is the base for the so-called space value chain which links together all the subjects operating in the space sector starting from institutions, science community and industry. All these actors are operating together in synergy to achieve the final success of the space project.

The socioeconomic module provides general overview of space economy which means a combination of activities and resource relevant to the space sector. It covers the main social and economic aspects of the space community. Such as a strategy and competitiveness; productive factors, consumers demand, industrial sectors and their support. The ambition of this module is to provide knowledge of the mechanisms and interfaces that are generated by these factors. Starting from the launchers to the final services.

The scientific and technical module is of support of the other four modules. It aims to give a basic knowledge of space activities and technologies with an overview of all space technical fields. As orbits and mission analyses, satellites and orbital platforms, launchers, space exploration and International Space Station, Earth observation and satellite navigation. The lectures are given by scientists, engineers and experts from space agencies and private space companies. Our ambition is to be prepared to the challenge and opportunities that space offers. For these reasons, we are now preparing the final work of the Master related to the space activities in a changing world. We are working in teamwork, focus on the main aspects of the present and future challenges. Space law applied to safety and security in outer space, policies and international relations through the analyses of the main space systems and governances, possible scientific and technical proposal to asteroids initiative, fundraising methods in space community as well as the growth of space private sector.

Each team and module is linked to the other ones in order to understand the added value of the innovative approach of this Master and importance of the multidisciplinary characteristic of the space sector.

Throughout our deep study of the space fields, this Master prepares experts skilled in outer space legal issues in national and international space policies. In analyses of socioeconomic landscape including in overviews of industrial dynamics of space programmes. The multidisciplinary and capability to operate in a multicultural environment, both a national and international level is one of the main goals of the Master. To understand all aspects of space activities, a very important role is played by the visits to the main national and international space organizations. Such as Agenzia Spaciale Italiana, European Space Agency as well as the industries. The visits show us the works, the management, the mechanisms at the base of a space programmes and activities. And interactions between the public and private actors of the space world.

Mr. Chairman, distinguished delegates, finally let me conclude that it is a great satisfaction for us to be here today. We are sure this is a great opportunity which will remain in our professional experience. The vision that the world cooperates together to address common challenge in term of exploration initiatives and protection activities for our planet. Thank you for your attention.

Mr. Chairman Thank you Ms. Pontetti and Mr. Rossi for your presentation. The second presentation is by Mr. Alexander Tuzikov from Belarus entitled "National Space Programme in the Republic of Belarus". You have the floor.

Mr. A. Tuzikov (Belarus) Chairman, distinguished delegates, it's really a great honour for us today to speak before the session of the Committee and to tell you what is occurring in the Republic of Belarus when it comes to implementing space activities. I'd like to say that Belarus has always been participating most actively in the programmes which were being run in the U.S.S.R. and Belarus nationals, now 3 of them, have already visited outer space. Within the context of modern sovereign, Belarus is well, we're doing a lot in terms of space activity and just like in other countries, we have a national space programme of our Republic which has been adopted for the year 2008 through 2012, that's the first stage. Of course the basic task of the programme was to insure the proper use of these scientific and technological potential of Belarus in creating space facilities in technologies. We are coordinating our space activity in the national academy of sciences of Belarus. Up until 2012, other state committees and ministries were also participating such as the space state property committee, the ministry of agriculture, forestry, emergencies, ministry of the environment, ministry of education, as well the state military industrial committee. And the engineers and scientists work in our country, are from various

agencies and they all participated most actively on working on this programme.

The first programme running through 2012 was basically stressed on remote-sensing of the Earth. There were 11 subprogrammes implemented, scientific research programmes, science technological programmes, this was a whole series of projects of making use of remote sensing technologies of Earth for the interest of the economic welfare of the country as a whole. A scientific programme is one that is financed by the State as a basis for outer space developments in the applications developed in our country. Second programme project was fairly small-scale technical programme. Developing technologies for aviation remote sensing of Earth, state of the art equipment was developed for running various GPS correction systems. Here are a couple of pictures to illustrate this equipment. It is fairly up to date, modern equipment with multi spectral sensors, infrared sensors. What's necessary for making use of outer space imagery as well as aviation imagery? The most important project that was performed in this programme was the Belarus space system for remote Earth sensing. It took a long way, winding our way, we started working in 2003 and then more took place in 2006, we were ready to actually launch our satellite for remote Earth sensing.

But there was a problem with the launch and positioning on orbit. Nonetheless, the work continued and in 2012, we were able to put together an Earth remote sensing system for both the outer space segments as well as Earth segments. This is its structure from the slide you have control centre, controlling the satellite and the satellite itself. This was successfully launched in July 2012 and it has fairly good, fairly sound parameters for orbit and imagery. Production, right now we are testing inflight. All of the necessary resources have been produced to distribute the data produced. Of course the most important thing was developing the appropriate technologies for the purposes requiring remote sensing data and we're actively developing this on producing digital data, maps, updating them and this is of course very useful in emergency situations and this is the work being done by our specialists and experts.

This is one of the first images produced by the Belarus equipment with various resolutions 10.5 and 2.1. So you see that the accuracy is a fairly good for remote Earth sensing purposes. Over this period of time we have also done extensive work on producing technology, high accuracy, electronic cameras and mirrors and photographic equipment thanks to our cooperation with the Russian Federation by 2000 we already elaborated a whole series of programmes on multifunctional space system of our State. The sixth

programme of this programme is presently up for confirmation. I hope this could be properly implemented. We have an agreement with Ukraine, we are working on one with Kazakhstan right now and just recently, the CIS countries Governments have assigned a project which is joint for forecast monitoring, for emergency situations. I think that this is a project which will be of interest not just throughout the CIS but also for other countries as well.

At present we are working to elaborate the next upcoming programme for the years 2013-2017. Right now, the Government is considering this programme. Unlike the preceding programme, this programme is really going to be comprising all of the space activities throughout Belarus including the development of Earth's remote sensing activities, the development of a telecommunications satellite, the development of a single temporal support programme in our country. And of course the development of educational capabilities, training and legal regulatory support activities in our country. Concluding our short statement, I didn't want to go much into the details and take too much time. I just wanted to say Belarus is implementing its space activity programme and of course we are basing ourselves on our financial capabilities. We are working within the budgetary envelope of our country. But what we are doing is certainly in tune and following the pace of modern day developments in this field. Let's hope that our contributions and developments in cooperation with our colleagues will prove useful in response to the challenges before the international community at large for the peaceful use of outer space and we'd like to say that our application to join the membership of the Committee, we hope we'll be supported by all of the distinguished delegates present in this session. Thank you.

Mr. Chairman Thank you Mr. Tuzikov for your presentation. Distinguished delegates, we will have the interpretation service up until five minutes after 1 o'clock. The third presentation is by Ms. Matsura of Japan entitled "Japan's contribution to the International Space Station". Ms. Matsura, you have the floor.

Ms. M Matsura (Japan) Thank you Mr. Chairman, distinguished delegates, representatives. It's my great pleasure and honour to participate in this session Committee and to briefly present Japanese contribution to the International Space Station (ISS). I will try to make my presentation short to save your lunchtime. First of all I would like to offer my congratulations on the fiftieth anniversary of the woman space flight. Actually, this year marked the 5th anniversary of the Japanese Experiment Module which is a part of ISS. Today I am going to introduce

you to this Japanese Experiment Module and Japanese space transfer vehicle as well as our International Space operation which I am involved as a flight director.

Here the International Space Station, this picture has already been shown several times in other presentations. And also you can find a small scale model of it on the ground floor of this building. The actual dimensions are about a 100 meters by 70 meters as big as a football field. It flies about 400 kilometres above the Earth and circles the Earth in 90 minutes and ISS is kind of an orbiting [...] and this is a summary of the history of the ISS but I am going to skip.

ISS is truly an international space cooperation effort, the result of the participation of a large number of countries. The ISS assembly sequence started with Russian module Zarya which means sunrise in Russian. The first piece of ISS was very small to the current ISS. The size, it was about 13 by 25 metres. Then assembly sequence continued through 2011 and the station grew accordingly like this.

This picture was taken by a crew member during the final space shuttle flight in 2011. Although the minor construction work is still being collected, ISS assembly was officially completed. This Japanese Experiment Module, Kibo. Kibo is the Japanese word for hope. The experimental logistic module was launched first which is a storage. The pressurized module main part of Kibo, is space laboratory. Kibo has its own robot which can manage Kibo externally. And exposed facility is one which enables large-scale panels to be installed outside.

They were launch by three space shuttle flights in 2008 and 2009. This picture shows the interior of Kibo. The size of internal area is as large as a huge bus. This is a typical Japanese style room, I think that some of this characteristics influence the design of Kibo for example; compact, efficient and clean with built-in storage. Kibo is the only module that has its own storage space and windows are also significant part of Kibo. Kibo is not only the module that windows, however, the crew says that they are always heard about the view through the Kibo windows. And there is also beautiful balcony known as exposed facility.

And recently, Canadian crew member filmed a music video in ISS and he used Kibo. I don't know actually the reason why he chose there but I believe because it is beautiful. Since Kibo is a laboratory, various science experiments are collected there. For example, life science experiments or twenty-four hours monitoring of space or the Earth. We are also very proud to provide Japanese space food. They are appreciated not only by Japanese astronauts but also

crew members from other countries. As far as I know, Miso flavoured maki, is the most popular space food. And many astronauts reported that they loved it.

And many Japanese astronauts have contributed to ISS activities. Takao Doi, he is supposed to be here. And Aki Hoshida and Koichi Wakata have participated in three Kibo assembly missions and Koichi Wakata will fly again this year as the first Japanese ISS Commander. Another of Japan's important contributions to the ISS which I would like to introduce is that the H-II Transfer Vehicle (HTV) or Kounotori. Kounotori is launched by the Japanese H-IIB launch vehicle from the Tanegashima space centre in Japan. It travels to the ISS using its own guidance, navigation and control system which is monitored and controlled by the Tsukuba space centre.

And finally, hovered at the predetermined position, actually above 10 metres below the ISS, it is then captured by the station's robot arm and installed in the ISS. In 18th century, adventurers set the stage for modern alpinism. Famous adventurers were supported by many porters or Sherpa, who carried up a great deal of equipment and supplies. Thanks to their tireless effort, mountain huts were built and 200 years later now, access to mountain tops has become much easier. Previously unexplored areas are now accessible. This is my friends. And likewise, Kounotori transports a large amount of cargo to the ISS, about 6 tons total per flight, not 4 years inside but outside ISS. Including experiment, spares, crew's clothes, foods, etc. And I believe that Kounotori acts like a porters to assisted climbers hundreds years ago.

Thanks to the activity of Kounotori and other transfer vehicles, access to space may become as easy in the future as it is to scale a mountain top, I believe. And the next Kounotori number 4 will be launched this summer to deliver a lot of cargo to the ISS again. The International Space Station operation is by mission control centres around the world; Houston, Huntsville, Moscow, Munich, Toulouse and Tsukuba in Japan. They have its own flight control team which is led by each country's flight director and flight directors communicate to each other in order to operate ISS safely and support onboard crew activities. There are two mission control rooms in Tsukuba space centre. One is for Kibo and the other is for Kounotori.

Kibo control operate 24 hours a day through the year, 9 console positions and approximately 80 flight controllers monitor and control the Kibo system and support crew activities on a shift basis. In contrast, Kounotori control is only on line during the mission period. Fifteen console positions and about 80 flight controllers navigate and control Kounotori to the ISS

and ensure it re-enters the Earth's atmosphere safely at the end of the mission. One of the most important achievement we accomplished at the result of the ISS operation is "Teamwork". Both domestically and internationally.

In March 2011, there was a huge earthquake in Japan. In Tsukuba space centre, several buildings, including the mission control room incurred severe damage. As a result, we were unable to continue operations there. At the time, NASA kindly provided us with facilities in Houston to continue our operations. Thanks to their support, we were able to continue our operations until our control room capability was restored after about 2 weeks. Sometime later, to cheer up flight controllers as well as all the people in Japan, NASA and other international partners gave us a great present, paper crane. Actually I made on here, this one. Paper crane in Japan is a typical child's play but sometimes it is made into pray for someone's health, happiness or good luck. At the time, the ISS crew member as well as flight controllers around the world folded the paper crane wishing the speedy recovery of those affected by the huge earthquake in Japan. That was a moment I felt, I realised that priceless partnership from the ISS international partner.

Lastly, in honour of the fiftieth anniversary of the first woman space flight, I would like to introduce my counterpart, female flight directors around the world. NASA, European Space Agency, Russian Space Agency and JAXA. There are a symbol of our teamwork and priceless partnership, definitely, and they are my enviable friends, absolutely. That's all my presentation. Thank you very much.

Mr. Chairman Thank you Ms. Matsura for your presentation. Distinguished delegates, I will shortly adjourn this meeting. Before doing so, I would like to inform delegates of our schedule of work for this afternoon. We will meet promptly at 3.00 pm. At that time, we will continue and hopefully conclude our consideration of agenda item 4, General exchange of views, agenda item 5, Ways and means of maintaining outer space for peaceful purposes, and agenda item 7, Report of the Legal Subcommittee on its fifty-second session. We will also begin our consideration of agenda item 6, Report of the Scientific and Technical Subcommittee on its fiftieth session, and agenda item 14, Other matters.

There will be three technical presentations this afternoon: by a representative of the Bolivarian Republic of Venezuela entitled "Satellite Miranda", by a representative of Turkey entitled "Recent space activities in Turkey", and by a representative of Tunisia entitled "The state of utilization of space

technologies by the National Weather Service of Tunisia”.

The Working Group on the Long-term Sustainability of Outer Space Activities will then hold its first meeting. This evening, starting at 6.00 pm, there will be a reception hosted by the Asia Pacific Space Cooperation Organization (APSCO). The reception will be held in the Mozart Room of the VIC Restaurant. Now I would like to give the floor to the Secretariat. Nicholas, you have the floor.

Mr. N. Hedman (Secretariat) Thank you Mr. Chairman. Just an announcement from the Secretariat, I would like to inform distinguished delegates that yesterday afternoon, the delegation of the Bolivarian Republic of Venezuela placed on your desk the book “Space science and technology for the development of Venezuela” recently published by the Bolivarian agency for space activities. Delegations are invited to the Venezuelan stand located outside the meeting room in that direction for additional copies of the book. Thank you very much for your attention.

Mr. Chairman Are there any questions to this proposed schedule which I made?

I see none.

Finally, I would like to remind delegations that during lunch time today, starting at 2.00 p.m., there will be a screening of two videos. The first one is entitled “Japanese space women”, and it is presented by Japan. The video is 25 minutes in length. The second video is entitled “Shenzhou-9”, and it is presented by China. The video is 10 minutes in length. Delegations are cordially invited to the screening of these videos.

Also during lunch time today, delegations that have already nominated an expert for the mission to evaluate the capacity of Beihang University to serve as a host of a regional centre for space science and technology education, or that intend to do so, are invited to join a meeting to consider the terms of reference of the evaluation mission. The meeting will be held in conference room C6 from 1:00 p.m. to 3:00 p.m. The terms of reference of the evaluation mission have been made available to delegations in document A/AC.105/2013/CRP.15.

This meeting is adjourned until 3:00 p.m.