# Committee on the Peaceful Uses of Outer Space: Legal Subcommittee Fifty-third session

888th meeting Monday, 31 March 2014, 10.00 a.m. Vienna

Chair: Mr. Kai-Uwe Schrogl

The meeting was called to order at 10.00 a.m.

**Mr. Kai-Uwe Schrogl** (Chair) Good morning distinguished delegates, I declare open the 888th meeting of the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space.

This morning, we will continue and hopefully conclude our considerations of agenda item 4, the general exchange of views, and we will begin our consideration of agenda item 12, General exchange of information on non-legally binding United Nations instruments on outer space. We will also continue our consideration of agenda item 13, the review of international mechanisms for cooperation in the peaceful exploration and use of outer space.

Today we will hear two technical presentations, by a representative of Japan entitled "Japanese contribution to the General Exchange of Information on Non-legally Binding United Nations Instruments on Outer Space", and one by a representative of the European Space Agency, entitled "The European Space Agency as a mechanism and actor of international cooperation".

The Working Group on the Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space will then hold its second meeting.

I would like to remind delegations that the Provisional List of Participants was distributed this week through the pigeon holes as conference room paper 2. Delegations are kindly requested to provide the Secretariat with written amendments to the list by close of business today, so that the Secretariat can finalize it.

Distinguished delegates, I would like now to continue and hopefully conclude our consideration of agenda item 4, General exchange of views. I do not yet have any speakers on my list. Are there any delegations wishing to speak on the General exchange of views before I close this agenda item? I see none.

We have therefore concluded our consideration of agenda item 4, the general exchange of views.

Distinguished delegates, I would now like to begin our consideration of agenda item 12, the general exchange of information on non-legally binding United Nations instruments on outer space and the first and so far only speaker on my list is the distinguished representative of South Africa, Mr. Kotze, you have the floor.

**Mr. T. Kotze** (South Africa) Mr Chairman, as this is the first time that I take the floor, please allow me to congratulate you on your lection.

Mr Chairman, the South African delegation is looking forward to the deliberations on this, the first new item on the agenda of the Legal Subcommittee in several years. We applaud the Japanese delegation for taking the initiative in proposing this topic, and we hope that the deliberations will shed light on and clarify the use of non-legally binding United Nations instruments on outer space.

Mr Chairman, kindly allow me to congratulate Professor Aoki on her election as the Chair of the new working group on this item, which will be the latest working group of the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space, and we look forward to working with her.

Mr Chairman, we wish to confirm that non-legally binding United Nations instruments on outer space played an important role in the development of South African space law, and are also considered in our current process of reviewing our domestic legislation.

I thank you Chair.

**Mr. Kai-Uwe Schrogl** (Chair) I thank the distinguished delegate from South Africa, next on my list is Ms. Ito from Japan. You have the floor.

Ms. A. Ito (Japan) Thank you very much Mr. Chairman.

Mr. Chairman, distinguished delegates, on behalf of the Government of Japan, I am pleased to address the 53rd session of the Legal Subcommittee of COPUOS. Japan believes that this new agenda item is of considerable importance and serves as an impetus to

facilitate and vitalize the discussions of the Legal Subcommittee.

Mr. Chairman, legal principles governing space activities have been structured by COPUOS. More specifically a number of principles, declarations, recommendations and guidelines in the form of the United Nations General Assembly Resolutions and COPUOS documents which play an important role in supplementing the United Nations treaties have been adopted. Yet the impact of the application and implementation of those documents is not necessarily evident or clear.

Under these circumstances and the increasing importance of non-legally binding instruments in the exploration and use of outer space, the delegation of Japan proposed this agenda item, co-sponsored by Austria, Canada, France, Nigeria and the United States at the last session of the Subcommittee. The aim of this agenda is to facilitate exchange of information on specific measures in relation to non-legally binding United Nations instruments such as Space Debris Mitigation Guidelines, recommendations on enhancing of the practice States and international intergovernmental organizations in registering space objects, and principles relevant to the Use of Nuclear Power Sources in Outer Space. We believe that it is the first meaningful step towards achieving an overview of how these instruments are applied and followed by different Member States.

Mr. Chairman, with the development of space technology and an increase in and diversification of space actors, the need to consider safe and sustainable use of outer space has increased. Non-legally binding United Nations instruments related to space activities which have been adopted thus far have played an important role to complement and support the United Nations treaties on outer space. Japan recognizes that these non-legally binding United Nations instruments have played and continue to play a significant role as an effective means to address emerging issues and serves as a basis of rule to ensure safe and sustainable use of outer space.

To promote taking appropriate measures in relation to non-legally binding United Nations instruments, it is necessary to gain a better understanding of the existing non-legally binding United Nations instruments and the practices related thereto.

Mr. Chairman, Japan is of the view that the sharing of information on measures taken by Member States in relation to non-legally binding United Nations instruments is essential to fruitful discussions under this agenda item. We would like to encourage and invite Member States to provide information on measures taken by their governments as well as nongovernmental entities such as companies and universities. Hoping to facilitate these discussions and launch an exchange of information, Japan prepared a couple of questionnaires. which have been distributed as а conference room paper (A/AC.105/C.2/2014/CRP.29) in order to simplify and ease the work of Member States in reporting their specific measures related to the implementation of nonlegally binding United Nations instruments.

Later on we will make a technical presentation to briefly explain Japan's vision for this agenda item, the content of the proposed questionnaires and introduce some examples of Japanese practices in relation to non-legally binding United Nations instruments.

Japan is looking forward to contributing to a substantial discussion on this agenda item with a view to achieving a meaningful outcome. We hope that all delegations will make active contributions under this agenda item.

Thank you very much for your kind attention.

**Mr. Kai-Uwe Schrogl** (Chair) I thank the distinguished delegate of Japan for her statement. next on my list is the United States, Mr. Israel. You have the floor.

Mr. B. Israel (United States of America) Thank you, Mr. Chairman. We wish to again thank Japan for proposing this agenda item at the last session of the Legal Subcommittee, which we were pleased to co-sponsor. States wishing to cooperate in the peaceful exploration and use of outer space have a range of mechanisms at their disposal to structure their cooperation, and identifying the optimal mechanism for a given instance of international cooperation is important to the overall success of the endeavour. It is with this in mind that the United States and cosponsors proposed the Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space at the 51st Session, and we are very pleased with the way this work is proceeding thanks to the active engagement of Member States and the able leadership of Professor Setsuko Aoki.

In particular, the legally non-binding principles and technical guidelines developed by COPUOS have proven to be important mechanisms for international cooperation to address major opportunities and challenges in the peaceful use and exploration of outer space. This opportunity to exchange information is especially welcome in view of the recommendation of the Group of Governmental Experts that Member States take measures to implement, to the greatest extent practicable, principles and guidelines endorsed on the basis of consensus by the Committee on the Peaceful Uses of Outer Space and the General Assembly.

Among the most important roles for international lawyers in facilitating successful international cooperation is identifying the optimal cooperative mechanism in any given case — including when a legally non-binding mechanism may actually facilitate the cooperative objectives better than a treaty. The Principles Relating to Remote Sensing of Earth from Outer Space serve as an excellent example of this Subcommittee advancing ground-breaking uses of outer space for the benefit of all countries through such a legally non-binding mechanism.

With the advent of remote sensing came a need to reconcile the great promise of this new capability with the concerns shared by many States about having access to data about their territory. Harnessing the full potential of remote sensing thus required a global consensus on how it was to be conducted.

As delegates are aware, this Subcommittee ultimately elected to develop a set of principles on remote sensing, which were adopted unanimously by the General Assembly. This mechanism offered the benefit of a global consensus on how this new activity would be conducted, rather than the piecemeal acceptance over time that generally attends international agreements.

The legally non-binding character of the Remote Sensing Principles certainly has not deprived them of influence — to the contrary, they are widely credited with fostering a successful international regime and enabling the robust remote sensing capabilities we enjoy today, whose myriad applications, such as in disaster mitigation and response, benefit all States.

At the heart of the Remote Sensing Principles is the principle of non-discriminatory access set forth in Principle XII. This principle of non-discriminatory access has been integrated into United States law, mandating that licenses to operate private remote sensing systems obligate the operator to make available to the government of any country. Unenhanced data collected by the system concerning the territory under the jurisdiction of such government as soon as such data are available and on reasonable terms and conditions.

It is worth noting that the United States did not incorporate this principle into law because it was legally required to do so — the Principles, after all, are legally non-binding — but rather in furtherance of its investment in the success of the international legal regime for remote sensing that the Principles embody. Mr. Chairman, I will conclude with the reflection that the nature of the task faced by this Subcommittee as it took up the subject of remote sensing in the mid-1970s differed fundamentally from the task it faced in the mid-1960s. In contrast to the task of developing an international legal framework for outer space where none existed, this Subcommittee undertook its work on remote sensing with a functioning international legal framework already in place.

The same could be said of efforts of space agencies about a decade later, beginning at UNISPACE III, to cooperate to realize the potential of remote sensing systems for disaster management. These agencies were able to build upon not only the international legal framework that enables the use of outer space in general, but also the international regime enabled by the Remote Sensing Principles, and thus were able to structure their highly successful cooperation on disaster management around an even less formal cooperative mechanism — the International Charter on Space and Major Disasters.

We think this example illustrates the crucial importance of legally non-binding mechanisms to this Subcommittee's work in furthering international cooperation in the peaceful exploration and utilization of outer space, and we are grateful for this exchange of information. Thank you.

**Mr. Kai-Uwe Schrogl** (Chair) I thank the distinguished delegate of the United States for his statement. Are there any other delegations wishing to speak under this agenda item number 12? I see none.

So we will therefore continue our consideration of this item this afternoon.

Distinguished delegates, I would like now to continue our consideration of agenda item 13, which is the review of international mechanisms for cooperation in the peaceful exploration and use of outer space.

The first speaker on my list is the distinguished delegate from Mexico. You have the floor.

**Ms. M.R. Ramirez** (Mexico) Thank you Chair, good morning. It is a great pleasure to see you all again after the excellent symposium on small satellites that we held on Saturday and which we think was a great success.

Chair, one of the fundamental mechanisms to reduce the gap which exists between highly developed countries in space affairs and those which are still working in this field, is without doubt international cooperation.

This statement has been divided up so that we can convey it more effectively. Firstly, cooperation in the Latin American and Caribbean region and the second part I will talk about international cooperation. As to the first part, I should tell you that on the 29th and 30th of October last year, representatives of space agencies and commissions of Latin America, this is Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Peru and Mexico met in Bogota, Colombia to discuss issues of common interest in the regions such as national natural disasters and climate change. Might I tell you that we did our level best to contact the countries of the Caribbean but without success so far. But that is a challenge and we intend to take up the gauntlet. It is important to emphasise that we looked for the necessary mechanisms to hold this event because we are aware of the scarcity of resources to take part in these works, so let me not forget to point out the support of the international academy of astronomics because the Government of Colombia and the Mexican Space Agency itself were various conclusions from this intending to promote international cooperation in the region among them.

Might I emphasize the following: the need to access space technology and capacity for the use of this in order to address climate change and prevent and mitigate disasters to define the needs and steps to be taken when it comes to climate change and prevent and mitigate disasters. To set up technical instruments and characteristics for the satellite missions, not just in Latin America, but throughout the World, based on the principle of cooperation. The need to coordinate efforts between the countries of Latin America to share information from space about climate change and prevent and mitigate disasters. Identify existing and future capacity to avoid duplication of effort to create a regional map of threats, risks and vulnerabilities. To establish a joint and coordinated project, to make best use of free and free access to satellite databases. The need to establish joint efforts to negotiate the acquisition of satellite data and images to reduce costs. The need to find innovative financial models. To promote investment in space technology and create a regional mechanism to make the best use of satellite data which contribute to the development of an early warning system for disaster prevention. To share methodologies and adapt a universal language, that is through pictograms and colours to avoid linguistic problems related to early warning systems. To establish a map of natural structures and agencies in order to ensure better coordination at times of disaster. To promote the creation of Latin American alliance of space agencies, the ALAS to facilitate and promote the developmental projects and cooperation programmes in areas of common interest for the countries of the region.

Ensure that each national space commission or agency define up to six priority areas nationally. To identify common problems and provide practical solutions in a cooperative way and to identify and discuss restriction and limitations on access to space technology to propose solutions to the benefit of cooperation between all countries.

Mexico was present in all of this during the ISEF. This meeting was organized by the United States State Department. This was held in Washington D.C. on the 9th of January. This is on international cooperation which I think we have already heard about.

Chairman, Mexico is aware that other meetings will be necessary to continue implementing issues already mentioned as regards the meeting in Bogota and hopes for a favourable response from our colleagues in the region, above all from the CONAE and Argentina and from the resilient space agency, which are the most advanced in our region in space activities.

The conclusions that I have mentioned is a work of all of us here present. I should point out that we have also conveyed to various embassies of the country such as Haiti, Santo Domingo and others, and these are countries of the Caribbean. They are all part of the integration of Latin America and the Caribbean in space affairs, and if we fail to incorporate all of the countries in our region, the gap in our respective levels of advancement would simply increase.

We should point out that the ALADA is the Latin America Aeronautic Law Academy held an event on the 11th to the 14th of November last year, that is this 37th Space Law days, this took up what has been mentioned numerous times in our legal affairs subcommittee. I should point out also what has been said on a timely matter by the delegation of Brazil, this regards the HCOC. When they talk about the need to delimit airspace vis-a-vis outer space. We would like to bolster the work of this subcommittee to avoid other fora addressing issues which are the competence of this committee without however these others a sensitivity and knowledge about space affairs which our own Subcommittee has.

I mention this Chair because I think that at the ALADA meeting, the icing on the cake was the fact that we talked about limitation of airspace vis-à-vis outer space.

Chair, if I may, I should like to refer to the space conference of the Americas, which involves the whole of the American region and as temporary secretary, I am in the final stage in determining those issues to be dealt with in convening a meeting on cooperation in the course of this year. And in line with the Pachuca declaration of this conference in 2010. I am trying to promote things so that this can be held jointly as a joint event. As might be for example, the United Nations-Mexico symposium workshop on basic space technology. Hence we need to make best use of the resources available to the agencies and outer space bodies being made and that we do such in Mexico. We must make sure that all such interested bodies can take part in these preparatory meetings thinking about related costs.

The reference to the [[CA]] is important because if as a region, both in Latin America or as American continent, we want to have effective international cooperation. It is important that we give some continuity to our proposals, which have been made in different meetings, and Chair, it is rather sad to note that everyone is very pleased in one meeting, defining things and ending up with various conclusions, then we leave our host country and go back to our own respective work and we see that there is no follow-up to what we've said.

As Mexico has already said, we repeat to members of the Latin American and Caribbean region the holding of the United Nations-Mexico symposium on basic space technology this year which is emphasized in the current report by UNOOSA and the delegation of Mexico emphasizes the importance of this event for Latin America.

Same as the event from the 20th to 23rd of October this year, to be held in lower California, in the north-west of our country and we express our thanks to the Office for Outer Space Affairs for the confidence they have shown in the holding of this event by Mexico and we repeat our commitment to ensure that this meeting is a joint success.

Chairman, and I continue that the invitation to take part in this will draw upon all the kind offers of cooperation extended to us and do please go onto the website of OOSA when it comes to international cooperation, when it comes to the agreements or memorandum of understanding, the Mexican Space Agency would like to emphasize the following. With the Italian Agency, signed on the 3rd of November 2012, in the International Astronomics Conference held in Naples in Italy and work will be done on the basis of both space agencies as partners in this joint activity will have a meeting today in my country with the Director of the Mexican Space Agency in order to give some follow-up to this work that we've already been doing together. And an agreement with the Ukrainian Space Agency, a memorandum of understanding was signed in August of 2012 and the meetings were held through teleconferences. The last one was held on the 27th of this month. Let me point out that there has been occasional follow-up by Ambassador Spirin from Ukraine in Mexico and by the Mexican Space Agency and it is my responsibility to ensure that the obligations entered in to are adhered to and an agreement with DLR, the German Space Agency, a memorandum of understanding was signed on the 1st of October 2012 at the International Astronautics Congress held in Naples. We have very close and intense working relations with them and from Germany we've received great support in various aspects. Let me emphasize for example the donation of facilities in Chetumal for imaging through the use of Earth observation satellites as well as the holding of seminars for secondary school pupils held last September and the United Kingdom Space Agency with which we signed an agreement in 2013, with which we are exploring one of the most fundamental issues, that is human capacity which was emphasized on the visit to our country by Deputy Prime Minister referring to the base fundamental basis which are human resources. We've held various meetings with the United Kingdom Space Agency above all thinking about satellite capacity applied to early warning systems and the meetings held at the level of national security committee in my country.

This is one way, together with the United States and other countries, that we've managed to come to agreements, one of them relates to stratospheric balloons which we did last year, which was very successful. We've also held a meeting, came to agreement for the preparation of human resources and on the 11th of March this year we held a preparatory meeting for an exchange of facilities thinking about taking part in respective projects. This is not in my written notes, but I wanted to point out Chair that just recently in my country we held a Franco-Mexican workshop on security in space affairs. This Franco-Mexican workshop held exclusively on national security related matters thinking about observation satellites and all the opportunities that they give us when it comes to Earth observation applied to our national security. It would become negotiations with the space agencies of the following countries: the Brazilian Agency thinking about the building of micro-satellites and the Argentinian Agency thinking about application of Earth observation satellites, in particular the use of data from remote sensing for disaster prevention. Terrestrial infrastructure, thinking about this storage and use of satellite data, also the use of space technology for the monitoring of the environment and management of natural resources and then with India, the aim being to look at early warning

systems and the disaster management system following natural disasters, and on another score is a part of the new negotiations we have various agreements we have entered in to, one of them with the Russian Federation and another with the Government of Italy and another with Ukraine and when we talk about agreements between countries as you all know Chair, these can be very time consuming because there is a whole protocol which must be adhered to. These things usually take between 2-3 years, however fast we may be working on them. Hence Mexico has availed itself of the option to enter into memorandum of understanding and agreements with the space agencies of various countries to come up with results in a short a period as possible.

I have left to the end mention that we concluded negotiations revisions of the final text both in the language of each States party and in gaining the opinion of the respective legal services from the national space centre of Mexico. Having taken advantage to visit the French President during which he signed his framework agreement on the peaceful use of outer space affairs and we also took best advantage of the President's visit to Mexico and the meeting this Spring, just the 18th to the 24th of March was a meeting of the International Astronautical Federation and I took advantage to discuss with my colleague, my opposite number, that is Dr. Sylvie Callari of CNES in which we had some discussions, minor issues that I would like to thank her for the facilities afforded us by the French opposite numbers to help us in our work, aware of the differences which do exist between a country which is highly developed in space affairs and one which is less so, such as mine. Thank you very much Chairman.

**Mr. Kai-Uwe Schrogl** (Chair) I thank the distinguished delegate of Mexico for her informative statement. I now turn to the distinguished delegate of Germany Mr. Wennholz who has the floor.

**Mr. P. Wennholz** (Germany) Thank you Mr. Chairman.

Mr. Chairman, distinguished delegates, the German delegation first of all would like to take this opportunity to congratulate Professor Aoki to her election of chair of the important working group on the subject "Review of international mechanisms for cooperation in the peaceful exploration and use of outer space. We are looking forward to fruitful discussions under her able leadership und assure her of our support.

Germany attaches great importance to this significant subject and also delivered a written statement for this session of the Legal Subcommittee. Global problems require global cooperation with adequate legal structures.

According to its current space strategy, Germany is strongly committed to the European Space Agency ESA which celebrates "Fifty Years of European Cooperation in Space" in 2014. The European Space Agency is a great success story: It has the experience to integrate countries with different sizes and technological capabilities in the space sector with the aim of creating an additional scientific, technical and economic value.

We believe that this experience could be transferred to other fields of global cooperation where the national interests of countries with different space capacities have to be combined for the common benefit. ESA's activities are divided in mandatory and optional programmes. While all member States have to contribute to the mandatory programmes which include basic activities, technology research and the science programme according to a scale based on their Gross Domestic Product, the participation as well as the level of contribution to optional programmes which cover fields such as Earth observation, telecommunications, satellite navigation and space transportation as well as the International Space Station, is voluntary. Each member State can choose the programme which fits best its interests and its industrial priorities. A characteristic of ESA which contributes essentially to its success is its industrial policy, especially the principle of "juste retour". This balance between contribution and technological return is one major aspect for encouraging member States in investing in space activities. ESA is not only focused on its internal cooperation mechanisms. In order to familiarize interested European countries with ESA cooperation mechanisms, ESA has developed the Plan for European cooperating States (PECS).

Beyond the European space cooperation, Germany is involved in intensive international cooperation with countries outside Europe. On governmental and on space agency level, Germany has concluded more than 80 cooperation agreements with over 20 countries, the oldest being signed in 1964 with the United States of America. Most recently Germany's space cooperation with Canada has been further intensified via the signing of the framework agreement on space science and technology during IAC in September 2013 in Beijing, China. Focus areas of cooperation will cover earth observation, satellite operations, space exploration systems and space technology.

Thank you for your kind attention.

**Mr. Kai-Uwe Schrogl** (Chair) I thank the distinguished delegate from Germany for his statement. Are there any other delegations wishing to speak? Yes, the delegate from China.

**Mr. Z. Shang** (China) Mr Chairman, international cooperation is a fundamental principle governing the exploration and uses of outer space. It is also an important contributor to the successful development of space activities worldwide. Discussions and exchanges relating to international space cooperation among nations under this agenda item would help increase information exchange, encourage mutual learning, and improve the dissemination of best practices and cooperative mechanisms and models, for the joint development of humankind's endeavours in outer space.

Mr. Chairman, at last year's session, the Chinese delegation introduced China's domestic legal framework on international space cooperation and relevant models of cooperation. Now, please allow me to brief the subcommittee on our mechanism for international cooperation in space-related priority development areas.

As for human space flight, China adheres to the principles of peaceful utilization, equality and mutual benefit, and common development. We are committed to fully strengthening communication and cooperation with all parties, and have established constructive, cooperative relations with space agencies of the Russian Federation, France, Germany, Belgium, and the European Space Agency by means of substantive collaboration in research and development and scientific experiments, among others. We have also been active in supporting the United Nations Human Space Technology Initiative and hosting relevant symposiums so that the aforementioned technology can benefit more countries in a wider range of areas.

In the construction of space stations, China, on the basis of equality and mutual benefit, has worked with other parties to explore diverse, flexible avenues and methods of cooperation. We can further promote our efforts in the following four areas. First, technical cooperation on platforms, including on individual devices, components, subsystems and even modules. Second, cooperation on space applications, covering joint research and passenger and payload experiments. Third, cooperation on selecting and training astronauts such as screening, training and joint flight missions. Fourth, sharing technological benefits, including dissemination of technology to other countries, developing countries in particular, for common development.

In terms of satellite navigation, China's Beidou System has, as always, upheld the concept of "open cooperation and resource-sharing" through broad international cooperation and sharing development results with other countries. Currently, the Beidou System has established a long-term cooperative mechanism with other major counterparts, vigorously enhanced coordination on compatibility and interoperability, and worked with others in testing and evaluating system performance and institutionalizing service performance. Meanwhile, China has also established a cooperative mechanism for the application of satellite navigation for developing countries, involving demonstration and dissemination, testing and assessment, education and training. Furthermore, we have participated in various events of the International Committee on Global Navigation Satellite Systems and extended collaboration with the Asia-Pacific Cooperation Space Organization (APSCO), the Shanghai Cooperation Organization and other international intuitions with a view to developing comprehensive mechanism for international а cooperation on the Beidou system.

Mr Chairman, international cooperation is vital in ensuring the use of outer space for peaceful purposes and to the benefit of mankind. China is of the view that the legal subcommittee should play a positive role in fostering international cooperation, strengthen the design of the system, as well as think long and hard at how to establish an effective and practical cooperative mechanism for the purpose of safeguarding peace, security and the rule of law in outer space.

Thank you, Mr Chairman.

**Mr. Kai-Uwe Schrogl** (Chair) I thank the distinguished representative of China for his statement. Are there any other delegations wishing to speak? I see none. So we will continue the consideration of this agenda item, the review of international mechanisms for cooperation in the peaceful exploration and use of outer space, this afternoon.

Distinguished delegates, I would now like to proceed with the technical presentations. Presenters are kindly reminded that technical presentations should be limited to 15 minutes in length.

We will hear two technical presentations this morning: the first presentation on my list is Ms. Atsuyo of Japan entitled "Japanese contribution to the General Exchange of Non-legally binding United Nations instruments on Outer Space", you have the floor.

**Ms. A. Ito** (Japan) Thank you very much Mr. Chairman.

Mr. Chairman, distinguished delegates, today, I would like to talk about the Japanese contribution to the agenda item "The General Exchange of non-legally binding United Nations Instruments on Outer Space". My delegation proposed this agenda item at the 52nd Session of the Legal Subcommittee of COPUOS to encourage the Member States to exchange information in relation to non-legally binding United Nations instruments on outer space. We are in the view that exchange of and discussion for non-legally binding instruments on outer space is important and meaningful, and my delegation would like to present Japan's vision for the agenda item and measures taken by Japan in relation to non-legally binding instruments and present a proposal to the delegations in order to seek concrete ways of preceding this agenda item.

I will start by touching upon a brief historical overview and role of non-legally binding United Nations instruments followed by the current status and content of the agenda item. Then I would like to present Japanese implementation by introducing some of the examples of specific measures conducted by Japan in relation to the registration recommendation and United Nations Space Debris Mitigation Guidelines. Lastly, I will briefly explain our envisaged work schedule for your consideration.

As you know, at COPUOS, five space-related treaties namely, Outer Space Treaty, Rescue Agreement, Registration Convention, Liability Convention, and Moon Agreement were adopted in 1960's and 70s. Achieving consensus for the treatybased law making has become increasingly challenging. It is due primarily to the increase in number of Member States of the COPUOS from original members of 24 to 76 members as of 2014. Rule-making for the exploration and use of outer space has taken place in a form of non-legally binding United Nations instruments such as United Nations General Assembly resolutions particularly since 1980's. Nonlegally binding United Nations instruments has played a significant role as an effective mean to address emerging issues and serves as a basis of rule to ensure sustainable and safe use of outer space.

Various principles, declaration, recommendations have been adopted as a form of United Nations General Assembly resolutions and most recently recommendations on national legislation relevant to the peaceful exploration were adopted December last year. Guidelines and Framework have been adopted at the COPUOS such as 2007 Space Debris Mitigation Guidelines and 2009 Safety Framework for Nuclear Power Source Application in Outer Space.

Non-legally binding United Nations instruments have played significant role in complementing and

supporting five space treaties. We can view that three major categories can be recognized for the role of non-binding United Nations instruments on outer space. The first category is addressing specific space applications and examples can include Direct Broadcasting Satellite Principles, United Nations Remote Sensing Principles, and Nuclear Power Sources Principles.

The second category is serving as complementary rules for applications of specific space related conventions and this includes registration recommendation, and applications of the concept of the launching State.

The third category is establishing specific guidelines for sustainable and safe use of outer space. As I already mentioned, these are Space Debris Mitigation Guidelines, and Safety Framework for Nuclear Power Sources Application in Outer Space.

Now I would like to briefly go over the current status of the agenda item "General Exchange of Non-legally binding Instruments on Outer Space". The agenda was adopted at the 56th Session of COPUOS in June last year for a single year item at the 53rd Legal Subcommittee Session of COPUOS. The objective of the agenda is to exchange and share information among Member States on views on non-legally binding United Nations instruments as well as experiences of how specific measures associated with non-legally binding United Nations instruments are taken at the domestic level. Following the general exchange of views and experiences among Member States, it was decided that a detailed study is to be undertaken and ways of proceeding the work is to be considered such as modalities for seeking a common understanding on how to promote the instruments as well as the feasibility of establishing a Working Group.

Now I would like to talk about the Japanese vision on the agenda item. First, the background of how Japan has proposed this agenda item is that we have fully recognized the increasing role played by and expected of non-legally binding United Nations instruments for sustainable and safe use of outer space. non-legally Certain binding United Nations instruments such as Space Debris Mitigation Guidelines have been addressed, but no agenda item dedicated for non-legally binding United Nations instruments as a whole existed thus far. The status of their applications has not yet been fully examined, and such need is recognized. We view that an overall approach to non-legally binding instruments will be taken for the first time and we believe that it is meaningful.

We are of view that there are three major goals of the agenda item. One is to gain a better understanding of the status of applications of non-legally binding United Nations instruments. The second is to promote taking appropriate measures in relation to non-legally binding United Nations instruments. The third is to contribute to considerations for future rule making for the exploration and use of outer space.

Japan views the benefits which could be brought by the agenda item is that it may vitalize the discussions at the Legal Subcommittee with practical and topical issues. The agenda item could facilitate sharing of the experiences and knowledge among Member States. Member States may be able to domestically incorporate similar measures that have been successfully taken in other States. The outcome we have in mind is the publication of an information package of concrete examples of the practices of States in relation to non-legally binding United Nations instruments as well as a summary of the work under this agenda item is proposed to be adopted and incorporated into the report of the Legal Subcommittee. We are not envisaging that the conclusion is to be adopted as an independent General Assembly resolution. Both expected outcome are simply ideas presented to the delegations for consideration.

Hoping to facilitate exchange and sharing of information among Member States and in order to simplify and ease the work of Member States in reporting the specific measures related to non-legally binding United Nations instruments, Japan has prepared proposed questionnaires.

Questionnaire is made up of two parts: one part addresses common questions on all the instruments such as ways of implementation of the instruments and scope of application. The other part addresses specific questions corresponding to each instrument.

The scope of the instruments covered under the questionnaires is the 11 United Nations General Assembly resolutions and other documents in the booklet ST/SPACE/61 and since we recognize that the major substance of the Safety Framework of Nuclear Power Sources Applications in Outer Space is covered under the Nuclear Power Sources Principles, 10 questionnaires have been prepared for your consideration. Among these 11 instruments, I would like to introduce some of the Japanese examples of measures taken in relation to the Registration Recommendation and Space Debris Mitigation Guidelines on the next few slides.

First I would like to share with you the example of how Japan follows the Registration

Recommendation with respect to the submission of additional information associated with space objects to the United Nations. For your information, the example of the Japanese implementation is provided as a sample to the questionnaire, so if the delegations could look at the CRP you could find the sample at the end of the document. Additional information associated with satellite has been provided from JAXA, private company, university, and non-profit organizations regarding date of moving a space object to a disposal orbit such as B-SAT 1A, date of a space object that has become no longer functional such as KSAT, Waseda-Sat2 and date of re-entry such as H-TI Transfer Vehicle Kounotori-2 and Kounotori-3.

Continuing with the examples of Registration Recommendation, with respect to determination of a launching State in case of a joint developed space object, in most of the cases, it is arranged among the relevant parties prior to the launch. Such arrangements include government-to-government agreement. As an example, I would like to introduce X-ray Astronomy Satellite (ASTRO-EII) Project where Japan has registered ASTRO-EII in accordance with Agreement between the United States of America and Japan, concluded on June 10, 2005. We can view that there is a certain trend that the State which owns and/or operates a satellite would register the satellite.

Now I would like to share with you the examples of how Japan follows the Space Debris Mitigation Guidelines. The Basic Plan on Space Policy has a general clause which states that the government will promote its own development and utilization of space taking into consideration the United Nations Space Debris Mitigation Guidelines and other international recommendations, ISO standards and other norms.

Furthermore, JAXA Space Debris Mitigation Standard was established in 1996 as an internal standard of JAXA. Not only JAXA follows this Standard, JAXA also requires its contractors to comply with the standard through all stages from design to operations.

JAXA Space Debris Mitigation Standard as management and technical standard for debris mitigation covering all phases of the development life cycle from mission requirements analysis, design, operation and end of mission disposal of spacecraft and launch vehicles.

Guidelines 1 to 7 of the United Nations Space Debris Mitigation Guidelines are incorporated into the JAXA Space Debris Mitigation standard. They include refraining from the releasing objects equivalent to the United Nations Guideline-1, prevention of orbit breakups in accordance with Guideline-2, Guideline-4, and Guideline-5, removal of mission terminated space systems in accordance with Guideline-6, Guideline-7 and avoiding on-orbital collision in line with Guideline-3.

We would like to encourage Member States to report domestic implementation for the 54th session onwards. Of course, this does not prevent sharing of information of any other form. Discussions and exchange of views are to be conducted include but not limited to: how much and how non-legally binding United Nations instruments are followed by Member States; how to promote taking appropriate measures in relation to non-legally binding United Nations instruments; and which or what type of the 11 instruments are followed more than others.

From the submitted information, we envisage that an overview of and an analysis of trend associated status and application for non-legally binding United Nations instruments could be produced. Again, it is simply our idea for considerations by the delegations.

In conclusions, let me reiterate highlights of my presentation. Japan fully recognizes that non-legally binding instruments have been and continue to serve as a catalyst to ensure sustainable and safe use of outer space. We are in the view that soft law is well-suited to address emerging issues and flexibly accommodating changes of the environment surrounding the exploration and use of outer space, and the topic may be able to vitalize the discussions at the Legal Subcommittee, Japan believes that issues associated with the agenda item for an exchange of non-legally binding United Nations instrument deserve further attention of Member States and the agenda item should be continued and elaborated for initiating the work at the 54th Legal Subcommittee Session onwards.

Thank you very much for your attention and my delegation is very pleased to hear your ideas. We are looking forward to active discussions toward this important topic. Thank you very much.

**Mr. Kai-Uwe Schrogl** (Chair) I Thank Ms. Ito from JAXA for her statement. Are there any questions you would like to address to the speaker? I see none, so we would like to thank again Ms. Ito for her presentation.

The second presentation we will hear this morning is by Mr. Marco Ferrazzani of the European Space Agency, it is entitled "The European Space Agency as mechanism and actor of international cooperation". You have the floor.

**Mr. M. Ferrazzani** (ESA) Thank you Mr. Chairman.

Mr. Chairman, distinguished delegates, observers, first I would like to personally congratulate the Chairman of this session here since this is the first time I have the pleasure to take the floor today and also Professor Eiko who is chairing the working group on this agenda item. We are confident that under her guidance this topic will bring fruitful discussions and relevance to the whole committee.

It is my pleasure today to present an offer to the international community, the European Space Agency as a mechanism and actor of international space cooperation through the presentation you have here and also especially through the conference paper CRP.28, there you can find today available to all of you. I will briefly summarize the content of the paper and invite all present delegations to refer to the paper as further explanation of the work we would like to contribute to the working group and to the committee.

Mr. Chairman, the European Space Agency is an international intergovernmental organization of 20 European Member States. It is a model of international cooperation in the exploration and use of outer space. States cooperate through ESA and ESA also cooperates with other partners. In the first case, ESA is a mechanism, an international corporation amongst States, in the second case, ESA is an actor of the International Space Corporation. In both cases, we work on space activities and undertake such space activity on a large multilateral basis. So these are the two cases I am summarizing.

The mechanism of ESA has brought the international organization to exist since 1975. With the 20 Member States you see on the chart and has given ESA international legal personality. With an annual budget of over 4 billion euro per year and over ,000 staff distributed over several centres in Europe.

The reason for this was officially stated in the creation of the agency in its convention for the establishment of ESA in 1975, and entered into force in 1980. It is an international treaty with articles and annexes, quite detailed ones, and the most important statement can be found in the opening preamble where the States Party to the convention stated solemnly that considering the magnitude of the human, technical and financial sources required for activity in the space field, this resource lies beyond the means of any single European country and therefore there was a need to create a single European Space Agency. So the objective is to pull resource in order to enable important significant space activities for Europe.

The purpose of ESA is fundamentally to cooperation, so the raison d'être is cooperation which is achieved through the purpose of elaborating and

implementing a space policy, elaborating and implementing space activity, the European Space Programme and national programme to be coordinated among self. So the coexistence among European and national programmes, and elaborating in an appropriate industrial policy which is a fundamental objective.

The purpose is to promote the for exclusive peaceful purpose cooperation among European States through policy, programmes and coordination. The structure is quite simple, the organs of the agency are simplified into two main institutional organs. One organ, the Council of Member States and one executive organ, the Director General assisted by staff and the two organs a pretty much well defined in the constituting convention of the European Space Agency and so it is a simple mechanism of decision making at European level.

The agency itself is one of the few agency's in the world which has a complete programme covering all areas of space activities. From space science to navigation to operation, Earth observation and launchers. So virtually all areas of space activity are covered and this means running several programmes, we call them, in parallel, and these programmes this is an interesting feature of mechanism, we call them either mandatory activities, or optional activities or programmes. The mandatory ones are those which are defined in the convention, all Member States are contributing by virtue of the treaty, and these are the fundamental existence of the agency, research and space science, while the optional activities are decided as some or all the Member States based on specific interests in that point in time. So they only exist when the Member States agree for a need for them and decide to commit to the objective and the resources.

The fundamental legal difference between mandatory and optional is that the mandatory activities are those done by the organization, ESA, as an international governmental organization, whereas optional activities are those of the Member States, which agree among themselves to do them on an intergovernmental multilateral basis and then they are entrusted to the European Space Agency for the execution. So especially in the case of optional programmes, the parties are the Member States who reach an agreement among themselves through an international act called programme declaration and this act by virtue of the Convention becomes immediately valid and effective in the national laws of each Member State through the ratification of the Convention itself.

I give here two examples which may be known, the first one, GAIA, is a space scientific observation telescope, it is the result of a science programme of ESA, launched recently to look into the stars and the origin of the Universe. And the second one Sentinel-1 is the first satellite of the European constellation Copernicus, which we do in cooperation and for the European Union, and this is a typical example of the end result of an off-shore programme among Member States. In addition in cooperation with the European Union.

Mr, Chairman, ESA is also an actor of international cooperation. Because ESA can conclude agreements including national treaties with third parties, be the Member States or the subjects of international law, such as States, Governments, governmental agencies or other institutions competent to enter into cooperation international agreements. Also we have agreements with other international governmental organizations. In such cases, ESA becomes a party and assumes legal rights and obligations by which it is bound as ESA as an organization. Therefore ESA can be considered and actor in international cooperation with legal capacity to be a party and create international commitments and acts. This comes as a compliment in addition to the intergovernmental mechanisms within the ESA system, by the way it is used be ESA and the Member States as a tool to achieve the objectives of their cooperation.

The ESA convention gives several tools and objectives. One of the important objectives that we have which was briefly mentioned by the distinguished delegate of Germany earlier on, is that not only ESA has programmes, but has also political objectives in terms of what we call "industrial policy" a project to the programmes. And this industrial policy objective are listed, such as cost-effective response to requirements of European and national programmes, the improvement of worldwide competitiveness of European industry, free competitive bidding and the safeguarding of all ESA States participating rights, so the possibility and capacity to participate in an equitable manner, and regard to the financial contributions. So to make this objective the convention lays down provisions in the placing of contracts where it is especially indicated ESA gives preference to industry and organization to the Member States, or in the case of programmes, optional programmes to industry organizational participating States. This indicates very clearly the very peculiar character and the multilateral agreements within the organization.

Under this scheme, currently ESA has about 80 programmes in parallel and we have executed several important programmes like Giotto, Huygens which was a first landing on the surface of a planetary body beyond Mars, on Titan in 2005, and other worldleading Earth observation programmes, like Earth explorer and as I mentioned before, the first sensing for Copernicus. And these are long-term commitments to establishing the first permanent inhabitant international human outpost in Earth orbit, the International Space Station.

In order to do this, ESA entered into more than 400 international agreements with States, intergovernmental organization and other institutions. I would mention one of the most important for us is the framework agreement we have with the European Union as an important partner in our activities and long-standing cooperation agreements and relationship we have with the United States of America, with Russian Federation, Japan, India, China, Canada and many several other States in South America, Africa, Asia-Pacific States.

So, Mr. Chairman, this illustrates the treaty making power, which is an important aspect of ESA and international legal personality. While one might think that an international organization process only limited treaty making power independently, ESA convention explicitly and expressly foresees this possibility of concluding international cooperation in article 14, where the agency may upon unanimous decision of the Member States, cooperate with other international organizations and States and governments and conclude agreements with them to that effect.

As I mentioned before Mr. Chairman, for us, it is important in international cooperation to provide the tools and the means to realise the objectives of the Convention. Balancing international cooperation with competition objectives and providing the basis for the activities. We have important agreements also with non-member States of ESA, who are European cooperating States, and therefore specific scheme is established for them and we have an important relationship with most important partner of ESA today, the European Union, by which the corporation is established to a framework agreement within the European Space Agency, European Union and international treaty is signed already since 2003 and into force in 2004 and currently up to 2016. The purpose is the development of an overall European Space Policy and establishment of a framework for appropriate corporation being ESA and the European Union. The cornerstone of this corporation are irregard to the respective task and responsibility of the respective solution settings in operational framework, and each party working and cooperating in compliance with its own prerogative, legal instruments and procedures. And this has allowed us to set up important and flagship programmes for Europe, such as Galileo, as I mentioned Copernicus, and financial contribution, important financial contribution made by each of the parties.

Mr. Chairman, ESA is also an actor of international initiatives. This once I mentioned before, but also specific ones are the one of the Agency being a founding member of international coordination mechanisms, like Committee on Earth Observation Satellites (CEOS) and ESA was also founder together with the French Space Agency (CNES) of the international charter on major disasters. A cooperation between owners and operators of Earth observation mission to follow rapid access to satellite data in the event of natural or man-made disaster. Helping disaster management authorities and relief organizations all around the world.

ESA is also an active promoter of space law and since a long time is accepted the rights and obligations provided in agreement of the rescue of astronauts, return of astronauts and return of objects, in the convention on international liability for damage caused by space objects and in the convention on registration of objects launched into outer space. So ESA has filed with the United Nations council declarations, unanimously approved by the ESA Member States, in order to submit to the previously mentioned conventions and treaties. Therefore ESA applied and supported space law not only as normative necessity but also as an instrument of international cooperation and ESA is committed to respect its international obligation and to give a guided example wherever possible and in this respect details can of course be given to all distinguished delegates and observers in terms of the behaviour of ESA, the declaration, our internal acts, to fulfil with all this obligation including several topics on the agenda of this committee, Mr. Chairman, registration and debris.

In conclusion Mr. Chairman, since this year we celebrated the 50 years of European space cooperation since 1964, I would like to summarize the main messages. ESA is a mechanism of international cooperation in outer space activities, taking the form of international, intergovernmental organization with international legal personality, recognized by its member States, and many other States of the international committee through the stipulation of international agreements or treaties. Because of its legal personality, ESA is also an actor of international cooperation in outer space activity programmes, cooperating with institutional and State partners around the world, often using instruments of international law as founding foundations of such cooperation. The ESA legal institutional and industrial policy systems allows for the necessary flexibility for taking into account the particular interests of its member States while at the

same time guaranteeing the necessary stability of the European Space Programme also as an international partner. So ESA is a flexible mechanism and innovative actor and reliable cooperation partner in the use of outers space for half a century, since 50 years. The ESA convention has proven to be a robust basis for enabling the functioning of this multilateral mechanism comprising meanwhile 20 European States and growing.

In conclusion Mr. Chairman, we are open in favour international cooperation as the best means to realize the objectives of peaceful use of outer space. Thank you very much Mr. Chairman.

**Mr. Kai-Uwe Schrogl** (Chair) I thank Mr. Ferrazzani representing ESA on his technical presentation, are there any questions from delegations to address to Mr. Ferrazzani? The United States, you have the floor.

Mr. B. Israel (United States of America) Thank you Mr. Chairman, my delegation would like to thank Mr. Ferrazzani for coming here to the Legal Subcommittee and providing this excellent presentation and also for CRP.28, both of which are tremendously valuable contributions to the Subcommittee's work on mechanisms for international cooperation.

I was wondering, during the presentation on ESA's 1975 Convention, whether it has been necessary to amend this convention over the years. Thank you.

**Mr. Kai-Uwe Schrogl** (Chair) Thank you, are there any further questions? I see none so Mr. Ferrazzani please.

**Mr. M. Ferrazzani** (ESA) Thank you Mr. Chairman and I appreciate and thank the question from the distinguished representative of the United States.

Yes, Mr, Chairman, the Convention has proved to be a very solid and flexible instrument, it is so flexible that not only it is an essential treaty, but it provides in its final provisions the possibility to of course amend, which requires ratification from Member States, but also to the possibility in some parts which are more prone to programmes and industrial policy that the Member States themselves, without ratification can modify the so-called annexes to the convention. And this was done several times where the council intervened to adjust some financial or industrial policy provisions. So the institution itself has not changed, the Convention itself, but the annexes have changed whenever it was necessary over the last 30 years to adjust some financial mechanism, some industrial policy mechanism and some specific

mechanism of intra-European cooperation. And I would like to underline that the full text of the Convention in three languages is available on the ESA website, if you go on the website of ESA it is all public, you will find pages called law at ESA, and there you will find the full text of the Convention, you can download and some explanation exactly on the ratification of Member States and last modifications to the annexes. Thank you Mr. Chairman.

**Mr. Kai-Uwe Schrogl** (Chair) thank you Mr. Ferrazzani and thank you again for your presentation. I will now shortly adjourn this meeting of the Subcommittee, so that the Working Group on the Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space can hold its second meeting. Before doing so, I would like to inform delegates of our schedule of work for this afternoon.

We will promptly meet at 3 p.m. At that time, we will begin our consideration of agenda item 11, General exchange of information and views on legal mechanisms relating to space debris mitigation measures, taking into account the work of the Scientific and Technical Subcommittee, and we will continue our consideration of agenda item 12, General exchange of information on non-legally binding United Nations instruments on outer space. We will also continue our consideration of agenda item 13, Review of international mechanisms for cooperation in the peaceful exploration and use of outer space.

The Working Group on International Mechanisms will then hold its third meeting.

Once again, distinguished delegates, I wish to remind you that the Provisional List of Participants was distributed as conference room paper 2 and you are kindly requested to provide the Secretariat with written amendments to the list by close of business today, so that the Secretariat can finalize it.

Are there any questions or comments on this proposed schedule? I see none.

The meeting is adjourned.