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Committee on the Peaceful Uses of Outer Space

Unedited transcript

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Vienna

Chairman: Mr. G. Brachet (France)

The meeting was called to order at 10.05 a.m.

The CHAIRMAN *(interpretation from French)*: Good morning distinguished delegates, I now declare open the 554th meeting of the Committee on the Peaceful Uses of Outer Space.

This morning, as I indicated yesterday, we will continue our consideration of agenda item 7, Implementation of the recommendations of UNISPACE III, and item 8, Report of the Scientific and Technical Subcommittee on its Forty-Third Session, on the agenda. And we will also begin our consideration of agenda item 9, Report of the Legal Subcommittee on its Forty-Fifth session.

And then at the end of this morning's meeting, under item 8 of the agenda, Mr. Arshad Siraj of Pakistan will make a presentation on the "Use of Remote Sensing Satellite Technology in Disaster Management".

I should also like to remind delegates that the Action Team on the Environmental Monitoring Strategy is currently holding its meeting in Room C-0727, and that the Ad Hoc Expert Group on the possibility of creating a disaster management international space coordination entity will continue its meeting at 11.00 a.m. in Room C-0713.

Implementation of the recommendations of UNISPACE III (agenda item 7)

Distinguished delegates, I should like then to now continue our consideration of agenda item 7, Implementation of the Recommendations of UNISPACE III.

And the first speaker on my list is the distinguished representative of India, Mr. Radhakrishnan. You have the floor Mr. Radhakrishnan.

Mr. K. RADHAKRISHNAN (India): Thank you Mr. Chairman. Mr. Chairman, one of the primary objectives of UNISPACE III was to strengthen the capabilities of member States, especially developing countries, to use the results of space research for economic and cultural development. Today, the developing countries face a number of challenges in terms of improving their agriculture, water resources management, eradicating illiteracy and providing better education to the populace and in improving public health services. Hence, implementation of UNISPACE III recommendations will directly enable and assist the developing countries in meeting their challenges. It is in this context, the practical actions defined by the Action Teams have to be implemented to really achieve the concrete results which will benefit developing countries.

The Indian delegation specifically noted that the United Nations General Assembly resolution of 2004 which mandated our Committee to review the implementation of UNISPACE III recommendations "until the Committee considers that concrete results are achieved".

Mr. Chairman, the Indian delegation is satisfied with the detailed work carried out by the Ad Hoc Expert Group on various aspects of establishing the Disaster Management International Space Coordination Organization, DMISCO. The study carried out by the Group addressed all phases of the

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disasters, like the pre-disaster preparedness with databases on the countries and regions which face recurrently some natural disasters like floods, forest fires, earthquakes, etc. We also noted the special efforts of the Ad Hoc Expert Group to address on how to maximize the efforts of the existing mechanisms. The Indian delegation is currently participation in further discussions on the Report of the Ad Hoc Expert Group. In this connection, we are prepared to look at various models, including models to finance the new initiatives, to serve the end goals in an efficient manner.

Our Committee had a lot of expectations a few years back to involve private industry, through their contributions to the Trust Fund, in implementing UNISPACE III recommendations. We still feel there is scope to encourage the private industry to contribute to our initiatives, once each of the recommendations is brought into shape of a clear-cut project.

We feel there is a large scope that some of the developed countries can pool the resources and enable one of the developing countries to initiate an application programme based on the space system and services, which proved successful elsewhere in other developing countries. This will be a fitting way of implementing the recommendations of UNISPACE III in a synergetic fashion.

Mr. Chairman, we are happy to note that the General Assembly has agreed for reconvening of the meeting of the Working Group of the Whole to consider implementation of recommendations of UNISPACE III. The Indian delegation is prepared to participate and contribute actively to the discussions and activities under the agenda of implementation of UNISPACE III recommendations with the aim of progressing towards achieving concrete results in this area.

Thank you Mr. Chairman.

The CHAIRMAN *(interpretation from French)*: Thank you Mr. Radhakrishnan and to the Indian delegation for that contribution. I am sure that, as in the past, the Indian delegation will be actively involved in discussions which will be taking place within the different groups following implementation of UNISPACE III recommendations. Thank you then.

I will now give the floor to Madam Liu representing China who would also like to speak to agenda item 7. Thank you.

Ms. X. LIU (China) *(interpretation from Chinese)*: Thank you Mr. Chairman. Mr. Chairman, since UNISPACE III in 1999, COPUOS has established several Action Teams to implement the various recommendations of UNISPACE III, under the direct coordination and guidance by the Office for Outer Space Affairs and with the active participation and joint efforts of member States. These Action Teams have worked hard and achieved substantive progress in implementing the recommendations of UNISPACE III and promoting the application of space technology.

The Chinese delegation has also actively participated in the work of the Action Team 7, chaired by China, Canada and France in rotation and the work of some other Action Teams for the three-year period.

The Chinese delegation notes with appreciation that in line with the recommendations of UNISPACE III, and in accordance with General Assembly resolution A/59/174, adopted at the fifty-ninth General Assembly session, the Scientific and Technical Subcommittee of COPUOS set up and Ad Hoc Group of Experts in 2005 to study the feasibility of establishing an international entity named DMISCO to be operated by the Office for Outer Space Affairs and that progress has been achieved in this regard.

Mr. Chairman, the Chinese delegation views the DMISCO project as the only activity available at present which covers the complete process of disaster reduction and disaster management by the use of space technology. In addition, it can also provide operational support and services and offer technical support in terms of information and technology sharing, pre-disaster preparation, early warning, impact assessment during and after disaster, rehabilitation and reconstruction, as well as education and training.

Furthermore, it can play an important role in providing practical support and technical assistance to the work by United Nations/ISDR. At the same time, it can be mutually supportive and complementary to the Charter on Major Disaster and Disaster Reduction and other international organizations and motions(?) in the field of disaster reduction and disaster management.

The Chinese delegation believes that the DMISCO project will enable the disaster-affected countries to contact the Office for Outer Space Affairs in the shortest of time possible and obtain technical support in time. It can fully utilize the space technology resources available from various space institutions, international organizations and relevant motions(?) in conducting international cooperation in

disaster reduction with a view to establishing a closer link between disaster management and the requirements and the capabilities of member States.

By providing infrastructure construction and services through space communication cooperation, the project can minimize the distance between the end-user and the space institutions, international organizations and the relevant motions(?), provide real-time technical support to disaster reduction activities and to improve the preparedness and the responsive capabilities of member States to disasters.

Mr. Chairman, China, as one of the countries worst affected by natural disasters in the world, has about two-thirds of its territory under the constant threat of floods to various degrees and nearly half of all its cities situated along the earthquake belt. In addition, China also suffers serious drought and desertification.

With global climate change since the 1990s, a period of high incidence of natural disasters has fallen on China which has resulted in the constant happening of major disasters and led to an obvious upward trend in the incidence of natural disasters and losses thus caused. Therefore, the Chinese Government attaches great importance to disaster reduction work and to the international cooperation in the field of disaster management and has actively supported and participated in the work of the Ad Hoc Group of Experts of COPUOS and the relevant activities by other international organizations.

Mr. Chairman, the Chinese delegation believes the Ad Hoc Group of Experts will provide a convincing argument for the report of disaster reduction to be operated by the Office for Outer Space Affairs. The Chinese delegation believes this entity is the practical action and results in implementation of the recommendations by UNISPACE III and is in line with the principles contained in the Vienna Declaration and is also the start to translate the paper languages into practical actions after almost six years of discussions in our Committee. Therefore, the Chinese Government support the establishment of DMISCO and hope that the office of this entity will be established in Peking. The Chinese delegation will provide offices and relevant experts and staff to this entity free of charge.

Mr. Chairman, Beijing is the site of the United Nations Centre for Drought Research established by the United Nations ISDR and is also the site of the headquarters of the Asia-Pacific Space Cooperation Organization which has nine member States. It is also the seat of the China Meteorological Satellite Application Centre, the Earth Resource Satellite Application Centre, Ocean Satellite Application Centre and also the seat of the Small Satellite Constellations on Environmental Monitoring and Disaster Management. Not long ago, the China National Space Administration, in cooperation with China Satellite Meteorological Application Centre has provided DVBS digital video broadcasting stations to seven countries which signed the Treaty which can broadcast live the satellite images from Fung Yin(?) Number 2 communications satellite. All this infrastructure and the facilities will also provide support to the entities for DMISCO.

Thank you Mr. Chairman.

The CHAIRMAN *(interpretation from French)*: Thank you Madam Liu, distinguished representative of China for that statement on issues relating to the Expert Group on implementing natural disaster management systems and also for your mentioning of the fact that you might be even willing to host this new organization, or new entity, in Beijing. I think that we will have another opportunity to discuss this when we hear the report from the Group of Experts that is working on that matter at this time.

We will continue this item of the agenda by inviting the Chairman of the International Astronautical Federation, Mr. James Zimmerman, to make a statement. You have the floor Sir.

Mr. J. ZIMMERMAN (International Astronautical Federation) *(interpretation from French)*: Thank you Mr. Chairman. *(Continued in English)* Good morning ladies and gentlemen, delegates, on behalf of the member organizations of the International Astronautical Federation, I am delighted to have the opportunity today to make some brief remarks.

The IAF is an international non-governmental association composed of space agencies, companies, professional societies and research organizations. We are global in character, with members located in most of the countries participating in this Committee meeting.

The IAF promotes public awareness and appreciation of space activities worldwide . We do this by organizing, together with the International Academy of Astronautics and the International Institute of Space Law, annual Congresses held in various locations throughout the world. Our last Congress, a very successful one, was held in Fukuoka, Japan, in October 2005. Our next Congress will be held in Valencia, Spain, from 2 to 6 October 2006. We are also planning

International Astronautical Congresses in Hyderabad, India, in 2007, and in Glasgow, Scotland, in 2008.

We also promote the exchange of information on space programme developments and plans. The annual Congresses we organize provide a forum to present 1,400 papers in 175 sessions that utilize both lecture and interactive presentation formats. These papers cover a wide variety of past, current prospective space activities. In addition to attending the actual presentations, participants use our Congresses for informal discussions that often prepare the way for new collaborative ventures. The IAF promotes the development of information exchange networks as well and, in this regard, has helped the European Space Agency establish a new remote sensing data network that links research institutes in Russian, the Ukraine and several EU member States as well as Canada.

We promote the development of a highly motivated, internationally knowledgeable workforce. The IAF has since 1999 welcomed students as participants in our annual Congresses. This initiative, begun by the European Space Agency and now strongly supported by JAXA, by NASA, by CSA and others, has become an increasingly important aspect of our Congress activities with almost 400 students from around the world participating in our last session in Japan. In addition, the IAF is working closely with the Space Generation Advisory Council, which was established during UNISPACE III, to develop activities of interest to young space professionals. The SGAC organizes its own annual meeting immediately before ours. This year, the IAF and the SGAC are collaborating to encourage even more young professionals to take part in our respective activities.

We promote recognition of achievements in space activities and space programme cooperation. In close collaboration with our member organizations, as well as our colleagues in the International Academy of Astronautics and the International Institute of Space Law, the IAF seeks to recognize significant achievements in the pursuit of global space activities. We are also exploring opportunities to preserve the experiences of those space programme pioneers who chose to cooperate on projects during the first half century of the space age. We hope to pass these experiences on to future generations.

The Federation promotes the preservation of information on global space developments. We maintain an online archive containing all of the papers presented during each International Astronautical Congress beginning with our fifty-fourth Congress in 2003. We view this digital archive as a valuable resource for the global space community and we are exploring the possibility of expanding it to include papers presented at Congresses dating back to 1964. The IAF also prepares, in collaboration with the International Institute of Space Law, an annual report on global space activities that is published by the United Nations Office for Outer Space Affairs and is among the materials provided to delegates at this meeting.

Finally, we promote increased use by developing countries of space systems for human development. Together with the Office for Outer Space Affairs, our Federation organizes an annual workshop on capacity-building in space technology for the benefit of developing countries. The next of these workshops will be held in Valencia, Spain, on 29 and 30 September 2006, just before the International Astronautical Congress. This workshop will focus on the use of space technology for water management, a topic of global concern and one that is also on the agenda of this Committee. We have also begun to make plans for the 2007 IAF/UN Workshop which will be held at the National Remote Sensing Centre of India, in Hyderabad, India, an organization with extensive experience in utilizing space technology in national development programmes.

Mr. Chairman, as had already been mentioned by several colleagues, 2007 is a particularly important year for those concerned with space matters. We have several very significant birthdays to celebrate, including the fiftieth anniversary of the launch of the first artificial satellite, the fortieth anniversary of the Outer Space Treaty and the fiftieth anniversary of the International Geophysical Year. The IAF plans to help celebrate these anniversaries on several occasions during 2007 including a special event that we are currently discussing with the COPUOS Chair, with the Office for Outer Space Affairs and with several other non-governmental organizations. The event we envision will not only commemorate past space activities but will look ahead to the likely achievements of space-faring countries during the next 50 years.

The IAF is a non-governmental organization composed of agencies, companies, societies and institutes. We are also a Federation of volunteers, some of whom, I am delighted to note, are here participating in this forty-ninth session of COPUOS. During the coming year, my IAF colleagues and I look forward to working very closely with the COPUOS Chair, with the Vice-Chairs, with the Office for Outer Space Affairs and with the national delegates to this Committee in pursuing our common objectives to explore space and increase our knowledge of the

Universe and to use space technology for the improvement of life here on Earth.

Mr. Chairman, thank you for the opportunity to discuss the activities and the plans of the International Astronautical Federation.

The CHAIRMAN *(interpretation from French)*: Thank you dear Jim for this presentation on behalf of the International Astronautical Federation on its activities. I think we could commend it for very strong interaction with the Office for Outer Space Affairs through providing the annual report material and organizing workshops, specifically the one prior to the Astronautical Congress. I think it is an excellent example of cooperation between the Office for Outer Space Affairs and a non-governmental organization which is, at the same time, a truly significant international organization.

I think our colleague, the representative of Chile, has asked for the floor.

Mr. R. GONZÁLEZ ANINAT (Chile) *(interpretation from Spanish)*: Yes, thank you very much Mr. Chairman. I have listened with great attention to the statement made by the distinguished representative of the IAF. Obviously, it is an important organization, an organization that pursues many important activities and organizes extremely far-reaching international congresses.

There is one thing, however, I would like to see clarified, if possible. It seems to me that these IAF Congresses consider a wide range of issues and they do refer to the opportunities that developing countries have in acquiring space technologies. However, developing countries face two major structural obstacles in that regard and I do not think that was discussed or mentioned in the IAF Congress, at least with regard to the Latin American continent, to my knowledge. At least it is not something that is in the focus of the attention of the delegates who attend these Congresses.

I think also participation in these Congresses is extremely costly which makes it very difficult for representatives of small and developing countries to attend even though it is extremely important for them to be involved in this work, to be aware of the realities and to gain access to these technologies, but the access that they currently have is extremely limited.

So my question to the distinguished representative of the IAF is to comment on the extent of interest that his Organization has in promoting the interests of developing countries. Would the IAF be prepared to making special steps to facilitate the participation of developing countries and to help them gain access to knowledge and technology. I do not think the participation of developing countries is anywhere near where it should be to date. I think only about five per cent of the developing world have a chance to participate in these Congresses, to the best of my knowledge.

Also, following the discussion we had in the Legal Subcommittee of COPUOS this year, I have been reflecting on specific issues that concern me a lot and yesterday I had a chance to visit the library of the Office for Outer Space Affairs, thanks to the kind permission issued by Dr. Camacho. And I was looking for comments on these issues that I have just highlighted and that are of great concern to my country and other developing countries and I saw very little in terms of the deliberations of these IAF Congresses.

Also commenting on the work of the University of Mississippi, the Centre for Outer Space Law in Canada and other such institutions, is there a way to let developing countries, less rich countries, access this wealth of material, knowledge and experience at a reduced cost? Is it possible to let them become full-fledged participants in this important work?

What we would like to see is that is a situation where these type of organizations, non-governmental organizations, organizations that promote knowledge and information and exchange of views, make a special effort to involve developing countries in this work and to serve their interests, to take into consideration to a much greater extent than they had done hitherto, the very vital needs of countries like ours, they can learn from conferences such as the Fifth Space Conference of the Americas. I mention all this because the Conference of the Americas will take place in June and I think the IAF Congress in October and it would be great to have some kind of relationship there and some kind of follow-up.

Also the Congress that took place in Abuja in Nigeria last year, particularly highlighted issues of interest to developing countries and should be of interest to organizations like the IAF.

When we talk about powerful international organizations that mostly work for and on behalf of countries that are far from bankrupt, in fact, possess enormous wealth, maybe they should think about providing these opportunities to the developing countries.

Thank you.

The CHAIRMAN *(interpretation from French)*: Thank you very much Ambassador, distinguished representative of Chile, for your contribution. You have raised a number of issues. The President of the IAF could perhaps answer some of them. Others are perhaps more appropriately addressed to the Director of the Office for Outer Space Affairs.

First of all, I call on Mr. Zimmerman, on behalf of the IAF. You have the floor.

Mr. J. ZIMMERMAN (International Astronautical Federation): Thank you Mr. Chairman, and I would also like to thank the distinguished Ambassador and delegate from Chile for his intervention on this matter. May I say that the IAF fully shares the objectives and the interest that he refers to with regard to increased participation on the part of developing countries in our Congresses and in all of our activities as we try to do a great more than hold an annual Congress each year. This is a goal which we work very hard on already but I would be remiss if I did not recognize that this is a goal we need to do more on and so we wish to work very hard on it.

I would say with regard to our Congress in Valencia, Spain, and our International Workshop that we and the Office for Outer Space Affairs will be organizing just before that, we will make efforts, as we have in the past, but we will make efforts to bring representatives from developing countries to Valencia to participate, not only in the Workshop, but in the full Congress, under very special cost arrangements that make it possible not only for them to travel to Valencia but to participate.

The Government of Spain, I understand, is particularly interested in doing this and in this case is interested in seeing representatives from the Americas participate in this meeting. So I look forward to that very much.

For the future, we welcome your suggestions and the suggestions of other national delegates and others in this Committee on how we can do more. As a non-governmental organization made up of volunteers, our resources are modest but our aspirations are very great and we will work with you. We will also work with organizations that wish to donate their financial resources to help us achieve the goals you mention.

Thank you Mr. Chairman.

The CHAIRMAN *(interpretation from French)*: Thank you President of the IAF. Maybe I could add to that a reminder. As I recall, the Astronautical Congress of the year 2000 happened in Brazil.

Mr. J. ZIMMERMAN (International Astronautical Federation): It did indeed, Mr. Chairman. I might also mention that the 2007 Congress will be held in India and I look forward to working with our colleagues in India in making sure that that event is particularly relevant to the countries in South-East Asia that have an interest in this matter. And in future Congresses, I would expect to see our location rotated to various parts of the world, again to South America, perhaps in the future to Africa, so that not only are we inviting people to participate but we are coming to regions where the applications of space technology is very relevant.

Thank you Mr. Chairman.

The CHAIRMAN *(interpretation from French)*: Thank you again. Thank you for this clarification. Sergio?

I call upon the Ambassador of Chile once again.

Mr. R. GONZÁLEZ ANINAT (Chile) *(interpretation from Spanish)*: Thank you very much and I am thankful to Mr. Zimmerman of the IAF for his explanation. At this point, we would very much like to hear the delegation of Brazil share with us their impressions as to what happened at that time and since. It is truly important to know the exact history as it happened.

Also with regard to the Workshop and Conference to be held in Valencia, Spain, we would like to ask the representatives of Spain to provide further clarification as to the terms and conditions envisaged to enable developing countries to participate in those events so I am going to ask the representative of Spain, if possible, to speak as well.

The CHAIRMAN *(interpretation from French)*: Thank you distinguished representative of Chile. The Director of the Office for Outer Space Affairs tells me that a meeting will be held, a preparatory meeting will be held for the Valencia Workshop this afternoon. With the participation of the Office for Outer Space Affairs and you are kindly invited to participate in that preparatory meeting at 3.00 p.m. And, of course, this invitation is extended

not only to the representative of Chile but to all delegations that are interested in becoming involved in this preparatory work that is pursued jointly by the IAF and the Office for Outer Space Affairs for the Valencia event. So at 3.00 p.m. today.

Would the distinguished representative of Brazil like to make a statement? I am giving you the floor.

Mr. C. E. DA CUNHA OLIVEIRA (Brazil): Unfortunately I am not as experienced as the Chilean Ambassador in following activities in this specific domain but he could count on the best feeling of my delegation in order to obtain information as regards the last session of the International Astronautical Federation which took place in Brazil and we would be glad to share that information with this Commission and with him in particular.

Thank you.

The CHAIRMAN *(interpretation from French)*: Thank you distinguished representative of Brazil. I would like to point out that the meeting that we have referred to a few minutes ago, the joint meeting of the representatives of the Office for Outer Space Affairs and the IAF will actually take place at 1.00 p.m., at 1300 hours. I think there was a misunderstanding there.

The statement made by our distinguished colleague from Chile contained a number of questions that had to do with the financial terms for the participation of countries in the Astronautical Congress and maybe we could address that as well.

You have the floor again Mr. González.

Mr. R. GONZÁLEZ ANINAT (Chile) *(interpretation from Spanish)*: As a son of my country, I would really like to hear the explanation by the representative of Spain.

The CHAIRMAN *(interpretation from French)*: I would gladly give the floor to the representative of Spain but I do not see him in the room. Therefore, it is difficult to satisfy your request just at the moment but as I said, the President of the IAF would perhaps be willing to answer that question because he is involved in the preparation for the Valencia event.

Mr. J. ZIMMERMAN (International Astronautical Federation): Mr. Chairman, I will attempt to give a preliminary answer to this matter. I think our colleagues from Spain are probably on their way to this meeting now and they certainly will attend the 1300 meeting you referred to.

What happens at each of our Congresses is that we have now, I think, for 13 occasions, 13 Congresses in a row, we have organized these Workshops, trying to focus on the benefits, the potential benefits, of space technology for developing countries. And as I noted in my statement, these Workshops are very actively organized by the Secretariat and the Expert on Space Applications who are with us today. In each case, we arrange for a limited number, we cannot have an exhaustive number, but a limited number of delegates to attend from developing countries, from different parts of the world and we try to subsidize their participation. Usually the host country plays a major role in that and, for example, in our Congress in Fukuoka, Japan, the Japanese Government and the Space Agency of Japan, JAXA, played a very significant role in facilitating the participation from people all around the world, and in particularly people from the Asian area. This year our colleagues from Spain are looking to do something very similar, the details of which we hope to learn at our meeting, but my understanding is that they will provide some funding to bring people to Spain, to permit them to stay not only for the Workshop but for the Congress. On our Federation side, we grant free registration for those individuals so that there is no cost for them to stay on and attend our Congress.

That is our contribution. And in addition, although our resources in our Federation are extremely modest, we contribute an amount of money each year to the actual funding and the scholarships, travel resources of this Workshop because we feel that it is such an important thing. So that is the initial step. I think in the future, though, you really touch on a very important point because we could do much more. And I do not have all of the answers for this but I would say that from our part in the IAF, we would be very interested in more ideas on how we could expand this programme and expand access to the information-sharing activities we have to more people in developing countries. And so we would be very pleased to work with the distinguished delegate of Chile and any of the other delegates to this meeting to get their ideas and to develop some new initiatives which we could pursue in this regard.

Thank you Mr. Chairman.

The CHAIRMAN *(interpretation from French)*: Thank you very much President of the IAF.

For my part, I would like to add a couple of words to this.

As it happens, I am personally involved in the preparation for the Symposium that will take place during the Astronautical Congress, a Symposium on matters pertaining to space policy, legal and economic issues involved in space activities. And I will personally see to it that the Symposium involve a presentation on the results of the Space Conference of the Americas to be held in Quito, Ecuador. In that way, I will personally make sure there is someone who took part in the Congress in Quito to attend the Symposium and make a summary.

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

Mr. F. MENICOCCI (Argentina) *(interpretation from Spanish)*: Thank you Mr. Chairman. Just a comment on the occasion of the 2000 Astronautical Congress in Brazil. Two thousand participants attended, very active participation from the region, including ourselves. I believe it was a highly successful Congress and, at that time, Argentina proposed that we consider the possibility of setting up a regional space entity for Latin America. The idea was taken up by Chile and presented at the Fourth Space Conference of the Americas. We believe it is a very important step. It would allow integration at the regional level for all space activities.

Thank you.

The CHAIRMAN *(interpretation from French)*: I thank the distinguished representative of Argentina for his contribution and for the information he just provided. I believe that such an exchange shows that it is indeed possible to improve, to strengthen the links that exist between this United Nations Committee for the Peaceful Uses of Outer Space, the United Nations Office for Outer Space Affairs and international non-governmental organizations such as the IAF.

Now, once again, I would like to give the floor to the distinguished delegate of Brazil.

Mr. C. E. DA CUNHA OLIVEIRA (Brazil) *(interpretation from Spanish)* Thank you very much Mr. Chairman. I just wanted to express our gratitude for the information presented by the distinguished representative of Argentina, a person with great experience in outer space affairs and this information is very valuable to us with regard to what happened at the Congress in 2000.

Thank you.

The CHAIRMAN *(interpretation from French)*: Thank you distinguished representative of Brazil for your contribution.

Once again, Ambassador González of Chile has the floor.

Mr. R. GONZÁLEZ ANINAT (Chile) *(interpretation from Spanish)*: Thank you Mr. Chairman. First of all, I, too, would like to express my gratitude to the distinguished representative of Argentina for the clarification and information provided with regard to the Congress that took place in Rio de Janeiro in the year 2000.

I have a further comment of a semantic nature, if you will. A regional entity that was proposed at the time is actually an idea put forward by Chile at a seminar in Quito in 1993 and it is mentioned in the 1982 Report of UNISPACE. So the idea has existed for a while and we join the initiative put forward by Argentina in the same sense and we are happy to work in that direction. But if one looks at the history of the idea, it is important to point out that this is an initiative that, if you would like to put it this way, matured in Rio but many years before that it was put forward by Chile.

The CHAIRMAN *(interpretation from French)*: I thank Ambassador González for this historical note. You know, in Europe we are in the habit of letting projects and ideas simmer and grow for many years. Sometimes they come to a conclusion, sometimes they do not, and I am sure that in Latin America, also there has been a long and profound discussion and will continue at the Fifth Space Conference of the Americas in Quito this summer.

I see no further requests for the floor on this agenda item. Therefore, I would like to, once again, thank …

Once again, Ambassador González of Chile.

Mr. R. GONZÁLEZ ANINAT (Chile) *(interpretation from Spanish)*: Thank you Mr. Chairman. I just would like to add one element which I think is important and that is explicit recognition of very significant work undertaken by Argentina. It is just a matter of an issue of a historical nature but the content is important in that they helped drive forward this initiative. They were very significant in that regard and Chile and Argentina are working jointly,

not only in this area but in many areas, we are working together and we have been working with Argentina on the continent on issues which we know for certain are very important to them and also very important for interregional integration. Without that, we would not be able to act on the international scene as it truly deserves.

Thank you.

The CHAIRMAN *(interpretation from French)*: Thank you Mr. Ambassador and thank you for recalling us the imminent role played by Argentina in this regional level.

We will now close item 7 of the agenda.

Report of the Scientific and Technical Subcommittee on its forty-third session (agenda item 8)

And we shall begin item 8 which we had just barely begun yesterday, and this is the Report of the Scientific and Technical Subcommittee on its Forty-Third Session.

I will begin by giving the floor to Dr. Suresh, who is the Chair of the Scientific and Technical Subcommittee so that he can report on its activities this year.

You have the floor Sir.

Mr. B. N. SURESH (India): The forty-third session of the Scientific and Technical Subcommittee was held between 20 February to 3 March 2006. The Subcommittee adopted 16 agenda items and held detailed deliberations on all these agenda items. I now present the brief summary of the progress of the Scientific and Technical Subcommittee.

Matters relating to remote sensing of the Earth by satellite and its applications for remote sensing was widely discussed. The importance of Earth observation satellite data to support activities in a number of key development areas like oceanography, water resources management, management of coastal zones, agriculture, early warning of disasters, forest fires, weather monitoring, prediction of weather conditions and many more areas was emphasized. The information on the increasing current and future availability of space-based sensors onboard satellites all over the globe was exchanged.

During the Subcommittee meeting, the agenda on space debris made a significant progress. The consensus had been reached on the development of the draft Space Debris Mitigation Guidelines contained in the document A/AC.105/C.1/L.284 by the Working Group of the Subcommittee based on and consistent with the technical content of the IADC guidelines. The Subcommittee also noted that the IADC guidelines has been referenced as a document of a technical nature, while the Space Debris Mitigation Guidelines would contain general recommendations. It would also consult IADC periodically regarding the future revisions consistent with the evolving technologies and debris mitigation practices. The Subcommittee also agreed that the Debris Mitigation Guidelines would be circulated at the national level to secure consent and the same after the necessary clearance will be submitted at the forty-fourth session of the Scientific and Technical Subcommittee in 2007 for necessary debate and approval.

Use of nuclear power sources in outer space under the multi-year work plan for the period 2003-2007 was one of the important agenda items discussed in this Subcommittee meeting. A joint workshop on the objectives, scope and general attributes of a potential technical safety framework for nuclear power sources in outer space was organized by the Subcommittee and IAEA during 20 to 22 February 2006. Good progress was made by the Working Group on the development of potential implementation options for establishing an international technically-based framework of goals and recommendations for the safety of the planned and currently foreseeable nuclear power sources applications in outer space.

Mr. Chairman, space-based tele-medicine discussions were held in the Subcommittee with the aim to bridge disparities in the quality of medical services in different parts of a country by providing access to a database of expert knowledge and connectivity for data transfer in areas with under-developed infrastructure. The Subcommittee also noted the broader use of space-based tele-medicine and the operationalization of projects in space-based tele-medicine at the national level.

Near-Earth objects attracted a lot of attention from member States in this session. The discussions and presentations addressed the asteroids, their scientific values as remnant debris, the possibility of their collision with the Earth and its devastating consequences. The early detection, precision tracking and the investigation on the possibilities for the mitigation of threats posed from these objects were also debated.

Space-system-based disaster management support was another agenda item(?) which made significant progress in the session. The Ad Hoc Expert Group presented an excellent study report on this subject during the forty-third session of the Subcommittee. The report submitted stressed that the proposed disaster management international space coordination entity, DMISCO, would provide support to the disaster management community at large and a platform for fostering the alliances that it would be user-driven. This entity would also contribute to bridge the gap between the disaster management and space communities. While appreciating the roles and function of the proposed entity, the Subcommittee recommended that its creation should not lead to duplication of efforts between the proposed entity and other similar existing organizations like the Charter on cooperation to achieve the coordinated use of space facilities under disasters, GEOSS, GMES, UNOSAT programme and others who are involved in the use of space technology for disaster management and suggested to have close interaction between these agencies. The Subcommittee noted that the Expert Group has also indicated that the entity being proposed should be implemented as a United Nations programme under the leadership of the Office for Outer Space Affairs or hosted by the member States offering to provide facilities and partial operational support.

The Subcommittee recommended the following steps to progress this task forward.

The Ad Hoc Expert Group, with the assistance of the Office for Outer Space Affairs, should discuss with other agencies with a view to reaching the agreement on division of tasks and on how the proposed entity could contribute to achieving the objectives. The results of that coordination should be presented to this forty-ninth session of this Committee United Nations COPUOS. The Office for Outer Space Affairs should correspond with all member States requesting them to officially communicate their possible commitments of support. All providers of support would discuss their proposal in this forty-ninth session to harmonize their commitments into one viable proposal.

The International Heliophysical Year 2007 and examination of the physical nature and technical attributes of the geostationary orbit are other agenda items were also discussed in the session and made reasonably good progress in all these areas. An industrial symposium on the theme “Synthetic Aperture Radar Missions and their Applications” was held during the sessions. Apart from this, several technical presentations were made by member States on several agenda items.

On the whole, I am very happy to report to the forty-ninth session of the Committee that the Scientific and Technical Subcommittee meetings and deliberations helped immensely to achieve good progress in all agenda items.

Thank you Mr. Chairman.

The CHAIRMAN *(interpretation from French)*: Thank you Dr. Suresh for your very complete accounting and very precise accounting of the forty-third session of the Scientific and Technical Subcommittee. And I would also like to in passing congratulate you on the quality of your chairmanship of the Subcommittee and your success as Chair. A great deal of progress was achieved in moving through the agenda while you were chairing.

Under this item of the agenda, we will now have a statement by the delegation of the United States, to whom I now give the floor. You have the floor Mr. Higgins.

Mr. J. HIGGINS (United States of America): Thank you Mr. Chairman. On behalf of my delegation, I would like to express our appreciation for the excellent work of Dr. Suresh as Chairman of the Scientific and Technical Subcommittee. Under his guidance, the forty-third session of the Subcommittee made significant progress and addressed a wide variety of topics. In addition, my delegation once again commends the extensive work of the Office for Outer Space Affairs in supporting not only the Subcommittee meeting, but also the joint Scientific and Technical Subcommittee/IAEA Workshop on the Use of Nuclear Power Sources in Space that was held in conjunction with the Subcommittee meeting.

Mr. Chairman, my delegation has noted the positive developments in the Scientific and Technical Subcommittee in addressing how it will proceed in addressing the UNISPACE III recommendations. We believe the flexible approach that uses multi-year work plans, actions teams where appropriate, and reports by other groups on their activities, is proving to be an effective means of implementing UNISPACE III recommendations and permitting us to address a wide range of relevant issues.

We fully endorse the Report of the 2006 Scientific and Technical Subcommittee. We would particularly like to note the successful work in February by the Working Group on Space Debris. As

noted in its report, consensus was reached by the Working Group, under the leadership of Claudio Portello of Italy, on a Space Debris Mitigation Document that is based on the Inter-Agency Space Debris Coordination Committee, the IADC, Space Debris Mitigation Guidelines. The United States views the IADC Guidelines as solid, technically-based measures for any nation to adopt and to implement in its national space activities. The United States Government had previously endorsed the IADC Orbital Debris Mitigation Guidelines and our domestic agencies are well along in implementing debris mitigation practices that are consistent with the IADC Guidelines. Recognizing the desire of other COPUOS member nations to have voluntary guidelines that are developed within the Scientific and Technical Subcommittee, we therefore agreed to work within the Space Debris Working Group towards that end. We are pleased to note that the Working Group has finished its work on the Space Debris Mitigation Document and we look forward to the adoption of the document at the forty-fourth session of the Scientific and Technical Subcommittee early next year.

We would also like to note the progress made at the Scientific and Technical Subcommittee by the Working Group on Nuclear Power Sources in Space, under the direction of its Chairman, Mr. Sam Harbison of the United Kingdom. The Working Group, following the multi-year work plan approved by this Committee in 2003, and as amended in 2005, made significant progress n identifying potential implementation options for establishing an international technically-based framework of goals and recommendations for the safety of planned and currently foreseeable space nuclear power sources applications. We note the success of the joint Scientific and Technical Subcommittee/IAEA workshop that was held concurrently with the forty-third session of the Scientific and Technical Subcommittee. The report of the workshop will help us to determine how to proceed in our efforts to develop an international framework for the safe use of nuclear power sources in outer space. We fully expect that the Working Group, during formal consultations being held concurrently with our session next week, will continue to lay the essential groundwork for a decision next year on how to proceed to develop the safety framework.

We also would like to note the progress made by the Scientific and Technical Subcommittee in addressing the multi-year work plan on space-system-based tele-medicine. The United States and a number of other delegations provided timely presentations on the status of tele-medicine applications in their countries. We look forward to continuing our work through Action Team Number 6, which will address how space technology can be applied to improve public health, and in particular its applications in developing nations, and we expect this work to continue at the 2007 session of the Scientific and Technical Subcommittee.

We have reviewed the study on the possibility of creating an international entity to provide for coordination and the means of realistically optimizing the effectiveness of space-based services for use in disaster management and we appreciate the work that has been done by the Study Group. We also note that the Group consisted of experts from 26 member States and five intergovernmental and non-governmental organizations.

The report covers current and future programmes and systems undertaken at the national and international levels that utilize space-based systems to address the range of issues associated with risk reduction and disaster management. There are recommendations and conclusions that deserve consideration by member States and specialized agencies of the United Nations system.

In regard to the specific proposal to establish a disaster management international space coordination organization known as DMISCO, we have a number of concerns that were reflected in the report of the last session of the Scientific and Technical Subcommittee. At this stage, we are not convinced of the need to establish such an entity. But we understand the work continues on this concept with results to be reported here next week. We also understand that there is considerable support among member States for DMISCO and that there are governments prepared to host DMISCO and provide resource support.

We are aware that United Nations programmes and specialized agencies such as the World Meteorological Organization, UNESCO, and UNOSAT, and other groups, such as GEO and the International Charter for Space and Major Disasters, have been contacted by the United Nations Office for Outer Space Affairs concerning their views on DMISCO and how the objectives of these activities could be mutually supportive. Those discussions should continue.

We believe that DMISCO must be supported on the basis of voluntary contributions and cannot have an impact on the regular budget of the United Nations. The United States agencies responsible for disaster early warning and mitigation will not contribute

resources to DMISCO should it be established, but their products will still be made available as they have been in the past in response to disaster situations.

Mr. Chairman, I would also mention that the United States is pleased to support the multi-year plan to follow the preparations for, and implementation of, the International Heliophysical Year, IHY, 2007. The IHY will be a truly international endeavour, with countries from every region of the world planning to host instrument arrays, provide scientific investigators, or offer supporting space missions. The IHY will serve to focus worldwide attention on the importance of international cooperation in research activities in the field of solar-terrestrial physics. The effects of solar activities and space weather phenomena on our daily lives, on our environment, and our space systems are becoming more apparent, and we need to collaborate to reach a greater understanding of these consequences.

As General Assembly resolution 58/89 has provided, reports on activities of the International Satellite System for Search and Rescue are to be considered under this agenda item. Accordingly, I would like to briefly address United States participation in the international COSPAS-SARSAT satellite search and rescue programme. The total number of member nations in COSPAS-SARSAT now stands at 37. The United States continues to provide instruments in both its geostationary and polar-orbiting operational environmental satellite programmes and, together with our international partners, the COSPAS-SARSAT programme has six polar-orbiting and five geostationary satellites that provide worldwide coverage for search and rescue beacons. In 2005, COSPAS-SARSAT helped save over 1,400 lives in 452 different events. Since COSPAS-SARSAT became operational in 1982, the system has helped save more than 19,000 lives.

We would like to note once again that of the two main types of beacons in the COSPAS-SARSAT programme, 406 Mhz and 121.5 MHz, the 121.5 MHz beacon is being phased out and will not be usable as of 1 February 2009. Given the large number of these beacons currently in service, outreach efforts are currently underway to provide information on this programme change. The United States has assisted in an effort to build an International Beacon Registration Database for COSPAS-SARSAT. This capability enables beacon owners who live in countries that do not register beacons to have a place to do so. It also enables nations who maintain a beacon registration service, but do not have it available online, to record their beacons within the International Database. This database became operational on 16 January 2005. Accurate and timely beacon registration is vital to the success of a SAR response to beacon activation, as it gives SAR forces appropriate information about the beacon owner.

Additionally, the United States and its partners are exploring the use of satellites in Mid-Earth Orbit, or MEO, to improve international satellite-aided search and rescue operations. The United States is currently conducting proof-of-concept testing using its Global Positioning System satellites. It envisions that this new MEO system will improve location accuracy while reducing the inherent delay associated with satellites in low-Earth orbit.

We would also like to note that last fall, the COSPAS-SARSAT Secretariat completed a move to its new headquarters in Montreal, Canada. For additional information on COSPAS-SARSAT, please refer to the website www.cospas-sarsat.org or www.sarsat.noaa.gov.

Finally, I would like to reiterate that my delegation welcomes the special presentations made before the Subcommittee on a wide variety of topics. We continue to believe that they serve to provide complementary technical content for our deliberations and they provide timely information that is useful in keeping delegations informed about new programmes and developments in the space community, as well as illustrative examples of the application of space technology.

Thank you Mr. Chairman.

The CHAIRMAN *(interpretation from French)*: Thank you Mr. Higgins, distinguished delegate of the United States for that statement. Very complete accounting of the United States position with regard to the various issues that were tackled in the Scientific and Technical Subcommittee. I would also like to take this opportunity to thank him for the information provided to the Committee with regard to the state of the COSPAS-SARSAT programme and its future evolution.

And I would like to ask delegates if they have any questions or any comments that they would like to make on the two statements that we have just heard, that is, the statement made by Dr. Suresh, Chairman of the Subcommittee, or that of Mr. Higgins, representing the United States.

I see no requests for the floor.

We will then give the floor to Madam Alice Lee, Expert on Space Applications. She will be reporting to the Committee on activities underway in the context of space applications. Madam Lee, you have the floor.

Ms. A. LEE (Expert on Space Applications, Office for Outer Space Affairs): Thank you very much. Mr. Chairman, thank you very much for this opportunity to address the distinguished delegates of the Committee on the activities of the United Nations Programme on Space Applications.

Congratulations on your being elected as the Chair of this Committee. Together with my colleagues in the Space Applications Section, I look forward to assisting you in implementing the activities of the Plan of Action in COPUOS' report to the General Assembly regarding implementation of the recommendations of UNISPACE III. We have identified the areas and actions in which the Programme on Space Applications, and the Office in general, can provide meaningful assistance, particularly in the areas that are proposed in Chapter VI of the Plan of Action.

I would like to express my gratitude to the Ad Hoc Expert Group that studies the possibility of creating an international entity to coordinate space-based services in disaster management.

I would like to thank all the members and observers of the Open-Ended Ad Hoc Working Group for your hard work on refining the draft Terms of Reference and developing a draft work plan for the International Committee on Global Navigation Satellite Systems, ICG, to promote the use of GNSS applications.

I would also like to thank the Action Teams that are continuing their diligent efforts in defining concrete steps and plans for implementing the UNISPACE III recommendations.

Mr. Chairman and distinguished delegates, the Space Applications Section is successfully conducting the diverse range of activities set forth in the United Nations Programme on Space Applications in 2006, and is laying the foundations for activities planned for 2007. The Section has also been supporting the implementation of the agreements reached at the forty-third session of the Scientific and Technical Subcommittee. Our efforts focus on the priority thematic areas with specific topics addressing sustainable development for developing countries. Our objectives are achieved through activities that produce tangible results in developing countries. Our success in meeting these objectives depends upon support from multiple partners. We rely on the financial and technical resources contributed by many member States in developing programmes and activities that encourage local support for the sustainable operational use of space technologies.

The priority themes of the Programme on Space Applications are the use of space technology for disaster management, tele-medicine and tele-education, monitoring and protection of the environment and natural resource management, as well as basic space science education and capacity-building.

The space technologies currently employed within these themes are: global navigation satellite systems, satellite communications, remote sensing applications, and Earth observation and meteorological satellites. The Programme is open to investigating new applications and use of new space technologies to support the priority thematic areas whenever possible.

Within the priority themes, we introduce space technologies to educators and decision-makers, stimulate discussions to identify regional needs and explore the possibilities of creating solutions using space technologies, and assist regions in launching pilot projects that utilize space technology applications and meet the regional needs identified. This is achieved by conducting workshops, seminars, symposia, training courses and expert consultations. Past efforts of the Programme have focused on building capacity in developing countries. We are continuously searching for effective and innovative ways to fulfil our goals. Our primary interest is in executing practical projects that effectively utilize space technologies to meet critical needs in developing countries.

The status of the year 2005 activities under the Programme on Space Applications and those planned for 2006 can be found in my report to the forty-third session of the Scientific and Technical Subcommittee, A/AC.105/861. That report was supplemented by the proposals contained in my statement to the Subcommittee, which are reflected in its report, A/AC.105/869. My statement today deals with the more recent work of the Programme on Space Applications and makes proposals for 2007.

In 2006, the Programme has already completed two major activities.

The first is the United Nations/ESA/ICIMOD Expert Meeting on the Remote Sensing Projects for the Hindu-Kush-Himalaya region. It was held in Nepal. It

was conducted in March 2006, hosted by the International Centre for Integrated Mountain Development, ICIMOD, in Nepal. The primary objectives of the Expert Meeting were to review satellite-based remote sensing projects relevant to the Hindu-Kush-Himalaya region, such as the new module for Eduspace "Himalayas from Space". During the Expert Meeting, the participants and experts discussed the improvement of the design of their 11 case studies, which are contained in this module.

The second activity is the United Nations/Syria/ESA Regional Workshop on the Use of Space Technology for Disaster Management in Western Asia and Northern Africa. It was conducted in April, hosted by the General Organization of Remote Sensing, GORS, of the Syrian Arab Republic. The Workshop successfully concluded with the initiation of two pilot projects that would benefit the region.

There are nine other workshops, symposia and training courses to be held during the remainder of 2006.

United Nations/Zambia/ESA Regional Workshop on the Application of Global Navigation Satellite System Technologies for Sub-Saharan Africa, will be held between 26 and 30 June, in Lusaka, Zambia. The Workshop will focus on applications of the global navigation satellite system technologies that benefit the social and economic growth of Sub-Saharan Africa, aiming at action planning for implementing specific applications for the region.

The United Nations/India/United States of America Expert Meeting for the Pilot Project "Tele-Medicine in the Reconstruction of Afghanistan" will be held between 29 and 31 August, in Kochi, India. This meeting is aiming at establishing an e-library on tele-medicine that provides training materials for tele-medicine applications. This e-library will be available to the region for zero cost.

The United Nations/Austria/ESA Symposium on Space Applications for Sustainable Development to Support the Plan of Implementation of the World Summit on Sustainable Development: "Space Tools for Monitoring Air Pollution and Energy Use for Sustainable Development". It will be held between 12 and 15 September in Graz, Austria. This is the first of a series of three symposia to be held between 2006 and 2008. The goal of this series is to address various issues related to the United Nations global agendas for development.

The Sixteenth United Nations/IAF Workshop on the Use of Space Technology for Water Management is to be held in Valencia, Spain, from 29 to 30 September 2006, in conjunction with the Fifty-Seventh IAC. The objectives are to increase awareness among decision makers and academic community of space technology applications for improving water resource management in developing countries.

The United Nations/ESA/NASA Workshop on Basic Space Science: International Heliophysical Year 2007 will be held in Bangalore and Pune, India, between 27 November and 1 December 2006. The objective of the Workshop is to explore how basic space science and the preparations for the International Heliophysical Year are contributing to sustainable development and capacity-building, particularly in developing countries.

The United Nations Workshop on Space Law will be held in Ukraine between 6 to 9 November. The main objective of the Workshop is to build capacity in space law, particularly with reference to the United Nations treaties and principles on outer space.

The United Nations/South Africa Training Course on Satellite-Aided Search and Rescue will be held between 20 and 24 November 2006. The primary objectives of the training course are to raise awareness of the International Satellite System for Search and Rescue, COSPAS-SARSAT, programme and to establish a formal interface with the user countries for better understanding and coordination of the programme activities and operations within the region of responsibility of South Africa.

The United Nations/China/ESA Training Course on the Use and Applications of GNSS will be held in November 2006 in Beijing, China. The primary objective of this training course is to introduce GNSS technology and its applications.

The International Committee on GNSS, the ICG, meeting will be held in Vienna in November 2006. The meeting will elaborate the future work plan of the ICG.

For more details on the afore-mentioned activities, I would refer the distinguished representatives to paragraph 44 of the report of the forty-third session of the Scientific and Technical Subcommittee, that is document number A/AC.105/869.

Paragraphs 47 to 56 of the same report and Annex III of the Expert Report, A/AC.105/861, reflect

the activities of the Regional Centres for Space Science and Technology Education, affiliated to the United Nations, and supported by the Programme in 2006 and 2007. All Regional Centres continue to offer post-graduate-level courses in space science and technology.

Within our Fellowship Programme, the Programme on Space Applications continues its cooperation with the Institution of Superiore Mario Boella, and Politechnico di Torino of Italy, providing scientists and specialists from developing countries with long-term fellowship opportunities in GNSS and related applications. Four participants joined the second class of this programme in October 2005 and five participants will be selected to join the third class that will commence in October 2006.

Mr. Chairman and distinguished delegates, in 2007, the Office plans to conduct the following 10 activities:

Two workshops on the use of space technology disaster management;

Three workshops on the application of space technology to environmental monitoring and natural resources management to address various issues related to the Untied Nations global agendas for development;

One training course on satellite technology for tele-health;

One United Nations/IAF workshop;

One workshop on space law;

One workshop on the International Heliophysical Year and Basic Space Science to highlight the legacy of the International Geophysical Year on its fiftieth anniversary; and

Related to the celebration of the fiftieth anniversary of Russia's historical launch of the world's first artificial satellite, Sputnik-1, and the space age it introduced, the Russian Federation and the Office for Outer Space Affairs will co-organize a workshop on small satellite applications to health studies.

Mr. Chairman and distinguished delegates, about the Programme's accomplishments. The Programme continues to support the Regional Centres for Space Science and Technology Education, affiliated to the United Nations, with its nine points interactive coordination procedure with the Regional Centres. Recently, the Programme initiated a measure to coordinate with all representatives of the Regional Centres to understand what efforts the Regional Centres have undertaken in the past to solicit in-kind and in-cash support. If the effort has not been sufficient, the Programme will then cooperate with the host countries and the Governing Boards of the Regional Centres to facilitate in-cash and in-kind provisions to the Centres' scheduled nine-month post-graduate courses in the respective disciplines of space science and technology, taking into account strategies contained in A/AC.105/775 and A/AC.105/844.

In April, the Programme successfully assisted the Office in hosting the Seventh Annual Meeting of the CEOS Working Group on Education, Training and Capacity-Building. In the Meeting, we discussed the proposed Working Group activities in 2006 and 2007, and formulated a Working Group Strategic Plan for next three years. This effort contributed to the GEOSS 10-Year Implementation Plan.

In 2006, the Programme co-sponsored the International Workshop on Small Satellites for Education that was organized by Sao Paulo University in Brazil, from 22 to 23 May 2006. It is a follow-up to the series of annual United Nations/IAF Workshop on the Use of Space Technology for Benefiting of Developing Countries. The Workshop discussed issues on space science and technology education, and the plan of establishing regional collaboration with industry in development of small satellite projects in universities.

Since the session of COPUOS last year, the Programme has initiated several pilot projects that support the sustainability development of developing countries, as follows.

The Disaster Management for South-East Asia Project. In 2005, the Programme called for proposals for projects related to space technology for disaster management in South-East Asia. The Programme received 46 expressions of interest. In March this year, the Steering Committee completed the assessment and selected the project proposed by the Centre for Remote Imaging, Sensing and Processing of Singapore. The project is entitled "Mapping Tsunami-Affected Coastal Aquaculture Areas in Northern Sumatra Using High Resolution Satellite Imagery". The project is financially supported by funds donated by the Korean Aerospace Research Institute, through its donation to the Trust Fund for the United Nations Programme on Space Applications.

The Afghanistan Tele-Health Project. The Programme, India and the United States collaborate a

project on tele-medicine applications in Afghanistan. Phase I of the project focused on training and was completed in August 2005. The project's Phase II will be concluded in September 2006. Phase II focuses on the planning of implementing tele-medicine for Afghanistan. This project is financially supported by the United States of America and technically supported by experts of the United Nations Programme on Space Applications, India and the United States of America. ISRO provided technical training and equipment.

The Remote Sensing Project for the Hindu-Kush-Himalayan Region. The Programme, ESA and ICIMOD, together launched a project to implement a new module for ESA's Eduspace programme, entitled "Himalayas from Space". Phase I of initial case studies was completed. Phase II of space radar technology applications will be completed by January 2007. All case studies will be placed in the web portal that was established and officially launched in March 2006. This project is financially supported by ESA.

The Data Sharing Project: "Distribution and Use of Available Global LANDSAT Data Sets for Sustainable Development in Africa". In order to make the global LANDSAT data sets widely available to African institutions, the Programme continues to support the distribution of LANDSAT imagery to African institutions building upon the work being carried out by UNEP. Up to now, this project has provided LANDSAT data to 11 institutions for education, training and project development. These institutions are spread in the African countries located in Burkina Faso, Cameroon, Congo, Morocco, Nigeria, South Africa, Sudan and Uganda. The Programme has also provided LANDSAT imagery to all members of the University Network for Disaster Risk Reduction in Africa of the United Nations University's Institute for Environment and Human Security. This project is financially supported by the United States of America.

Within our very limited budget, the Programme implements pilot projects with the approach of low or zero cost, voluntary effort from each participating institute and no transfer of funds among any of the parties involved in the project. The following are successful examples of the activities carried out under this approach.

GEO Occupancy Analyzer Tool. The Programme and Colombia, in cooperation with ITU, continue the development of the GEO Occupancy Analyzer Tool. It is a tool for in-depth analysis of the geostationary Earth orbit occupancy with the aim of providing historical measurements of GEO occupancy.

Tele-Health Projects. The Programme assisted the participants of the workshop on tele-health held in 2005 in Argentina to establish a task force on health using space technologies for the Latin America and Caribbean region. Members of the task force are working on pilot projects of common interest to the region. The team members presented 11 projects at a special poster exhibition in the 2006 Conference held by the International Society for Tele-Medicine and e-Health. The United Nations Office for Outer Space Affairs is an Alliance Partner with the Society since 2004.

The Programme also assisted the participants of the workshop on tele-health held in 2005 in China to initiate four projects related to tele-health training, avian flu early warning methodology development, communication system network configurations assessment, and the needs assessment on implementing a national tele-health programme. The Programme remains in close contact with all the project participants and monitor the progress.

Projects for West Asia and North Africa. At the United Nations/Syria/ESA Regional Workshop on the Use of Space Technology Disaster Management in Western Asia and Northern Africa that was held in April this year, participants launched two significant projects: "Development of an Early Warning Strategy for Disaster Management Using Space Technologies", and "Data Access and Sharing: To establish Base Maps for Focused Types of Natural Disasters". These two projects will be carried out by voluntary national teams under the concept of low cost and no transfer of funds among any parties involved in the project.

Projects on Basic Space Science. The Workshop on the series of IHY 2007 that was held in the United Arab Emirates in November 2005 has implemented elements of the Three-Year Work Plan of the Scientific and Technical Subcommittee, as reflected in the report of the Scientific and Technical Subcommittee, A/AC.105/848, paragraphs 181-192, particularly taking into account how IHY 2007 might benefit developing countries. The Workshop continued cooperation with Japan in aiding astronomy in developing nations through the Japanese official development assistance cooperative programme and initiated low-cost, ground-based, worldwide instrument deployment opportunities under the United Nations Basic Space Science Initiative.

On the International Charter Space and Major Disasters, the Office continues acting as the Cooperating Body of the Charter on behalf of the United Nations system. It is a mechanism through

which any United Nations agency can request satellite imagery to support emergency response activities. In May 2006, the Charter has been triggered to provide imagery of the flood in Suriname and the earthquake in Indonesia. At this point, please allow me to convey our deepest condolence to the victims and their families of these natural disasters.

On educational outreach to youth, the Programme continues to support the activities of the World Space Week. We are also working with the Space Generation Advisory Council in defining the activities that involve young professionals and students in space technology applications. The Programme has invited members of the Space Generation Advisory Council to its activities and the SGAC is considering to prepare training modules on various space technology topics for the Programme to use in the future in outreaching youth.

On future development of the Programme, beginning 2006, the programme has expanded its effort in providing greater support for pilot projects of national or regional significance in developing countries. The Programme will continue this effort towards the approach of low or zero cost, voluntary effort from each participating institute and no transfer funds among any parties involved in the project. The programme has demonstrated some initial success in this approach. In the future, the Programme will place emphasis on the follow-up activities for sustainable development after giving capacity-building activities such as a workshop or symposium. The ultimate goal is to apply space technologies to contribute to the economic growth and social betterment of humans.

Mr. Chairman and distinguished delegates, I have presented to you a brief review of the major activities carried out under the Programme on Space Applications. We have achieved significant successes but many challenges remain. International cooperation in mustering the human resources, technical capabilities and financial resources is essential. The day before, the Director of the Office, in his statement, explained to us the financial challenge that we are facing. I thank the member States for your contributions of labour, financial and technical resources and appeal once again to the member States and relevant organizations to contribute generously to the voluntary Trust Fund of the Programme on Space Applications.

In conclusion, the Programme on Space Applications seeks to continue to identify ways to use space science and technology to build capacity in developing countries for promoting their sustainable development. We will continue to focus on activities that prevent or reduce the loss of human life and property and on activities that improve economic and social conditions. Within the constraints of the limited financial and human resources available, the Programme seeks to establish near- and intermediate-term activities and projects that yield tangible result and that will help to propagate sustainable economic and cultural development. In this endeavour, we look forward to fruitful cooperation with all member States and their institutions.

Thank you very much for your attention.

The CHAIRMAN *(interpretation from French)*: Thank you Madam Lee for your presentation, for your report on the United Nations Programme on Space Applications.

Would any delegations like to ask questions or make comments or seek clarification with regard to this report.

I see no requests for the floor. I see no questions.

This brings us to a suspension of the consideration of this agenda item which we will re-open this afternoon.

Report of the Legal Subcommittee on its forty-fifth session (agenda item 9)

But at the moment, we can start on agenda item 9, which is the Report of the Legal Subcommittee on its Forty-Fifth Session.

I am going to give the floor to the Chairman of the Legal Subcommittee.

Mr. R. GONZÁLEZ ANINAT (Chile) *(interpretation from Spanish)*: Thank you Mr. Chairman. I have a question. Today, we heard an excellent report. I have to point out in this context that my country is led by a woman at present and women are playing an active part in the work of this Committee as well. And I apologize to the lady who made the report and to the others for delaying the work of this session for a few minutes but I have a comment to make, or rather some questions.

In the light of what has been done and what has not been done within the framework of the Legal Subcommittee. I would like to highlight two fundamental elements in this regard.

Number one, resolution 60/99, preambular paragraph 3, which is about encouraging the international community to respect legal norms and standards with regard to outer space law and the peaceful uses of outer space and so on and so forth. I believe that in terms of the legal and political level at which these things have been highlighted and recognized, it is important to point out that the legal aspect is inexplicably linked to all other aspects of outer space activities, if we are to talk about truly maintaining outer space for peaceful uses. I would like to refer to the great lacunae that exists in this regard in the legal regime, especially with regard to international cooperation in terms of the peaceful uses of outer space.

I would like to ask Dr. Camacho, when was it adopted? In 1996? In the Annex in paragraph 1, it says international cooperation to promote the use of outer space for peaceful purposes will take place, in keeping with the provisions of international law, including the Charter of the United Nations and the Treaty of 1977. So the big question is, if the Legal Subcommittee, and even the Scientific and Technical Subcommittee, which is related to it, the question is, have we in the Committee realized the mandate that arises from these provisions? The truth of the matter is that it is a bit disheartening, if one reads the report from the Legal Subcommittee because I would say that 80 per cent of the paragraphs start saying "that the view was expressed". In 10 per cent of the remaining paragraphs, it says "some delegations" and maybe five per cent says "other delegations" and 1.5 per cent says "the Subcommittee agreed with pleasure, or noted, or decided to adopt …", etc. I think we need to put this in a context of what goes beyond a single session.

And I would like to digress, if I may, briefly. I have listened very carefully to the distinguished representative of the United States when he referred to the Scientific and Technical Subcommittee and quite rightly, indeed, the statement established its satisfaction with the headway made in the Working Group related to space debris. And that is one of the greatest threats at this time in the area of space and the environment. And yet, in the Legal Subcommittee, despite the fact that the work is almost finished, in the Scientific and Technical Subcommittee, notwithstanding that many countries oppose the idea of establishing a Working Group on this. So we are being inconsistent here, completely inconsistent with this statement that I referenced and with the General Assembly resolution. When we talk about international cooperation, in keeping with the rule of law, because it is not just arbitrary or voluntary international cooperation, it is not subject to the whims of each and every country, it is a mandate, it is an obligation which even is referred to and refers to the Charter of the United Nations. There are explicit and implicit obligations that go with this in order to promote international peace and security. And it is also referenced in Article 13 of the 1967 Space Treaty.

And yesterday, I listened with great interest to the subject of militarization of space being mentioned. Some important achievements have been verified in other areas in the United Nations but we were not told what exactly was verified. And I recall now, this is the tenth year, let me repeat, the tenth year that the Disarmament Conference does not look at outer space amongst other things on its agenda. And the Disarmament Commission is basically a Committee which is a rhetorical one, exhorting people to do things and it is instructed by the First Committee of the United Nations to include this issue and, in fact, I think I heard something about that the Commission should not have been looking at issues of disarmament. So basically, it no longer is valid. There is no *sui generis(?)* in effect to consolidate it.

And then, in this area, we are not being consistent either. Again, I want to be very clear that we have not been able to address the possibility of creating a Working Group, as requested by many countries. Many countries have requested a mechanism or some sort of modality in order to look at what is taking place in the area of militarization of space. Of course, militarization *per se* is not a violation of international law. In fact, it could even contribute to international stability. So we have to make a distinction between militarization, military use and arms race. Those are just a few examples of the things that should be discussed.

So let me just insist on this. If we do not go back and look at what happened in the Legal Subcommittee, which I had the privilege to Chair, we will not realize that, first of all, it was a pretty high level of discussion, a great deal of interest was shown in the content and there are issues of concern for the majority of countries that were on the table. So if we go back and look we see that but then when we look at what is actually being tackled on the basis of principles, in a binding way or based on treaties or international regulations, then we realize that the report basically reflects the typical paragraph which is "the view was expressed". It is very non-committal and that is saying very clearly is that there was no agreement.

And if I could, I just would like to take a couple of paragraphs at random from the report. Let me start with paragraph 59. It says "the Subcommittee

noted with appreciation that the ECSL had established a virtual network free of charge on space law and policy for countries in Latin America and the Caribbean". In other words, it sounds like its operational and I can tell you it is not up and running actually. I understand that an effort is being made and I hope that the effort will lead to something concrete.

Another example, paragraph 60 is a real success here, says "the Subcommittee agreed to invite the IISL and ECSL to organize a one-day symposium during the forty-sixth session of the Subcommittee …", etc. Now this is important work on behalf of the Office for Outer Space Affairs and the report presented by them and the compilation data presented is very helpful and I just would like to take this opportunity to once again congratulate Dr. Camacho and his staff for their excellent work. They do this work often without having the necessary support to even do it and so it is work that is extraordinarily useful for us.

Now let us look at paragraph 73 where "the Subcommittee noted with appreciation also that the excellent Workshop that took place in Nigeria". I think in the case of Nigeria and Africa, this Workshop on Space Law, held in Nigeria was very important. It was an important point of reference. It was a way of promoting recognition of space law, broadening the reach of space law and even provided an opportunity to expand it to other stages and involve other players. And that is why in the objectives set forth for Fifth Space Conference of the Americas is to promote an interregional dialogue, particularly Africa, of course, and we have this example here, but with all continents, of course.

Paragraph 135 that "the Subcommittee noted with concern" that …

(interpreter) The interpreter would request that Ambassador González slow down a little bit. I cannot keep up and the rest of the team cannot follow either. He is reading too fast.

Mr. R. GONZÁLEZ ANINAT (Chile) *(interpretation from Spanish)*: There is an inconsistency here. There is a contradiction between paragraph 135 and "objects launched into space". And then if you look at the political determination of countries, we do not see a relationship with the objects launched into space.

So this means that, once again, there is inconsistency in this area.

Finally, Mr. Chairman, in paragraph 141, "the view was expressed that with regard to jurisdiction and control over space law, the State had registered a space object" and this is with regard to national infrastructure for registry of space objects and the Subcommittee took note of this preliminary step and that it would be developed more in-depth to be presented to the Committee later. I think that the delegation of Brazil unofficially circulated a document. I had an opportunity to peruse the document. It is an important document. It is a significant contribution and we hope anxiously that the document will be distributed and be put on the table for discussion by the rest of the delegations.

In synthesis, Mr. Chairman, I am concerned, as the Chair of the Legal Subcommittee and it is a source of concern to note that, on the one hand, we have sky-rocketing growth, rapid growth of science and technology and we have a colossal number of seminars and workshops that are organized, but that often developing nations are in a position to be able to attend them. And then there is a lack of correspondence on the legislative or political levels, in other words, it is not keeping pace with science and technology.

The Treaty of 1967 of Space and the Declaration of International Cooperation of 1996 and the resolution of the General Assembly, 60/99, I mean I have been repeating these for years now, 20 years or more, but basically all reflect that developing nations and space legislation needs to take into account developing nations interests. None of that is being translated into norms that actually take into account developing nations needs and aspirations. Now that does not mean, as some countries would like to infer, that we need to shorten the sessions of the Commission. In 1967, there was a large restructuring plan, a whole plan to overhaul the Commission and what we would like is simply to attempt to be as efficient as possible, taking into account the fact that there are international norms that we must respect and we need to underscore that.

Thank you.

The CHAIRMAN *(interpretation from French)*: Thank you Ambassador González, Chair of the Legal Subcommittee. Thank you for that report on the work of the forty-fifth session of the Committee.

On this item of the agenda, we have a request for the floor from the delegation of Japan. I now give the floor to Mr. Takashi Iwai. You have the floor Sir.

Mr. T. IWAI (Japan): Thank you Mr. Chairman. Mr. Chairman, distinguished delegates, on behalf of the Japanese delegation, I am honoured to have the opportunity to address the forty-ninth session of the Committee on the Peaceful Uses of Outer Space.

Japan is pleased to announce its support for the report adopted by the forty-fifth session of the Legal Subcommittee.

I would like to express our heartfelt appreciation and respect for the excellent work of Mr. Raimundo González Aninat, Chairman of the forty-fifth session of the Legal Subcommittee, and Mr. Sergio Camacho-Lara, Director of the Office for Outer Space Affairs, and his staff.

Mr. Chairman, I would like to now turn to a couple of important topics we discussed during the Legal Subcommittee.

To begin, Japan is a Party to four space treaties: the Outer Space treaty, the Rescue and Return Agreement, the Liability Convention, and the Registration Convention. Japan consistently carries out its space activities in compliance with these treaties. These treaties, which form the legal framework for our current space activities, are important in the sense that they provide a basis for expanding the scope of future space activities. We consider it highly desirable that all countries commit to these treaties first and foremost in order to strengthen the legal framework for global space activities. Japan support a COPUOS initiative to reach this goal.

Mr. Chairman, Japan is of the opinion that the "Practice of States and International Organizations in Registering Space Objects" is a most important subject, particularly when "registration" is regarded as a basis to exercise national jurisdiction for the commercialization of space activities. Japan contributed to this discussion during the forty-fifth session, by reviewing Japan's practice in registering a space object when more than one State participates in the launching of a space object. We would like to continue to take parting further discussions for the adoption of a resolution in the next session.

Mr. Chairman, the Protocol on matters specific to space assets to the Convention on International Interests in Mobile Equipment will promote financing for space assets by establishing international security interests in them. It will also have a positive effect on commercial activities and should, therefore, be an interesting subject for discussion. Japan contributed to the development of the preliminary draft Protocol by sending Japanese experts to meetings to discuss this matter. Japan also organized a domestic study group consisting of legal specialists and relevant persons mainly from industry which is primarily discussing security interests of space assets. Japan will continue to be engaged in this discussion.

Mr. Chairman, the COPUOS Legal Subcommittee is charged with the important task of promoting space law in order to ensure that space activities are conducted in a free and fair manner. Japan intends to help the Legal Subcommittee achieve its distinguished goals by contributing with efficient and productive discussions.

Thank you very much for your attention.

The CHAIRMAN *(interpretation from French)*: Thank you Mr. Takashi Iwai for that statement. It reflects Japan's interest in the work of the Legal Subcommittee, particularly those items that you highlighted, the issue of registry and that of a Protocol on space objects. And we will follow with interest the discussion and how it evolves on these items of the agenda of the Legal Subcommittee. No doubt it will continue discussing it during its next meeting in April of 2007.

I see no other requests for the floor under this item of the agenda, today at least, so we will continue with this item of the agenda this afternoon.

Technical presentation

And we will now move on to the technical presentation that was scheduled for this morning.

I will now give the floor to Mr. Arshad Siraj of Pakistan who will be giving us a presentation on the "Use of Remote Sensing Satellite Technology in Disaster Management".

Mr. Siraj, you have the floor Sir.

Mr. A. SIRAJ (Pakistan): Thank you Mr. Chairman. Mr. Chairman, distinguished delegates, on 8 October 2005, at 8.52 a.m., a powerful earthquake struck the northern part of Pakistan causing major destruction and playing havoc with millions of lives.

The affected areas were the five districts of the north-west frontier province and four districts of Jamon(?) Kashmir in Pakistan. More than 70,000 people lost their lives, out of those 35,000 were children who were attending schools at that time. Most

of the civil society infrastructure, such as schools, colleges and hospitals were destroyed and required immediate attention.

The Civil Administration was totally incapacitated. Telecommunications, the road networks, electricity and water supply systems were wiped out in most areas and severely disrupted in others.

The earthquake was 7.8 on the Richter Scale. Most of the villages were very remote because it was a mountainous and hilly area and there were hundreds of aftershocks which made the work of rescue almost impossible. Since most of the roads and communication systems had been destroyed, there was no way to determine the scale of damage and to locate which areas were most affected.

Air and space were, therefore, the only means for observation. Relief was possible only through helicopters, foot soldiers and mules.

This is a picture of one of the cities that was almost totally flattened and the city was Muzaffarabad.

Here are some of the pictures of the rescue being carried out. You will see on the picture on the bottom right, these are the kinds of roads that were developed after they had been wiped out by landslides and out of the 9.000 kilometres network of roads, almost 300 to 400 kilometres were gone.

The sectors which needed immediate attention were emergency relief, roads and bridges, shelter, agriculture and irrigation, and environment.

Remote sensing data was the only means to determine the damage because from the second day onwards, there were clouds in the area and the aircraft could not also determine the extent of damage.

The International Charter “Space and Major Disasters” promptly started providing imagery of the affect area.

SPOT Image mobilized its satellite assets to provide us imagery and there is a Ground Station at Islamabad where data from SPOT CDs of satellites is downloaded.

Luckily, on that unlucky day, the first satellite pass over the area was about one hour after the earthquake.

This is a picture of the affected area after the earthquake and you will notice that the area is severely hilly.

Now, I have put in this picture just to be able to give you an idea of the road network. Unfortunately, you cannot see the colour very clearly here but the red coloured lines denote the roads and the yellow writing shows the villages, this shows the large number of villages that are dispersed in a fairly large area. The total area is about 20,000 square kilometres that was affected and some of the area was snowbound even at that time of the year.

This is one of the districts and GIS was developed which was provided to all the relief, reconstruction and rehabilitation agencies for them to be able to focus their relief efforts in the appropriate areas. And the legend on the right shows the different types of effects that the earthquake created. For example, the purple colour on the right shows the landslides and the yellow colour shows the residential areas.

There is a summary of the district, gives the area, gives the length of the roads, the damaged roads, landslide, the number of landslides and the population _____(?) was affected.

This is a picture of Muzaffarabad City and the white spots that you see along the blue river side are the areas that had the severest of landslides and these landslides were so large that they were visible very clearly on satellite images.

This is another one of the pictures that shows the extent of damage. The red colour shows catastrophic damage. The purple colour shows extensive damage 40 to 70 per cent and moderate damage is shown in the blue colour, 40 per cent.

The same picture. This is another of the districts that was affected and I will very quickly go through these images because this is more or less a repeat of what was done following the case of Muzaffarabad. This is Bagh City and these are the damaged areas. This is Mansehra City and similarly the damaged area is over there.

This is a picture of a major landslide and that landslide actually blocked the flow of the river creating lakes which eventually there was a risk that these lakes would overflow or bust the dam, that was the artificial dam that was created because of the landslide and there could be a major flood after that.

This is the one of the river that was actually a dam because of the landslide and it had to be managed very carefully later on so that there was not a risk of flooding if the dam was to break.

Mr. Chairman, distinguished delegates, the purpose of me showing you this use of remote sensing was to be able to emphasize that in a situation in which Pakistan was at that time, the only way to get information about the area that was affected was through satellite imagery and to create a GIS so that the rescue efforts would be focused at the right time in the right place.

In order for us to provide information about the amount of damage that had taken place in different areas, the Government wanted to create a website which would create transparency for seeking donations for education and health units and SUPARCO provided a GIS for that also and also the satellite imagery to help them create that website. The purpose of _____ *(not clear)* at this point in time but to be able to again show that how satellite imagery can be utilized even for applications like this.

Now this is the website of the Government that seeks donations. This is the area affected. Again, it is based on satellite imagery and when you click on any one of the red dots, you get a detail of information for that particular area. And you keep on going and zooming and this shows you the amount of population that got affected, how many got injured, how many died, what was the education infrastructure that got affected, of different categories. This is how a GIS was developed for this particular website.

In the end, I just want to, on behalf of the people and the Government of Pakistan, express our gratefulness to the international community for their immense moral, human and integral(?) support for mitigating the effects of the disaster.

Thank you very much.

The CHAIRMAN *(interpretation from French)*: Thank you Mr. Siraj for your presentation, your excellent presentation, I must say. The satellite imagery in the context of a terrible disaster that struck your country is truly amazing. This presentation illustrates the considerable progress accomplished by developing countries in the use of space technologies and I should congratulate you and your country on the quality of the work accomplished under these really difficult circumstances.

Are there any questions that delegations wish to ask of our colleague from Pakistan?

I see no questions.

Once again, congratulations and thank you for your excellent and fascinating presentation.

I will shortly adjourn this meeting of the Committee. But before doing so, I would like to inform you of our schedule of work for this afternoon. We will reconvene promptly at 3.00 p.m. At that time, we will continue our consideration of agenda item 7, Implementation of the Recommendations of UNISPACE III.

We will also continue our consideration of agenda item 8, Report of the Scientific and Technical Subcommittee on its Forty-Third Session, and 9, Report of the legal Subcommittee on its Forty-Fifth Session.

Time permitting, we will also begin the consideration of agenda item 10, Spin-Off Benefits of Space Technology: Review of Current Status.

Are there any questions or comments on this proposed schedule?

I see none.

In that case, the meeting is adjourned until 3.00 p.m. this afternoon.

The meeting adjourned at 12.32 p.m.