United Nations COPUOS/T.573

Committee on the Peaceful Uses of Outer Space

Unedited transcript

573rd Meeting
Monday, 11 June 2007, 3 p.m.
Vienna

Chairman: Mr. G. Brachet (France)

The meeting was called to order at 3.06 a.m.

The CHAIRMAN *(interpretation from French)*: Representatives, distinguished delegates, please be seated. I call to order the 573rd meeting of the Committee on the Peaceful Uses of Outer Space. I hope you enjoyed the two documentaries screened during lunch break, that you were able to watch those. Obviously the one on Apollo 11 brought to our minds some salient features of 1969. Tomorrow we will have a chance to view another two documentaries, one on the COSPAR-SARSAT satellite-aided systems and the second one on China's space achievements.

Distinguished delegates, this afternoon we will continue our consideration of agenda items 7, report of the Scientific and Technical Subcommittee on its forty-fourth session and 9, spin-off benefits of space technology: review of current status.

I intend to suspend the plenary meeting shortly before 4 p.m. I remind you of this so that the symposium on space and water can commence. The symposium will be moderated by Mr. Lothar Beckel of the European Academy of Science and Arts. At the end of this afternoon's meeting, at 6 p.m., there will be a reception hosted by the United States in the Mozart Room of the VIC Restaurant.

Distinguished delegates, I have been informed that Dr. B.N. Suresh of India, our distinguished colleague, has been awarded the ISRO annual outstanding achievement award for his outstanding work and significant contribution to innovative research and development, science and technology, _____ (*inaudible*) breaking applications and excellence in project management for more than 25 years. This is the first time that such an award has been given and I would like to extend my sincere congratulations to Dr. Suresh. I would call on our distinguished representative of India to please convey to him the congratulations of this Committee.

Distinguished delegates, we continue and perhaps we might complete our consideration of agenda item 7, report of the Scientific and Technical Subcommittee on its forty-fourth session. The first speaker on my list is the distinguished representative of India, Mr. Vasudevan.

Report of the Scientific and Technical Subcommittee on its forty-fourth session (agenda item 7)

Mr. B. VASUDEVAN (India): Mr. Chairman, the Indian delegation is very much pleased with the progress and significant achievements made during the forty-fourth session of the Scientific and Technical Subcommittee.

The United Nations Programme on Space Applications plays an important role in implementing the recommendations of UNISPACE III particularly in improving the capacity building of developing countries to apply space-based technology to support the sustainable developmental efforts. We fully appreciate the fact that identification of reality teams for the Programme on Space Applications is a very useful initiative. The status of this will depend on the benefits this pilot project will provide to the developing countries towards capacity building in space science and technology.

V.07-84674 (E)

We are happy that, during the forty-fourth session of the Scientific and Technical Subcommittee, consensus has been reached on one of the major initiatives taken up under the agenda item on space debris. This is one of the significant and concrete results being achieved towards implementation of UNISPACE III recommendations. The Indian delegation attaches high importance to the subject of space debris in the Scientific and Technical Subcommittee. We fully appreciate the good work carried out by the working group in arriving at the final space debris mitigation guidelines document using the technical content of the IADC document. We are happy that the final document has been accepted by consensus as guidelines and for voluntary application by member States through their national mechanisms during the forty-fourth session of the Scientific and Technical Subcommittee. The Indian delegation would like to express its appreciation to Mr. Claudio Portelli in his capacity as the chairman of the working group on space debris for the excellent work carried out under his chairmanship in arriving at the consensus on the space debris mitigation guidelines document.

The Indian delegation attaches high importance to the subject of disaster management in the Scientific and Technical Subcommittee. We fully appreciate the task carried out by the ad hoc expert group 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. We are of the view that the global system covering support during all phases of disaster using space systems and also covering all types of services which space systems can offer will be very useful for all countries towards this establishment of a SPIDER network under the United Nations umbrella is quite appropriate. We are happy that during the sixty-first session of the General Assembly it has ratified the establishment of the SPIDER network. We are confident that in the coming years this entity shall serve as an _____ (*inaudible*) point for all countries, particularly for developing nations, to quickly assist them at times of need on all matters of disaster management. We compliment the detailed presentation made by UNOOSA on the SPIDER work plan for the year 2007 and for the biennium 2008-2009 during the forty-fourth Scientific and Technical Subcommittee meeting.

We note with satisfaction the extensive work carried out by the working group on the use of nuclear power sources in outer space. We are sure the working group will continue with a good work in the coming years and evolve the safety framework for NPS applications in outer space. The Indian delegation fully appreciates the presentations made by the experts from various countries during the COSPAR/IAEA workshop held on the subject of use of equatorial orbits for space applications. The presentations and deliberations during the workshop, as well as during the Scientific and Technical Subcommittee session, were of high quality and very informative.

The Indian delegation attaches special significance to the science and technology aspects of outer space activity. It should endeavour to identify specific and concrete action plans for space-related activities for knowledge sharing, capacity building and increasing awareness among various member States. Towards this effort the work of the Scientific and Technical Subcommittee is very important. We endorse the report of the forty-fourth session of the Scientific and Technical Subcommittee. Thank you.

The CHAIRMAN *(interpretation from French)*: Thank you Sir for that statement on behalf of the Indian delegation and also the expression of support for the work of the Scientific and Technical Subcommittee.

I will next call on our distinguished representative of China, Mr. Zhang Wei.

Mr. W. ZHANG (China) (*interpretation from Chinese*): The Chinese delegation is satisfied with the progress achieved at the forty-fourth session of the Scientific and Technical Subcommittee and we are very pleased to see that this Committee has adopted the space debris mitigation guidelines. We hope that the Committee will make further efforts in this regard.

Here we would like to make a special mention of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response in order to implement the recommendations of the 1999 UNISPACE III to use space technology for disaster management. The member States of COPUOS and some other relevant international organizations have carried out extensive and in-depth studies and put forward concrete recommendations as to how space-based information can be used for disaster reduction to the maximum extent possible. In this respect we are pleased to see that the United Nations General Assembly adopted, at its 2006 session, resolution 61/110 which decided to establish the SPIDER programme within the UN system and approved the recommendation by COPUOS to set up a SPIDER office in Beijing and Bonn respectively.

As a country hit frequently by natural disasters China attaches great importance to the use of

space-based resources for disaster management and has actively participated in the international coordination and cooperation in this field. China not only acted as the rotating chairman of action team 7 formed to implement this particular recommendation of UNISPACE III but also participated in the work of the special group of experts which was later set up to study the relevant recommendations of action team 7 this has positively contributed to the adoption of the SPIDER programme. Now that China is a host country of a SPIDER office in Beijing it will continue to play an important role in the implementation of the SPIDER programme. In order to ensure the effective implementation of the SPIDER programme the Chinese Government will provide strong support to the SPIDER office in Beijing in line with its commitment including the provision of experts, staff, office premises and facilities as well as the basic running costs for the office in support of its activities required by its work plan.

Using space technology for disaster management is one of the key components in the peaceful use of outer space. We are confident that, with the support of all the countries concerned, the SPIDER programme will play an important role in coordinating global disaster management and emergency response at the international level especially in promoting capacity building in developing countries. In the field of disaster management, China will work closely with OOSA and other bodies of the SPIDER programme to carry out our work systematically with a view to reducing the effect of disasters to the maximum degree possible. Thank you, Mr. Chairman.

The CHAIRMAN *(interpretation from French)*: I would like to thank Mr. Zhang for his statement which confirms the very active participation of China in the SPIDER programme particularly via the Bureau office in Beijing.

Now, we have a planned statement from the distinguished representative of Japan, Ambassador Sumi and Ms. Tanabe.

Mr. S. SUMI (Japan): Japan is pleased to announce its support for the report adopted by the forty-fourth session of the Scientific and Technical Subcommittee. I would like to express our heartfelt appreciation and respect for the excellent work of Dr. Mazlan Othman, chairperson of the Scientific and Technical Subcommittee and Dr. Sergio Camacho-Lara, Director of the Office for Outer Space Affairs and his staff.

Japan has actively contributed to discussions on the work of the Scientific and Technical Subcommittee of COPUOS. Japan continues to make significant contributions most notably in the field of capacity building with regard to the implementation of the UNISPACE III recommendations. The water rocket events, poster contest and space education seminar all co-organized with UNESCO and LAPAN have been executed within the framework of the Asia-Pacific Regional Space Agency Forum. Through these activities Japan contributed to implementation of the Vienna Declaration recommendations and the action team's proposals in cooperation with each country.

I would like to express my deepest respect for the United Nations space debris mitigation guidelines which were adopted in February during the last session of the Scientific and Technical Subcommittee. Japan played an important role in drafting the document. Japan is pleased that this document was approved in this morning's session and would like to express its deepest respect for the concerted efforts of all those who contributed to accomplishing this important task. We also thank the chairman of the space debris working group, Mr. Claudio Portelli, for his excellent chairmanship. We intend to continue such efforts for the mitigation of space debris in the future and we strongly request that all parties using space technologies abide by the guidelines. On this topic Japan is concerned with the intentional satellite destruction experiment which took place in January of this year. Such behaviour increases risk to human space flight and space infrastructure. We strongly request that all parties continue to honour the peaceful uses of outer space.

Concerning space system-based disaster management support. In recent years natural disasters such as earthquakes, flood and volcanic eruptions have rapidly increased around the world. Space technology is expected to adapt to solve these problems. Japan proposed a satellite data utilization network initiative entitled, Sentinel Asia, to support disaster management and this was started last October. The number of participants has grown to reach 52 organizations including 44 agencies from 19 countries and 8 international organizations. Since the project began, JAXA has carried out emergency observations via advanced land observing satellite, Daichi, of the mudslide of the Mayong volcano in the Philippines last year, the flood in Jakarta in Indonesia in February, the earthquake on the west Sumatra island, Indonesia in March and earthquake and flood affecting the Solomon Islands in April. The released satellite data and relevant information on the Sentinel Asia website. JAXA also cooperated with the related space and disaster

management agencies on each of the disasters. In November the fourteenth session of APRSAF will be held in Bangalore, India, under the auspices of the India Space Research Organization. Japan will promote the build up of Sentinel Asia to share information on disasters in the Asia-Pacific region in cooperation with space and disaster management agencies and, through its activities, Japan will make the necessary contribution to the UN SPIDER project. We think it is very important to have a long-term vision and to contribute to creating a prosperous society by participating in these international activities. From this viewpoint we would like to express our respect for the efforts of the UN system in these areas. Japan intends to promote international cooperation with members and observers of the UNCOPUOS so that the benefits derived from space activities can also be enjoyed by the whole of humankind.

We would like to introduce now a short video about the Japanese lunar orbiting satellite Selena, the launch of which is planned for this summer. Our colleague, Ms. Rio Tanabe, will provide an explanation of this video. So now I would like to begin the video.

Ms. R. TANABE (Japan): About one hour after launch Selena will be separated from the H-2A rocket. Two hours after launch the solar array paddle would be deployed. Six hours after launch the high end antenna would be deployed. After completing two orbits around the Earth, Selena would head toward the Moon while maintaining its attitude in such a manner to ensure that the solar panel is facing toward the Sun. About 15 days after launch, as Selena nears the Moon, it _____ (*inaudible*) its direction and enters into the lunar polar orbit by blasting of its main engine. The leading satellite and the radio source satellite would be separated. About 40 days after launch the main orbiter of Selena would be placed into a circular polar orbit at an altitude of 100 km. After injecting the main orbiter into the mission orbit, the four antennas of 15 metres each in dimension of the lunar radio sounder would be sequentially deployed. Then the 12 metre long mast of the lunar magnet orbiter would be deployed. After the initial checkup of the mission instruments, the nominal mission operation of Selena would take place for about 10 months to provide data for scientific research and lunar exploration which should enrich our knowledge about the origin of the Moon and its evolution. Thank you for your kind attention.

The CHAIRMAN *(interpretation from French*): Thank you Ambassador Sumi for that statement and thank you, Ms. Rio Tanabe, for commenting the video on the Selena mission that you launched this summer and, of course, I wish the Japanese delegation every success for this very interesting lunar mission.

I suggest that we next call on our distinguished colleague, the representative of Indonesia, Mr. Syahrudin Damanik.

Mr. S. DAMANIK (Indonesia): Our intervention at this point is based on our observation that remote sensing of the Earth by satellite has quickly contributed to the promotion of sustainable development of all countries. In this connection, my delegation would like to reiterate the importance of ensuring non-discriminatory access to remote sensing data and to derive information at reasonable cost and in a timely manner. We would also like to stress the importance of international cooperation in bringing about maximum benefit of such satellite for all countries.

As to space debris, my delegation is pleased to note that in the morning's session of the Committee, the Committee agreed on the space debris mitigation guidelines. In this connection my delegation considers its importance to open access data and information of space debris whether it would be it as all man-made or non-man-made objects.

Concerning the examination of the physical, natural and technical attributes of the geostationary orbit and of its utilization and application, my delegation highly appreciates the efforts of all delegations in discussing this item within UNCOPUOS and its bodies in the past. It is our hope that the discussion on this item will allow us to reach a decision ensuring granting an equitable access to the geostationary orbit according to the needs of all nations taking into particular account the needs and interests of developing countries as well as the geographical position of certain countries.

In celebrating the International Heliophysical Year 2007, we are pleased to inform you that Indonesia is preparing various activities under the _____ (*inaudible*) of the National Institute of Aeronautics and Space (LAPAN). Among these activities is a research of solar physics and sun relationship that is being undertaken by the Bandung Institute of Technology. This Institute, in cooperation with LAPAN and the Jakarta Planetarium, also organize public outreach programmes. We established cooperation with other countries among others the Japan Geomagnetic Observation _____ (*inaudible*) and Solar Physics. At the moment further collaboration with other countries is being considered in observation

of solar radio burst and energetic particles and ionosphere.

Programmes of IHY 2007 in Indonesia are carried out through six working groups, five working groups are related to coordinated _____ (*inaudible*) programmes (CHIPs) namely (1) solar physics and heliophysics; (2) sun/earth connection; (3) geomagnetism; (4) ionosphere and (5) _____ (*inaudible*) and database. In one working group, namely, the International Geophysical Year (IGY) anniversary and public education, we coordinated activities of related institutions for the fiftieth anniversary of IGY. These activities include finding Indonesians who participated in the IGY in 1957 and educating the public of the role of Earth and space sciences, which is the focus of this year's IHY. We have organized a national seminar in November 2006 related to the preparation of IHY. Thank you.

The CHAIRMAN *(interpretation from French)*: Thank you for your statement which demonstrates the wide range of activities pursued by Indonesia specifically within the framework of the International Heliophysical Year. I note with great interest that one part of your programme, linked to the International Heliophysical Year, has to do with looking for traces of those who participated in a similar event 50 years ago. I think a number of countries are involved in that work. At that heroic time there were many heroic people who are still with us today. Thank you again for your contribution.

Are there any other delegations wishing to take the floor under this agenda item, that is agenda item 7, report of the Scientific and Technical Subcommittee?

I call upon our distinguished colleague Mr. González of Chile.

Mr. R. GONZÁLEZ-ANINAT (Chile) (*interpretation from Spanish*): I have some comments that are general in nature.

First, something that is quite obvious, the guidelines on space debris mitigation were adopted as a counterpart and this was something that was discussed at great length with other developing countries. We are a little disappointed about this because there is an overall trend, that has become noticeable over time, that many of the topics dealt with here for example nuclear energy sources in the Scientific and Technical Subcommittee are being monitored but not so in the Legal Subcommittee so there is no possibility of having legislation, bearing in mind or establishing rights and obligations for countries in respect of this very important aspect. Space debris is caused by space powers. So here we should apply the principle that applies in other standards as joint liability, differentiated and there should be much greater liability and a proper legal framework would be one that would contain reference to such responsibilities.

My delegation is agreement with the adoption of the principles that is obvious but things should not be left as they stand because the Legal Subcommittee should be attending to legislation on this particular item which would clearly differentiate in a positive discriminatory fashion and distinguish because some countries might suffer damage from space debris which, in the case of my country, did occur. During the first month of the year a plane from a commercial company was almost hit by space debris. It is not a trivial matter, it is a very important issue.

To summarize, let me say again that we are in agreement with the successful negotiating process and, as we supported the developed countries in the Registration Convention and many other aspects, we are sure that we will be expecting from them a form of reciprocity because, in the United Nations, we have that on the basis of reciprocity and that applies to international legal matters as well. So flexibility that we have shown we hope will be the subject of reciprocal flexibility in the Legal Subcommittee.

On SPIDER, we very much welcome the new office in Beijing because this gives us every assurance, from the scientific and technical point of view, that there is major human skill there to come to grips with issues and problems that are so important for our countries. Our country is unfortunately constantly facing natural disasters. Recently, we had a small tsunami but a tsunami it was, in the southern area of the country. This is really an issue where the Office can provide every assistance and deserves our support and, may I say by the way, that it is important to take on board, in the Commission report, a reference to an appeal that was launched by the Secretary-General of the United Nations and which was published El País. I say an appeal from the Secretary-General of the United Nations establishing that, in the next General Assembly, there is going to be a special session of the General Assembly devoted to climate change.

Since the next symposium of the Legal Subcommittee will precisely be on space technology and climate change and, given the fact that, in the context of what we do in my country but that nevertheless has regional and global implications which is space technology and climate change we are

particularly concerned and we would like to ask you, Sir, to remind the general Secretariat of the United Nations and the Secretary-General that, on the occasion of the special session on climate change, there should be reference to space technology as a basic tool for countries to have the necessary images and data to come to grips with the many adverse effects of climate change and this is perfectly in line with what we have in international humanitarian law as well, that is, that responsibility to protect.

Finally, I wanted to refer to what the distinguished representative of Indonesia said and several other countries in Latin America have also stated this and indeed developing countries, there is a major imbalance between the principles of remote sensing and observation and the evolution of technology. There is a clear backlog and we need to bring this up to date not just in the scientific and technical area but also the legal domain. Here we cannot work in isolated compartments in fact the Legal Subcommittee should be bringing in all the elements, the Scientific and Technical Subcommittee should be bringing in the technical and scientific information and the Legal Subcommittee should be bringing that to the attention of the General Assembly where there is a generation of practice. This is what I have, by way of comments, under this agenda item. Thank you.

The CHAIRMAN *(interpretation from French)*: I thank our distinguished colleague, Ambassador González of Chile, for his comments on the report of the Scientific and Technical Subcommittee.

On the matter of space debris, it is an issue that should be considered by the Legal Subcommittee in the years to come but, for the moment, at this particular juncture in this phase, which is more of a technical phase, we focused on the recommendations to limit or mitigate the generation of debris in outer space.

As regards the special session of the United Nations General Assembly which was proposed by the Secretary-General in his recent statement. It is true and our distinguished colleague is quite right to remind us that the importance of space technology in working against climate change should be a part of it. Clearly I know that the Scientific and Technical Subcommittee will be devoting a lot of time to this and has been discussing it in recent years and our colleague quite rightly reminded us that the symposium of the Legal Subcommittee, planned for next year, will be focused on the legal dimension, the legal aspects of climate change.

I am now going to call upon our distinguished colleague from Greece.

Mr. V. CASSAPOGLOU (Greece) (*interpretation from French*): Mr. Chairman, I wanted to speak at greater length but, after the statement of our Chilean colleague, I am going to confine myself to just a few comments which seem to me very important. It has to do with the follow-up or the actions to be undertaken with regard to the legal dimension of the issue of space debris.

Maybe ten years have elapsed since proposals were made by the Czech Republic, also co-sponsored by Greece, suggesting a discussion of the legal principles that apply to the issue of space debris. Unfortunately, we have reached a situation which is the province of a psychiatrist rather than an international legal body. Why? The famous Czech astronomer Luboš Perek who unfortunately has, for years now, not attended our sessions but he gave us a mathematical, astronomical formula, I am not an expert I cannot go into detail but at least we had a solid scientific basis on which we could start this discussion in the Legal Subcommittee. I ask myself why did we not do that, why did we have to waste so much time before we start, maybe at the next session of the Legal Subcommittee, to tackle the legal issues pertaining to activities in outer space that caused not so much climate change but a change of the natural environment of our planet. This is a schizophrenic situation, if you will, it seems that schizophrenia is present in our work. We had this wonderful text posing specific problems and, in this body, we have to not only politically and legally but morally as well, we have to act on that.

This past month I have observed a tendency to re-open a debate not only on the usefulness of a treaty or a convention that would codify progressively everything to do with outer space as envisaged by the UN Charter. This is truly a big lacuna that needs to be filled when we talk about the peaceful uses of outer space, when we insist that space should be used for peaceful purposes only. If you take out the little brochure that was offered to us three days ago, very well produced even as a publicity material it says in big letters, peaceful uses of outer space, it says peaceful outer space on the cover and that really is significant, this is the crux of the matter. if you will. How to consecrate space, maintain space as a peaceful environment, not weaponized, not militarized. Thank you.

The CHAIRMAN *(interpretation from French)*: I thank you Dr. Cassapoglou, distinguished representative of Greece for your statement. Once

again on the matter of space debris it is really indispensable that we should start moving ahead toward legislating the norms and standards on the basis of international consensus. Approval of the space debris mitigation guidelines is a very important step that was made to address that, which does not rule out future discussion of the legal aspects.

Any other requests for the floor on item 7, report of the Scientific and Technical Subcommittee?

I see no further requests.

We will continue our consideration of this item, item 7, report of the Scientific and Technical Subcommittee tomorrow morning. We are now moving on to agenda item 9, spin-off benefits of space technology: review of current status. We have a few speakers on the list for this agenda item actually I see none who have asked for the floor beforehand so I am going to ask now.

Are there any delegations that wish to speak on this agenda item?

I do not see any delegations. Well, we will continue and perhaps conclude this item tomorrow that is spin-off benefits of space technology: review of current status.

Before I adjourn this meeting I would like to give the floor to the distinguished representative of Austria, some further clarifications regarding the party.

Mr. S. MAYER (Austria): As you have already indicated the traditional Austrian heurigen will take place tomorrow at the invitation of the Secretary-General of the Ministry of Foreign Affairs. Just to clear up two points and as for the assistance of all the distinguished delegates and invited guests, one thing we like to do in Austria is also to prepare the right amount of liquid and other sustenance and in particular dessert for our guests so could I ask those delegates, head of delegations and delegates who will come to the Austrian heurigen tomorrow and who have not responded, either to my office or to the Austrian delegation, to tell the Austrian delegation here there is a list that they will come or can confirm. Thank you.

The CHAIRMAN *(interpretation from French)*: I thank our colleague, the distinguished representative of Austria for his contribution. Once again I would like to remind delegations that we are invited and you need to confirm, as soon as possible, your attendance to the Austrian delegation or the Secretariat and this is always very pleasant, this will take place tomorrow evening.

Ladies and gentlemen, distinguished delegates, I am going to shortly adjourn the meeting so that the symposium on space and water can begin but, before adjourning, I would like to inform you of our schedule for tomorrow morning. We will reconvene promptly at 10 a.m., at that time we will continue consideration of agenda item 7, report of the Scientific and Technical Subcommittee on its forty-fourth session. We will continue and hopefully conclude our consideration of agenda item 8, report of the Legal Subcommittee on its forty-sixth session and, item 9, spin-off benefits of space technology: review of current status.

Furthermore, time permitting, we will begin our consideration of agenda items 10 and 13. Item 10, space and society, Item 13, other matters. At the end of tomorrow morning's meeting there will be three technical presentations by the representatives of Austria, Syria and by the Space Generation Advisory Council (SGAC). I would also like to inform you that tomorrow from 9 a.m. to 6 p.m. there will be a conference in the VIC Boardroom on the fourth floor entitled, Radiation exposure to aircraft crew due to space weather effects, what is known as space meteorology which is not the same as regular meteorology. The conference is organized by the Austrian Research Centre in cooperation with the Office for Outer Space Affairs. You are warmly invited to attend.

Any questions or comments on this proposed schedule for tomorrow?

I see none.

I would like to remind delegates that, following the symposium on space and water, there will be a reception hosted by the United States in the Mozart Room downstairs. I now invite my friend Mr. Lothar Beckel of the European Academy of Sciences and Arts to moderate the symposium on space and water.

This meeting will be adjourned following the conclusion of this symposium.

The meeting closed at 3.51 p.m.