

**Committee on the Peaceful  
Uses of Outer Space***Unedited transcript*598<sup>th</sup> Meeting

Wednesday, 3 June 2009, 3 p.m.

Vienna

*Chairman:* Mr. Ciro Arévalo-Yepes (Colombia)

*The meeting was called to order at 3.17 p.m.*

**The CHAIRMAN** (*interpretation from Spanish*): Good afternoon distinguished delegates. I now call to order the 598<sup>th</sup> meeting of the Committee on the Peaceful Uses of Outer Space.

Distinguished delegates, ladies and gentlemen, first of all, I would like to inform delegates that the Commission of the European Community has asked the Secretariat to participate during this session as an observer. I would also like to suggest that, following past practice, we invite those representations to attend the current session and to address the Committee when appropriate. This is, of course, without prejudice to further requests of this nature and does not involve any decisions of the Committee concerning status. This is merely a courtesy that we customarily extend to such delegations.

If there is no objection, we will proceed accordingly.

This afternoon, we are going to continue our agenda item 4, General Exchange of Views. Then from 4.00 p.m. to 6.00 p.m., for two hours, we will hold a panel discussion on the tenth anniversary of UNISPACE III.

I would like to inform delegates that the Action Team on Near-Earth Objects is meeting in C0727, with a view to reviewing and developing draft recommendations for the International Response to the Threat of Near-Earth Object Impacts for Consideration by the Working Group on Near-Earth Objects of the Scientific and Technical Subcommittee in 2010.

I would also like to announce that members of the Working Group on Nuclear Power Sources of the Scientific and Technical Subcommittee will hold informal consultations that is best possible follow-up actions on the adoption by the Subcommittee of the Safety Framework on the Use of Nuclear Power Sources in Outer Space. These consultations will take place in Conference Room VII this afternoon and on 4 June from 9.00 a.m. to 5.00 p.m.

Finally, as Chairman, I would like to inform delegates that once we conclude, and please, through you, inform all of your colleagues, I would ask that this evening at 6.00 p.m., I would like to cordially invite all delegates to attend a Reception in the Mozart Room of the VIC Restaurant, hosted by the Chair.

I now give the floor to Niklas Hedman, who is going to give us some further details on the schedule this afternoon. Mr. Hedman has the floor.

**Mr. N. HEDMAN** (Deputy Secretary, Office for Outer Space Affairs): Thank you Mr. Chairman. Yes, indeed, this is an announcement by the Secretariat. Informal consultations, chaired by the delegation of France, on the proposal by France for a new agenda item of the Scientific and Technical Subcommittee entitled "Long-Term Sustainability of Space Activities" will be held at 4.00 p.m., today, at 1600 hours today, in Room E0951, and that is the Office for Outer Space Affairs Meeting Room, Building 'E', Floor 9. It is just at the corridor straight, take the elevator up to the ninth floor. Thank you Mr. Chairman.

**General exchange of views (agenda item 4)**

In its resolution 50/27 of 6 December 1995, the General Assembly endorsed the recommendation of the Committee on the Peaceful Uses of Outer Space that, beginning with its thirty-ninth session, the Committee would be provided with unedited transcripts in lieu of verbatim records. This record contains the texts of speeches delivered in English and interpretations of speeches delivered in the other languages as transcribed from taped recordings. The transcripts have not been edited or revised.

Corrections should be submitted to original speeches only. They should be incorporated in a copy of the record and be sent under the signature of a member of the delegation concerned, within one week of the date of publication, to the Chief, Conference Management Service, Room D0771, United Nations Office at Vienna, P.O. Box 500, A-1400, Vienna, Austria. Corrections will be issued in a consolidated corrigendum.



**The CHAIRMAN** (*interpretation from Spanish*): Thank you. Let us now continue then on agenda item 4, General Exchange of Views. The first speaker on my list is Dr. Carlos Rodríguez Bocanegra, Permanent Representative of Colombia, from the Permanent Mission. You have the floor Dr. Bocanegra.

**Mr. C. RODRÍGUEZ BOCANEGRA** (Colombia) (*interpretation from Spanish*): Thank you very much Chair. First of all, please allow me to express the honour for me to address this COPUOS and to say that it is a source of pride for Colombia that you are chairing this meeting. You have so far been doing an excellent job and we are sure that under your leadership, this Committee will reach its objectives.

Now, since this is the first time that Colombia takes the floor during this session, please allow me to express a thought dealing with the future but based on a past event which was very important for this Committee.

Some 10 years ago, during UNISPACE III, which took place in the same city, the implementation of many of its recommendations changed the whole situation with regard to space, in our opinion. Likewise, the many actors in this field of space denoted(?) a new series of categories for space. Also the challenges faced by how humanity have become more serious over the last two years, and I mention these because if we think about the future, as you have already, Chairman, in your opening statement, to know whether the existing norms and rules have not become somewhat obsolescent and whether progress in the field of space can now still be ready to meet the challenges concerning the rational utilization of the resource of space, in particular, space debris, risks of orbital saturation, climate change, the food crisis, natural disasters and so on and so forth, all of these challenges.

Chairman, distinguished delegates, have these global challenges met an appropriate response in terms of the best way to use space to solve mankind's major problems or is it time for us to think about a new paradigm for space? Perhaps we need a UNISPACE IV Conference or a bowstring of this Committee turning it into a body with greater profile and visibility with greater organizational and operational capacities.

Chairman, Colombia is aware of the potential strengths and weaknesses linked to the peaceful use of outer space as well as our responsibilities in fulfilling the fundamental principles of the use of this resource.

For Colombia, these principles are, along with an approach of shared benefits, the fillers(?) of the peaceful use of outer space for sustainable development of mankind. The sustainable and equitable use of this fine \_\_\_\_\_(?) resource is fundamental for Colombia and is certainly a task of States. Colombia believes that preserving this resource by ensuring its sustainability and equitable use can be achieved through a more transparent management. The reports of countries on their own activities are one of the tools to achieve this transparency as well as building confidence and reliability of data. At the same time, we do have capacity-building as established in paragraph 10 of resolution 63/90 of the General Assembly considered by the Scientific and Technical Subcommittee with respect to the holding of seminars and practical classes of the United Nations Programme on Space Technology Applications for Developing Countries.

Colombia believes that interregional cooperation is indispensable. We see it as having the Colombian Space Commission carry out courses for the integral use of satellite navigation, remote sensing, information systems and space data infrastructure in the fields of natural resource management and protection of the environment, and management and prevention of catastrophes, amongst others.

In this respect, Chairman, we are very pleased to report on activities such as the seminar that was held dealing with satellite navigation system applications that took place in Medellín between 23 and 27 June 2008, as well as the 2009 Space Adventure, which was one of the largest events of this kind ever held in Latin America to commemorate the International Year of Astronomy and the 400 Years Commemoration of the Birth of Galileo. Twenty thousand children and adolescents participated in this celebration of technology in Barranquilla, Colombia, in May, with the support of COPUOS and the Office for Outer Space Affairs, as well as NASA and the Colombian Space Commission.

Likewise, the International Seminar on Space Law that was held in Bogotá in April this year under the auspices of the Sergio Arboleda University, all of which reflects Colombia's efforts in relation to training. We also propose the use of Regional Centres for this end in order to train legal experts in space law.

As you mentioned this morning in your opening remarks, Chairman, distinguished delegates, all of the events form a part of our Action Plan under the resolution of the United Nations General Assembly 59/2 of October 2004, as well as along the lines of recommendations adopted by UNISPACE III.

As for the growing problem of space debris, Colombia views with concern this challenge, as we see it, in the Scientific and Technical Subcommittee's Report. We believe that both COPUOS, as well as its members and private agencies and some satellite owners, must take the necessary measures for correct follow-up and management of space debris and its mitigation. Again, Chairman, we believe that the national reports are of vital importance, as was suggested in the GRULAC Declaration, as presented in the forty-eighth session of the Legal Subcommittee.

A unilateral mechanism, for example, an intergovernmental panel, could support initiatives aimed at producing studies and early warning systems that would allow for preparation and eventually the mitigation of the re-entry of these materials in the stratosphere.

Colombia wishes to express its gratitude to the Commission for the support that was shown in developing the UNSPIDER system which is certainly an excellent factor for prevention mitigation of natural disasters. In respect of this, Chairman, Colombia has begun implementation of measures to benefit from this network. Likewise, Colombia believes that regulations and the establishment of international norms, as well as national reports, will all facilitate the work of COPUOS in this field.

Now, in the light of progress in this field, the development of space law will help us to define and delimit the fields of action here, as well as the application of aeronautical law. We remain concerned about the imminent saturation of geostationary orbit because of a lack of delimitation and responsibilities which affects, of course, negatively equal access of this by countries with limited capacities. In this respect, Colombia wishes to welcome all proposals from governments and initiatives of member countries that would make contributions to the open debate here on the definition of norms and institutions that would not only allow for the implementation of the basic principles, here(?) with policies that would tend towards a greater use of natural space resources in benefit of all mankind.

Any United Nations space policy would have to take into account aspects such as sustainability with equitable, harmonization of concepts and norms, the reaching of the Millennium Development Goals, leading to a reduction of binding normative universal norms that would take into the respective interests and vulnerabilities of member States of the United Nations and emerging actors in the space field.

As regards, Chairman, we emphasize the fact that we must take into account progress made in international legislation. Yet we also believe that it is necessary to update the *corpus juris espaciales(?)* in a holistic way which takes into account the developments over the past 50 years.

Chairman, we reiterate the importance of regional and interregional cooperation, as it is set forth in the text of resolution 63/90 of 5 December 2008 which states that the setting up of regional entities and space programmes are an efficient measure to both preserve the use of outer space for peaceful uses as well as to rationally share the capacities and knowledge that are common to a member State's specific region, thus maximizing the use of its space resources.

We would remind one and all that according to resolution 17/21(a) and (b), of 20 December 1961 of the General Assembly, in Point 3(c), it is up to COPUOS to work on the consideration of means to promote international cooperation in activities relative to outer space.

Moreover, in the Principles that govern remote sensing, in particular the peaceful exploration and use of outer space, the General Assembly has provided that the United Nations and pertinent entities of its system will help form in cooperation in this field as well as promoting technical assistance.

Chairman, these are the main postulates that, once again, lead us to the fact that it is necessary to establish objectives and scopes of a single United Nations policy as generated by these different works of a universal and openly participative nature. In our historical experience, we have seen how, on the contrary, basing ourselves on consultations with a limited number of countries has a consequently limited scope. So in virtue of the Principles I have just cited and because of the different vulnerabilities of this limited and non-renewable resources which are creating impacts with greater and greater frequency. Colombia encourages one and all to make these efforts towards understanding tolerance, trust and promotion of common values towards sustainable human development, equity and the obtaining of the Millennium Development Goals for a better future for our children and the generations to come.

Finally, we would like to, Chair, reiterate our support for the proposal you made as well as our support for the successful work of this Committee. Thank you Chair.

**The CHAIRMAN** (*interpretation from Spanish*): I would like to thank Dr. Rodríguez Bocanegra, my colleague of these many years, with whom I have had the pleasure to work together to meet many challenges along the way. Many thanks to the delegation of Colombia.

Now it is my pleasure to recognize Mr. Radhakrishnan of India. You have the floor Mr. Radhakrishnan.

**Mr. K. RADHAKRISHNAN** (India): Thank you Mr. Chairman. Mr. Chairman, the Indian delegation is delighted to see you in the chair guiding the deliberations of the fifty-second session of the Committee. We are confident that your astute leadership will contribute significantly to progress all agenda items identified for this session. We are proud to see Professor U. R. Rao, the Chair of UNISPACE III, to address the session on the occasion of the tenth anniversary celebration of UNISPACE III.

The Indian delegation is delighted to note that the United Nations General Assembly agreed to include space and climate as an agenda item of the Committee and we look forward to fruitful deliberations on this pressing issue of global concern. We will make a technical presentation on this agenda item during this session.

Mr. Chairman, the Indian delegation places on record its appreciation for the significant achievements of China for its first space walk in September 2008, GOSAT launched by Japan in January 2009, and the Gravity Mission, GOCE, by ESA, in March 2009.

Mr. Chairman, during the last one year, India made a significant step(?) in space exploration through the Chandrayaan Mission. On 22 October 2008, India's PSLV-C11 launch vehicle injected the Chandrayaan spacecraft into an elliptical trans-orbit around the Earth, and later, through a series of orbital maneuvers, Chandrayaan-1 was placed in a 100 kilometres circular orbit around the Moon.

On 14 November 2008, India set its imprints on the Moon using the Moon Impact Probe.

The Chandrayaan-1 Mission is intended to study the Moon using high-resolution remote sensing. Besides the five scientific instruments built by India, the international scientific community provided six complementary scientific instruments. Chandrayaan has mapped nearly 90 per cent of the Polar Region and nearly 50 per cent of the Equatorial Lunar Surface successfully so far providing data of high quality for

scientific analysis. This mission has become a good example of international cooperation in the field of space exploration and earned laurels nationally and internationally.

The Indian delegation would be making a technical presentation on Chandrayaan-1 during this session.

Mr. Chairman, our delegation is proud to report that the students and faculty of an Indian university built an experimental satellite, ANUSAT, under the oral guidance of ISRO. ANUSAT was successfully launched by PSLV in its fourteenth successive, successful flight on 20 April 2009, as a co-passenger on radar imaging satellite RISAT-2.

Mr. Chairman, the OCEANSAT-2, slated to be launched shortly, would also carry a radio occultation sounder from Italy. Also, India is getting ready for the launch of CARTOSAT-2B, CARTOSAT-2, radar imaging satellite, RISAT-1, also lastly the ISRO-CNES joint mission, Megha-Tropiques, using PSLV.

Six small satellites, built by Germany, Turkey, Switzerland, a YOUTHSAT, with participation of the Moscow State University, and EXOSAT, with the participation of NTU(?), Singapore, EMELETICS of Canada, and ALSAT-2 from Algeria, are also scheduled to be launched as co-passengers in these flights.

We are exploring the satellite-based Positioning, Navigation and Timing(?) services to the communities in the region. India is building a GPS- and GEO-augmented navigation system, GEGAN(?), as well as an Indian Regional Navigation Satellite System, IRNSS.

Mr. Chairman, in the area of space applications, India has played a notable progress in seamlessly integrating the advances in space technology and applications with the National Development Goals, particularly in vital services, such as telecommunications, television broadcasting, meteorology, disaster warning, as well as natural resources survey and management.

In our efforts to provide quality education across the country, the Peri(?) Education Projects undertaken a couple of years ago, now connects teacher and students at primary, secondary and university level, through more than 35,000 EDUSAT classrooms. The Tele-medicine Project today connects 375 hospitals of each, 305 hospitals in the rural, remote

and district levels and 13 mobile ones have been connected to 57 super-speciality hospitals located in major cities.

Today, more than 470 Village Resource Centres, including 45 expert centres have been established. We consider that this concept of Village Resource Centres is appropriate for other developing countries as well.

Mr. Chairman, recently India signed an Agreement with France, Egypt, Kazakhstan and Chile on the peaceful uses of outer space.

The Twenty-Eighth Meeting of the Inter-Agency Space Debris Coordination Committee will be hosted by India during March 2010 at \_\_\_\_\_ buddah(?).

ISRO is actively participating in the initiatives of the Asia-Pacific Regional Space Agency Forum, APRSAF, including the Sentinel-Asia Project, to share satellite data for disaster mitigation and the STAR satellite technology for the Asia-Pacific Region Programme for sharing expertise, again(?) developing and operating the Indian mini-satellite IMS-1.

Mr. Chairman, so far 824 scholars from 31 countries from the Asia-Pacific region and 27 scholars from 17 countries outside the Asia-Pacific region have benefited from the education activities of the Centre for Space Science and Technology Education for the Asia-Pacific region. India would like to request more participation from the member countries.

Mr. Chairman, during 2008, the International Academy of Astronautics conferred that the Team Achievement Award for the PSLV-C7, CARTOSAT-2 and SRET Teams(?) (*not clear*). Also a book entitled "Touching Lives", authored Mr. S. K. Das of the Department of Space, was presented the prestigious Luigi Napolitano Book Award. The Chandrayaan1 team was awarded the Space Pioneers Award by the National Space Society recently.

Mr. Chairman, having achieved self-lines into the end-to-end space programme, the Indian Space Programme is entering into a space exploration phase mainly to explore the inner solar system and built such capabilities for the outer solar system. Exploration of outer space using PANA-3(?) missions will be furthered with the Chandrayaan-2 and its follow on missions.

India has also been discussing at various levels the need for embarking on a human space flight programme.

Mr. Chairman, in conclusion, the Indian delegation would like to support the United Nations COPUOS in all its activities to increase the awareness of space-based benefits and to encourage developing countries in taking up the space application programmes for sustainable development and to maintain outer space exclusively for peaceful purposes. Thank you Mr. Chairman.

**The CHAIRMAN** (*interpretation from Spanish*): I would like to thank wholeheartedly Mr. Radhakrishnan for his very important contribution to our work. The Programme being deployed by his country is very impressive and it gives us great satisfaction that India has reached self-sufficiency in its various activities. It is a great incentive for all of us and for the Committee as a whole. Thank you very much for your statement.

I now have the pleasure of recognizing the Ambassador of China, Mr. Guoqiang Tang. You have the floor Sir.

**Mr. G. TANG** (China) (*interpretation from Chinese*): Mr. Chairman, first of all, please allow me on behalf of my delegation to congratulate you on your continued chairmanship of the current session of COPUOS. I am confident that under your and the Bureau's ever leadership, this session will be crowned with success. My delegation will, as always, participate actively in the succession.

Mr. Chairman, in the morning, a Chinese taikonaut, Mr. Yang Liwei, walked us through China's extraordinary journey in manned space flights. I am sure that, while giving you an idea of China's achievement in the rapid development of its space activities, this review would enable you to better understanding the hard-working and enterprising spirit of Chinese astronauts.

China's manned space missions not only represent the Chinese nation's outstanding contribution to human exploration and utilization of outer space but also epitomize the great voyage of mankind in the exploration and use of outer space and give expression to the concept of harmony in outer space practice by China.

Mr. Chairman, the Chinese Government has always stood for and abided by the principle of the peaceful use of outer space and considered this an

important part of efforts to build a harmonious world of lasting peace and common prosperity. China is unswervingly committed to peaceful development and opposed to bringing weapons and an arms race into outer space.

China is ready to join with the international community in the efforts to maintain the peace and tranquillity in outer space and use outer space to promote human civilization and social progress for the maximum benefits of mankind.

Mr. Chairman, the fundamental goal of building a harmonious outer space is to ensure that it is used for peaceful purposes. In the past year, China continued to adhere to the objectives of the peaceful use of outer space and vigorously develop its space activities and achieve significant results.

China's credibility in areas such as satellite development and applications, aerospace infrastructure, logistical support, as well as space exploration, have further improved.

In addition to manned missions, our Lunar Exploration Programme and deep space exploration activities have also moved into new phases.

In China, space technology is being widely used in such areas as agriculture, forestry, land and resources, education, water conservation, urban and rural development, environment, survey and mapping, transportation, meteorology, oceanography, and regional scientific research, and the application of space technologies has brought very great changes in peoples lives.

Mr. Chairman, outer space is the common heritage of mankind and the exploration and use of outer space concerns all humanity. Strengthening international cooperation in the outer space area to promote common development in all countries is the main path to a harmonious outer space advocated by China.

The Chinese Government has earnestly implemented the various UNISPACE III recommendations and highly evaluated the role of the Conference. In addition, the Chinese Government has been working hard along with the Office for Outer Space Affairs towards the early operation of the UNSPIDER-Beijing Office.

Mr. Chairman, the Asia-Pacific Space Cooperation Organization began operation last December in Beijing and has been playing a positive

role in promoting space technology cooperation in the Asia-Pacific region. As the host country, the Chinese Government will continue to support the Organization's various activities and the Chinese Government supports the request of that Organization to be granted observer status with this Committee.

China's cooperation with many countries in the space area has also been very fruitful. In February this year, when a forest fire was raging in Australia, the Chinese Government provided timely and effective assistance to Australian disaster relief efforts with 141 frames of satellite images and 24 issues of fire monitoring and analysis products.

On 20 May this year, China and Brazil signed an Agreement on providing data from the CBERS-2B satellite to African countries via ground stations in South Africa, Egypt and Spain.

China is ready to cooperate in space technology with more countries, many developing countries in particular, with an open mind and a responsible attitude.

Mr. Chairman, harmony in outer space is impossible without the robust guarantee of the space laws. In the current legal framework governing outer space constituted by the five United Nations treaties on outer space, various States find the legal basis for most of their activities in the peaceful exploration and use of outer space.

The Chinese Government is also appreciative of efforts by the international community to explore new ways to regulate space activities, such as the United Nations General Assembly-endorsed Space Debris Mitigation Guidelines and the Safety Framework for the Nuclear Power Source Applications in Outer Space being developed by the Scientific and Technical Subcommittee and the IAEA.

We are also of the view, however, that the existing space law is not sufficient to effectively prevent the militarization of outer space. Therefore, there is the need to address this issue and to maintain peace in outer space by discussing and elaborating new legal instruments without prejudice to the current legal regime.

Mr. Chairman, the Chinese Government is prepared to work with the international community towards building a harmonious outer space that is more peaceful-, orderly-, development-oriented and prosperous. Thank you Mr. Chairman.

**The CHAIRMAN** (*interpretation from Spanish*): I would like to thank the distinguished Ambassador of China, His Excellency Mr. Tang, for his exposé of the general principles guiding China's policies in outer space. As was mentioned this morning, there is the new Cooperation Treaty between Brazil and China and you have again drawn our attention to the importance of that Treaty which links together countries in spite of the great geographic distance between them. Thank you very much again Ambassador for your statement.

We continue with our list of speakers and the next delegation on my list is the delegation of Indonesia, Mr. Bambang Teja Sukmana. You have the floor.

**Mr. B. T. SUKMANA** (Indonesia): Thank you Mr. Chairman. Mr. Chairman, at the outset let me take this opportunity on behalf of the Indonesian delegation to congratulate you upon your assumption of your duties as the Chairman of this Committee. My delegation is convinced that under your able leadership the deliberation of this Committee will reach a fruitful outcome.

My delegation expresses its appreciation to Dr. Mazlan Othman and her valuable team in the Secretariat for supporting and carrying out the work. This in turn facilitates our deliberations during the course of our present sessions.

Mr. Chairman, my delegation would like to express its general views on some agenda items being deliberated in this current session as follows.

First, on agenda item 5 on ways and means of maintaining outer space for peaceful purposes, my delegation is of the view that this agenda item is of great importance and essential to the works of this Committee. There is no way that this Committee will remain \_\_\_\_\_(?) unless the main focus of its works continues to be ensuring the peaceful nature of all outer space activities, including to prevent any attempt to militarize or weaponize outer space. Taking this into consideration, as the main Committee under the aegis of the United Nations, dealing particularly with this issue, it is essential for this Committee to enhance its cooperation and coordination with other bodies and mechanisms within the United Nations system, such as the First Committee of the United Nations General Assembly, and the Conference on Disarmament in pursuit of maintaining the peaceful nature of outer space activities.

Second, on agenda item 6, on the implementation of the recommendations of the UNISPACE III, my delegation welcomes the endorsement by the Scientific and Technical Subcommittee at its forty-sixth session to celebrate the tenth anniversary of UNISPACE III by organizing a panel discussion under the issue at the current session of the Committee. It is our hope that the discussion will lead us to greater identification of ways and means to further strengthen the link between the implementation of the recommendations of UNISPACE III and the works of the Commission on Sustainable Development.

In this context, Indonesia has conducted various activities and programmes related to the application of satellite data for natural resources mapping, Earth observation, and disaster management, both within its national capacity and through international cooperation.

Third, on agenda item 7 on the Report of the Scientific and Technical Subcommittee on its forty-sixth session, my delegation takes note with appreciation of the considerable progress that has been made by the UNSPIDER during the two years since its inception in 2006. My delegation believes that establishment of excellent-oriented activities of this kind will be fully aided to the works of this Committee. Furthermore, as a disaster-prone country, Indonesia would continue to contribute to the future works of this platform.

Still in this context, Indonesia also supports the implementation of the Sentinel-Asia Project. It is one of the concrete actions towards the establishment of a disaster management support system in the Asia-Pacific, sponsored by JAXA, Japan.

Furthermore Indonesia will soon activate(?) the data provided notes with support to set up the automated and \_\_\_\_\_(?) information distribution through the regional network.

In the field of space telecommunication, Indonesia has already developed telecommunication satellites which are Palapa D, to be launched in the second half of 2009, this year, and TERCOM-C satellites to be launched in the first half of 2011.

Whereas, in the area of Earth observation satellites, we would also like to inform that the second generation of an Indonesia surveillance micro-satellite is being developed and planned to be launched in the Equatorial Orbit on PSLV launcher of ISRO, India, in 2011.

In enhancing the utilization of space-based technology in disaster management and mitigation, Indonesia operates buoys in the context of a tsunami early warning system covering all of its sea-\_\_\_\_\_ (?) territory that is considered to be at high risk of tsunami. Some essential parts of the system have been funded through a donation from the Government of Germany.

Fourth, under agenda item 8 on the Report of the Legal Subcommittee on its forty-eighth session, my delegation would like to reiterate its view that after 40 years of in-depth discussion, the Legal Subcommittee needs to make progress on its deliberation of the definition and the delimitation of outer space. My delegation's position on this issue continues to be that the definition and delimitation of outer space is of paramount importance in ensuring legal certainty in the utilization of outer space, especially in the light of an increasing volume of outer space activities and the growing participation of the private sector in outer space activities. It is for this very reason that this issue has been included under the agenda of the Subcommittee for such a long time and remain there now. In order to make considerable progress in our deliberations on this issue, my delegation is strongly of the view that the time has come for us to try to achieve minimum consensus or compromise through a more realistic approach, such as through focusing on certain issues where we have more common ground rather differences. My delegation is ready to discuss this issue along these lines.

Fifth, under agenda item 11 on space and water, thank you Mr. Chairman, my delegation would like to inform, through you, Mr. Chairman, my delegation would like to inform that from 7 to 11 July 2008, in cooperation with the Office for Outer Space Affairs, Indonesia has hosted the United Nations/Indonesia Regional Workshop on Integrated Space Technology Applications for Water Resources Management, Environmental Protection and Disaster Vulnerability Mitigation. The overall objective of this Regional Workshop is to promote the integrated use of the demonstrated capabilities of space technology to support national, regional and international efforts in water resources management and environmental protection that could reduce the vulnerability of water-caused natural disasters and mitigate its occurrence.

Sixth, on agenda item 12 on space and climate change, my delegation notes that the development of knowledge and technological capacity has led to the increase of a number of satellites with the capability of collecting data related to the climate and space environment. Unfortunately, the increase in data

collection has not been followed by an increase in access of all countries to it, particularly the developing countries. In this regard, my delegation encourages the United Nations Office for Outer Space Affairs to relate its capacity-building activities with the use of analyses of data coming from those satellites.

In conclusion, Mr. Chairman, I would like to reiterate my delegation's commitment to contribute actively to the works of this Committee in order to ensure a productive and fruitful outcome to our deliberations. Thank you.

**The CHAIRMAN** (*interpretation from Spanish*): Let me thank the distinguished representative of Indonesia for his kind words. We also take note of the concerns voiced by your country's delegation concerning the definition and delimitation of outer space. Indeed, this is a long-standing topic where we really need to reach some kind of consensus, I think. I think it is also important that you mentioned the difference between data collection and the difficulties that many countries have in accessing it. Again, a topic that is becoming more and more acute for the international community so I thank you for your statement.

The next person on the list is the distinguished Ambassador from Ukraine, Volodymyr Yel'Chenko. You have the floor Sir.

**Ms. A. KARNAUKHOVA** (Ukraine) (*interpretation from Russian*): Mr. Chairman, unfortunately Ambassador Yel'Chenko could not be here this afternoon. Let me make the statement on behalf of the Ukrainian delegation.

Mr. Chairman, on behalf of the Ukrainian delegation, I would like to pay tribute to you Sir and express our profound respect and certainty that the fifty-second session of the Committee will be a success.

Under this agenda item, we would like to inform those present of the most recent breakthroughs in the space activities of Ukraine.

First of all, 10 April of this year saw an unprecedented session of the Government of Ukraine outside of the capital specifically devoted to the development of outer space exploration. The session of the Government was held in the city of Dnipropetrovsk and most particularly on the site of the Yuzhnoye Designer Bureau, a leading entity in our space activities. The session adopted 16 Decrees of the Cabinet of Ministers of Ukraine to set up an array of



special conditions for the development of our Space Programme.

As a result, the planned budget of the Rocket and Space Programmes of Ukraine for 2009 was increased by a factor of 1.8 and the overall scientific and technical research budget earmarked for space exploration was increased by a factor of eight for the period 2008-2012.

Also in connection with the plan to hold the European Soccer Cup in Ukraine in 2012, it was decided that special resources were going to be allocated to launch a national communications satellite to provide television broadcasts for the European Soccer Cup.

We believe this is a high-efficiency project which is very important to the development of our Space Programme. It is going to be Ukraine's first-ever national communications satellite, to be launched in September 2011.

The increased funding of Ukraine's Space Programme in 2009 will also make it possible to complete work on the Sich satellite and start a large-scale project to create the Cyclone-4 launch vehicle and the Platform-Free Inertial Navigation System for the future management of launch vehicles, including Cyclone-4.

On 30 January, the Cyclone-3 launch vehicle was successfully launched from the Plesetsk launch pad. It brought into orbit the Coronas Photon Space Vehicle for the Russian Federation, which is designed to study the Sun and solar phenomena.

Also this year, the Zenith-3 SLB Launch Vehicle was launched under the Land Launch Programme.

In January of this year, the Framework Agreement on Cooperation with Russia and the United States for the Peaceful Uses of Outer Space(?), between Ukraine and the United States for the Peaceful Uses of Outer Space, entered into force. It was signed on 31 March 2008 and would promote mutual beneficial scientific and technological projects for both countries.

Also in March 2009, in Tokyo, the Director-General of the National Space Agency of Ukraine signed a Memorandum with the Sumitomo Corporation to promote joint work to enhance clean energy production and reduce greenhouse gas emissions in compliance with the Kyoto Protocol.

We also signed a Protocol of Understanding with Mitsubishi Heavy Industries and in Kiev and Dnipropetrovsk(?), a Memorandum was signed between our Space Agency and the Yuzhny Machine Building Enterprise, involving the Sumitomo Corporation and Mitsubishi Heavy Industries from Japan.

We also have signed an Agreement with our European partners to promote joint work with the European Union under the Twinning Project.

In conclusion, I would like to say that Ukraine supports space exploration for peaceful purposes for the benefit of all mankind and invites all interested countries to engage in lateral and multi-lateral cooperation. Thank you very much Mr. Chairman.

**The CHAIRMAN** (*interpretation from Spanish*): I thank the distinguished representative of Ukraine for their statement on Ukraine's space activities. We congratulate your country on the planned launch of the first national communications satellite which will serve the course of sports. Welcome. Thank you very much.

And the next delegation is Romania. You have the floor Mr. Piso.

**Mr. M.-I. PISO** (Romania): Thank you Mr. Chairman. Dear Chairman, Ambassador Ciro Arévalo, let me express on behalf of the delegation of Romania our satisfaction and seeing you again the main chair of this Committee, together with my certitude that the strategic and practical objectives of COPUOS will be successfully accomplished under your chairmanship.

I would like also to extend our congratulations to the Executive, and particularly to Professor Mazlan Othman, for the excellent proof of management of the Secretariat during the period of space activities in continuous growth.

Mr. Chairman, Romania is continuing to support its space development at the national level and together with the international space community. As a European Space Agency Cooperating State, and a European member State, Romania is participating to the European space and research activities but is also keeping and developing its own national Space Programme.

The Romanian Space Programme is further developing under the authority of the Romanian Space Agency and presently involving more than 100

organizations with research, academic and industrial profiles. The actual Research and Technology Development Plan of the Government includes space as one of the priority areas. There are three main sub-programmes on space exploration, on space applications and space technology. The specific objectives are established presently up to 2013 and also presently there are a number of 47 projects involving several hundred full-time \_\_\_\_\_(?) professionals.

Most of the projects are completed under international cooperation. I might remind the contribution to international space exploration projects as PLANCK, CLUSTER, Venus Express, Alpha-Magnetic Spectrometers, CORO(?). I would also remind the development of nano-technology, in particular for systems information flying in a network environment. Also I might remind the development of integrated space applications as the Land Parcel(?) Information System as space tele-medicine and disaster management, flood and water management and environmental monitoring for land degradation.

Also in the capacity-building area, I would like to remind the investment of younger professionals and a nano-satellite developed by students has been selected to be launched with the maiden flight of the new ESA Vega Launcher. Also I would remind that two projects which started within the European Space Agency contain also Romanian students' contribution. It is the European Students Earth Observation Satellite and the European Student Moon Orbiter.

I would also like to remind that during 2009, Romania begun the negotiations for to complete the joining the country to the ESA Convention.

In the Romanian Space Policy, Romania will continue to develop its own Space Programme, the first by keeping in harmony the participation to the European space missions and projects. Second, by developing its National Space Infrastructure and human resources. And third, by investing in some niches of science and space technology in which Romania has some co-competencies.

Mr. Chairman, distinguished delegates, with reference to agenda 5, Maintaining Outer Space for the Exclusive Peaceful Utilization of Space Technology, this is a need and a must. Nevertheless, today space technology already proved this contribution to the overall mitigation of global threats, as natural disasters. We should improve the mechanisms and increase the efficiency of the space tools for better warning, monitoring and prediction, to a better preparedness to meet unfortunate major events.

And also we were speaking about the broad comprehensive security concept going beyond the military aspects and security of the States. This concepts needs for its development, as a major pillar, the contribution of space activities and this contribution could be undertaken, in our opinion, by maintaining both the peaceful aspect of space technology and development, and fostering the maintaining of our space for peaceful purposes.

As the delegation of our country mentioned already, space is generating significant added value in the areas of security as for reliable information for early warning, operational capabilities and readiness, being proven by space imagery, for example, secure and reliable communications, space-based positioning and timed distributed.

Concerning the sixth item of the agenda, we consider that progress has been done regarding the implementation of the UNISPACE III recommendations and the outcome of the Action Teams. Romania is ready to further contribute, support and accomplish specific projects to be defined as follow-up of the work of the Action Teams.

During the 10 years from the UNISPACE III, we would like to remind that Romania has a constant contribution to the COPUOS activities which started with the organization in Bucharest 10 years ago of the Regional Preparatory Conference for UNISPACE III for Eastern Europe. And my country supported also some of the organization of several relevant United Nations actions as the Workshop for Space Technology for Disaster Management for Europe, as the Sixth COSPAR Capacity-Building Workshop and Summer School. We also contributed to the good start of the actual SPIDER Programme and brought substance to several new agenda items, as the Near-Earth Objects. Romania also brought some contribution by providing the chairmanship of the Scientific and Technical Subcommittee.

Mr. Chairman and distinguished delegates, my delegation considers that space technology is not only able but should play a crucial role in the risk mitigation and in the improvement of the quality of life on Earth. Efforts should be done to generate complementary cooperation between national agencies and international organizations which conduct products as a project and assistance for disaster management. And the better access to information and data technology could be one of the first goals the Committee might take into consideration. And, of course, my delegation is further supporting the activities of SPIDER.

And I would also like to recall that space technology has been operationally utilized by Romania for the monitoring of the disaster floods which occurred between 2005 and 2008. The International Charter Space and Major Disasters has been triggered by Romania four times and radar and optical satellite information has been acquired and processed by the Romanian Space Agency in cooperation with the French Space Agency and the German Space Agency and also with the satellite products from NASA. The Romanian authorities were daily informed on the flooding evolution and disaster maps containing pertinent information of the flooded area were produced, together with the three dimensional flythroughs of other specific data products.

Having this new experience on the utilization of space technology for disaster management, my delegation expressed the commitment of Romania to establish a Regional Centre for SPIDER, in Bucharest, under the aegis and with the resources of the Romanian Space Agency.

Regarding agenda item nine, Spin-Off Benefits of Space Technology, we consider the space programmes are a major driver for all scientific, technology and development activities. Space systems are presently are a critical infrastructure for the planet but not only as operational systems but also as the principle generators of direct and spin-off solutions addressed to the users and in the benefit of the users.

Regarding agenda item 10, Mr. Chairman, concerning Space and Society, my delegation agreed with the need to develop specific action plans for incorporating outer space into education, enhancing education in space, expanding space tools for education and fostering the wide promotion of space concepts and applications among the social and the business life.

We might mention also the contribution of Romania to the World Space Week 2008. It was one of the top countries as a number of events.

Regarding agenda item 11, my delegation agreed with and supported the development of the theme "Space and Water" and supported the initiatives organized by the United Nations and the member States in that field.

Regarding agenda item 12, Space and Climate Change, we should consider the unique role of Earth observation satellites and systems of satellites in the global monitoring of the planet. Imaging success of excellent sensors on-board satellites in sensing and

measuring the geographic and atmospheric distribution of carbon dioxide represents a good beginning in the achievement of more and more refined and comprehensive global monitoring systems from space and the direct benefit of the citizens and States, not only for short but for a longer term.

In particular, I would like to mention here that Romania hosted during November 2008, the Fifth Plenary of the Group on Earth Observations.

Regarding the use of space technology and the united (United Nations?) systems, we agree and sustain the important applications of space technology and monitoring processes specific to the United Nations system and concurrent with its activities and programmes. However, we are also considering the need to promote the role of space as a model of international cooperation and this model might be considered by very specific activities within the United Nations.

Mr. Chairman, my delegation will ask you for taking up the floor during the specific items of the agenda. Thank you Mr. Chairman and distinguished delegates for your attention.

**The CHAIRMAN** (*interpretation from Spanish*): Let me thank the representative of Romania for those words. Among other things, he mentioned the fact that Romania has participated in the Preparatory Meetings of UNISPACE III, something that is going to be dealt with by the panel in the rest of the afternoon, a historic position for Romania which has always been present. I think that the Office will also be very pleased with the offer for the Regional SPIDER Centre. Again a concrete demonstration of the fact that this system is working and working well.

And also to say that we much appreciate his final remarks on promoting the role of space as a model for international cooperation and in other United Nations entities which is very close to my own proposal.

Lastly, let me give the floor to the final speaker, the Republic of Korea, His Excellency Yoon-Joe Shim. You have the floor Ambassador.

**Mr. Y.-J. SHIM** (Republic of Korea): Thank you Mr. Chairman. On behalf of the delegation of the Republic of Korea, I would to join other delegations in extending our heartfelt congratulations on your presiding again as the Chair of the fifty-second session of COPUOS. I also assure you of my delegation's full support to your endeavour to make this session on our

valuable contribution to the promotion of international space cooperation.

Mr. Chairman, there are indeed great benefits to obtain from the development of space technology and the peaceful use of outer space. We can certainly use the knowledge acquired from space activities to address the problems of climate change, to avoid control and monitor natural disasters and to realize sustainable development. Even nations without advanced space technology can also enjoy the benefits of space technology through international and regional cooperation mechanisms.

As much as we wish to take advantage of space technology and aim for the sustainable use of outer space, however, we must recognize that some uses of space may result in threats to the long-term security of space operations. For instance, the increasing debris density in low-Earth orbit already poses a great hazard to space objects. Furthermore, the possibility of an arms race in outer space and the growing conflict of limited space resources constitute potential challenges that should be addressed.

Having this in mind, I believe that COPUOS will certainly play a pivotal role in securing the peaceful uses of outer space for all mankind as it has done throughout the first half century.

Mr. Chairman, taking this opportunity, I want to share with you some of the recent developments and efforts that the Korean Government has undertaken in line with the work of COPUOS.

A particularly meaningful event that I would like to highlight today is the planned launch of Korea's first space launch vehicle, KSLV-1. The launch will take place at the end of July this year at the Naro Space Centre located on the southern tip of the Korean Peninsula. In conducting this launch, Korea will exert every effort to fully comply with all international obligations for the peaceful use of outer space, including the Pre-Launch Notification and other relevant safety measures.

The Korean Government has high expectations for the scientific micro-satellite, STSAT-2, which will be launched on board the KSLV-1. Of the two main payloads, GREEN, which stands for Duo-channel Radiometer for Earth and Atmosphere Monitoring, will collect basic data on the Earth's atmosphere such as water content and the amount of cloud data. The data acquired through DREAM will substantively help us research and address climate change and global warming.

The other payload, LRA, an abbreviation for Laser Retro-flector Array, will be used to determine the precise orbit of STSAT-2. The launch will provide a valuable opportunity to test and confirm the precision of current technology in determining the orbit over satellite.

Mr. Chairman, building upon national achievements in the area of space activity, the Korean Government plans to continue its efforts to strengthen regional and international cooperation. Korea is currently participating in the Sentinel-Asia Programme and the STAR Programme, that is satellite technology for the Asia-Pacific region, both of which are APRSAF, that is Asia-Pacific Regional Space Agency Forum Initiatives, to support disaster management in the Asia-Pacific region. We plan to further increase our contribution to these programmes by providing satellite data as well as technology and expertise we have accumulated in this field.

With regard to space law, I would like to inform you that the English version of Korea's Space Legislation is now available on the United Nations Office for Outer Space Affairs website. We hope that the new information on Korean legislation will add to the collective efforts of the international community to achieve progress in the legal regime of outer space.

Mr. Chairman and distinguished delegates, allow me to remind you once again of the events that the Korean Government plans to host this year.

First is the Sixtieth International Astronautical Congress, that is IAC, which will be held in Dajon, Korea, from 12 to 16 October under the theme of "Space for Sustainable Peace and Progress". Korea is pleased to host such a globally renowned event and we are currently preparing this year's Congress as a space festival for the space community. The promotion reception for this event is going to be held tomorrow evening in this building where I hope all participants in this meeting will have a chance to drop by.

In addition, Korea plans to host the United Nations Basic Space Science and International Heliophysical Year Workshop from 24 to 25 September.

I believe these events will serve as a stepping stone for enhancing international cooperation among many space-faring nations and I hope that many member States will be able to participate in these meaningful events. Thank you Mr. Chairman.

**The CHAIRMAN** (*interpretation from Spanish*): I would like to thank you Ambassador for your statement. Indeed, the entire international community welcomes the Space Congress, the Sixtieth International Astronautical Congress, to be more precise, to be held in Dajon, Korea, in October, under the title “Space for Sustainable Peace and Progress”. I would like to take this opportunity to call on all member States of the Committee to attend this important event which is being prepared very seriously and dynamically. Thank you very much again Ambassador for your statement.

We have reached the end of our list of speakers for this afternoon, somewhat later than planned, but we are going to try and catch up during the forthcoming panel to finish up by 6.00 p.m. as envisaged.

Tomorrow morning, we will continue with our consideration of agenda item 4. Those delegations wishing to speak please submit your names to the Secretariat.

Let me dwell in greater detail on our schedule tomorrow morning.

We will start promptly at 10.00 a.m. We will continue with agenda item 4 and then begin items 5, Ways and Means of Maintaining Outer Space for Peaceful Purposes, 6, Implementation of the Recommendations of UNISPACE III, and 7, the Report of the Scientific and Technical Subcommittee on its Forty-Sixth Session.

Following the Plenary, there will be three presentations tomorrow morning. The first by Japan entitled “Japan’s Space Policy: the Basic Plan for Space Policy”. The second by India entitled “Status Report on the Operation of the Regional Centre for Space Science and Technology Education in the Asia-Pacific Region”. And the third by Morocco entitled “Status Report on the Operation of the African Regional Centre for Space Science and Technology Education(?)” in the French language.

Any questions or comments on this proposed schedule for tomorrow?

I see none.

Now I would like to invite you to move on to our panel and then to ask the panellists to come to the podium. There will be a five-minutes break purely to allow us to organize the panel. Thank you very much. Five minutes.

*Break*

**The CHAIRMAN** (*interpretation from Spanish*): Good afternoon once again. Please be seated. Thank you. This is a panel discussion that is of fundamental importance for all of us, for the work of COPUOS. Ten years ago the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space, UNISPACE III, was held here. There were more than 2,500 representatives from member States, organizations within the United Nations system, and international intergovernmental and non-governmental organizations with space activities, as well as from space-related industries and national organizations. All of these participated in UNISPACE III with the common aim to meet the challenges faced by the global community and to maximize opportunities for human development through the use of space science and technology and their applications.

I am not going to introduce this at length for two important reasons. First, through various statements we have already largely discussed the subject of UNISPACE III, a lengthy introduction is not needed. The other reason is that this happened one month before I came here to Vienna so I was not here but I have seen and I have lived through the enormous momentum created by this Conference. It was the last really big conference of the twentieth century. It changed the paradigm as far as space activities are concerned and focused the world community on the exploration of this other world, this other dimension, through international cooperation.

Thus, we are going to dispense with a lengthy introduction and will proceed directly to the panel discussion itself. I will call upon the actual protagonists, participants, starting with Professor Rao, and by the way, it is a great honour and privilege for us to have him here. He is one of my mentors, one of my guides through the complexities of this subject matter. He was Chairman of the Preparatory Committee of UNISPACE III, Chairman of UNISPACE III, and Chairman of the Committee and of the Space Exploration Commission of India. Professor Rao really does not need an introduction. We welcome him, we honour him, and he has been extremely helpful in preparing this panel and his statement at UNISPACE III was imbued with tremendous social sensitivity, a profound understanding of everything involved. I am your pupil and I am proud to be one. You have the floor Sir.

**Mr. U. R. RAO** (India): Thank you. Distinguished leaders of the delegations, Ambassadors, representatives of member nations and friends.

Let me at the outset congratulate COPUOS on the organization, conduct, achievement and shortfalls of the historic UNISPACE III Conference on the tenth anniversary of UNISPACE III at the fifty-second session of this Committee. I am indeed grateful to COPUOS for inviting me to participate in the panel and speak on the "Path Towards UNISPACE III. As Chairman of COPUOS during 1997 to 2000 and President of UNISPACE III, I was indeed very fortunate to have been an integral part of the UNISPACE III Conference.

The historical launch of Sputnik-1 by USSR in 1957, which heralded the beginning of the space age, irrevocably changed human kind's understanding of our Universe and Earth's place in the Universe. Since then humankind has sent hundreds of satellites into orbit for instantaneously gathering information on weather and natural disasters, obtaining data for optimal management of our natural resources and monitoring the environment. Communication satellites have enabled us to interlink the entire humanity, thus shrinking time and distance and unfolding the rich diversity of the entire cosmos. Space technology due to its vast reach and ability to access even the remotest corners of the globe, has provided great opportunities for achieving rapid socio-economic development to enable all nations, developing nations in particular, to improve the quality of life of their people. The extraordinary developments in space technology and its applications, together with the convergence of computer and communication technologies, have initiated the most powerful Information and Communication Technology (ICT) Revolution, which has revolutionised the globe affecting the entire humankind.

In the space sciences, the changes have been even far more met(?). For example, the fact that the space, the entire length and breadth of electromagnetic(?) spectrum became available for us to view the cosmos changed our understanding probably by almost a factor of thousands.

The exo-planets, in fact, somebody talked about in a special session about exo-planets, has started just before the UNISPACE III started and today we have more than 450 exo-planets discovered, some of them planetary systems with almost five planets.

The complex organic molecules have been discovered in space and the latest one which is

ethylene-oxygen, the carbon organic combo which has a flavour like the raspberry or rum, whichever you like, both are the same, has been discovered, which is just a step before the immuno-acids. The moment we discover immuno-acids, that is the building block of life.

The bacteria having discovered in space, actually in the stratosphere, and which are ultra-violet resistant and giving some hope that maybe they came from elsewhere.

Possible discovery of intelligent life in the Universe is being pursued and hopefully it will be the crowning glory of humanity.

The very small minor disturbance changes in the temperature after the Big Bang discovery today, in fact, shows that across the entire cosmos, the magrum(?) difference is only point zero zero zero four degrees. You know on the Earth we have more than 100 degrees difference between the south and the north. And this small difference is the one which has been responsible for the formation of the galaxies, for the stars, for the planets and so on. We know that small difference we would not have any of these things and none of them would have been here and many scientists feel that it is the Face of God they have seen. And hopefully with the kind and \_\_\_\_\_(?) theory which hopefully will be seen very soon, we will have the capability to read the mind of God.

But actually producing around a temperature of 13 watts of energy, the type of thing that scientists believe that we are still in the zero point seven civilization(?). Our stage of first civilization(?) will come when we get out of our cradle and establish colonies elsewhere.

We can put space exploration, we can see which is now for the next 20 years has been put up as the most important in for all the countries. These are one of the most important things to look at, the planets and the planetary atmospheres, planetary geology, to see what resources can be brought(?) (ignored?) and how they can be exploited, not only found but exploited for the benefit of the Earth and maybe in about 500 years probably will reach the temperature of 16 watts of power which is equivalent of the power of the Sun today which is beaming on the Earth and that probably will also coincide with large-scale colonization of Mars.

It is in this background we started looking at it. The extraordinary ascent(?) of discoveries. It has

turned into \_\_\_\_\_(?) applications which prompted us.

Recognizing the immense potential of space technology for socio-economic development, the United Nations established the Committee on the Peaceful Uses of Outer Space in 1959 for promoting greater international collaboration among all nations in the development and application of space technology. The United Nations COPUOS organized the first UNISPACE Conference in Vienna in 1968, which succeeded in bringing an awareness of the vast potential of space benefits to all the Member States. Significant successes achieved in the 1970s in the application of space technology, particularly in communication, weather monitoring and management of natural resources, clearly established the urgent need to promote greater use of space technology in all member nations through international cooperation, paving the way for the organization of UNISPACE II in Vienna in 1982.

Following the recommendations of UNISPACE II, the United Nations Programme on Space Applications was considerably strengthened and expanded, resulting in an increased opportunity for developing countries to participate in educational and training activities in space science and technology and to develop their indigenous capabilities in the use of space technology applications.

One of the major accomplishments following UNISPACE 82 was the establishment of Regional Centres for Space Science and Technology Education, aimed at building human and institutional capacities for exploiting the immense potential of space technology for socio-economic development. International efforts in this regard resulted in the inauguration of Regional Centre for Space Science and Technology Education in Asia and the Pacific at Dehradun, India, in 1995, followed by Regional Centres in Morocco for French-speaking countries in Africa and in Nigeria for English-speaking countries in Africa in 1998, and in Brazil and Mexico in 2003 for the Latin American and Caribbean regions.

A large increase in the number of developing countries involved in space activities since UNISPACE 83 (UNISPACE II?), combined with the far-reaching changes in the political climate of the world due to the end of the Cold War, undoubtedly created a conducive atmosphere for increased international cooperation. Rapid growth in the commercialization of space activities, which were earlier essentially the domain of the governments, made a qualitative change in the spread of space benefits across the world.

New scientific discoveries helped in sharply focusing global attention on the environmental problems facing the world community. Major advances in space-based observation of the Earth's atmosphere, oceans and biosphere led to the initiation of sustainable development. Sustainable development rightly became the watch-word for the survival of humanity in the next millennium.

Satellite communication resulted in bringing distant parts of the world, including the most remote locations together, in a seamless way. Extensive use of space observations for applications related to surveying and mapping the Earth's resources, agriculture, environmental monitoring, disaster management and telecommunication infrastructure gained great importance.

At the same time, the Committee recognized the increasing challenges such as continued population growth, unsustainable development and consumption patterns of the past, increased pressure on the Earth's environment, scarcity of natural resources, growing demand to meet the basic needs of the people and frequent occurrence of natural disasters having an adverse effect on the condition of our planet. The consequences were large-scale degradation of land and coastal areas, increased air and water pollution, deforestation and loss of bio-diversity and further degradation in the living conditions. Many people, particularly living in the developing countries, depending on the limited amount of land, were caught in a vicious circle of environmental degradation and poverty.

Abrupt changes in the global climate, combined with poor health care facilities had a severe effect, particularly on the health of poor people in the developing countries. Frequent occurrence of natural disasters causing enormous loss to property and life practically annulled all the economic progress made by the developing countries over decades. Globalisation, following the Information Communication Technology Revolution, had unfortunately further increased the digital divide between the people in the developed and developing countries, the haves and the have-nots of cyber space.

To address the serious challenges facing humanity as a whole and develop a comprehensive road map for promoting wide-spread application of space technology developments, COPUOS initiated a discussion for holding UNISPACE III, the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space. As the world

transitioned from an era of confrontation to an era of cooperation, greater emphasis was placed on the practical application of space science and technology for human development.

Accordingly, COPUOS at its 1992 Session, mooted the proposal for holding UNISPACE III, at the time it started in 1995, to consolidate the momentum provided by the activities during the International Space Year in 1992 and broaden international cooperation with increased participation from developing countries.

Based on the Committee's recommendation, the General Assembly in its resolution 47/67 of 14 December 1992, recommended that member States might discuss during the Committee's 1993 Session, the possibility of holding UNISPACE-III.

The emerging opportunities for greater cooperation in space activities led to the adoption by the General Assembly, in 1996, of the Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, taking into particular account the needs of developing countries. The Declaration stressed that States are free to determine all aspects of their participation in international cooperation in space activities, to be carried out on an equitable and mutually acceptable basis and recognized commercial space activities as a mode for international cooperation.

The Committee recognized the increasing challenges faced by humanity such as rapid population growth, expansion of industrial activities, increasing demand to meet the basic needs of people, in the context of limited resources, extensive land and coastal degradation, air and water pollution due to uncontrolled anthropogenic activities, loss of forest resources and bio-diversity and significant deterioration in living conditions, particularly in highly-populated developing countries.

In spite of the initiation of the Information and Communication Revolution, the digital divide between the developed and developing countries was steadily increasing. It became clear that the initiation of sustainable development practices was the key to halt or even reverse this trend and protect the planet Earth from increasing threats of rapid environmental changes (challenges?) including climate change, deforestation, desertification, land degradation and loss of bio-diversity.

COPUOS, after extensive discussions and considering the volume of work involved in the

preparation, including definition of sharply-focused objectives and goals to be achieved, working out financial implications and time required for detailed preparation etc., finally recommended that UNISPACE III should be convened at the United Nations Office at Vienna in 1999 under "Space Benefits for Humanity in the Twenty-first Century". The proposal of the Committee was endorsed by the General Assembly in its resolution 52/56 of 10 December 1997.

The primary objectives of the Conference were elaborated as: to promote effective means of using space solutions to address problems of regional or global significance; to strengthen the capability of member States, especially developing nations, to use the results of space research for economic and cultural development; and to enhance international cooperation in space sciences and technology and its applications.

UNISPACE III was perceived as an unique opportunity for the world's experts and decision-makers to meet and exchange information and ideas to advance human conditions into the next Millennium.

The following eight broad themes were identified for UNISPACE III for harnessing the space potential for socio-economic development:

Theme Number One, the protection of the environment, extensive use of synoptic, continuous and long-term global observation from space to address environmental issues such as the influence of the Sun on the Earth's environment, global change, and the impact on the environment and human health due to anthropogenic activities including ozone layer depletion and global warming; maximising the use of space remote sensing for more reliable and timely predictions of weather, climate and natural disasters and provide assistance including information, training and financial support for developing countries to enable them to effectively deal with disaster management;

In the Communication networking, facilitating extensive use of satellite communication to enable all countries, developing countries in particular, to benefit from the application of satellite-based telecommunication services including communication, video-teleconferencing, multi-media communication, global Internet, tele-education and telemedicine.

Theme Number Two, Theme Number Three was promoting the extensive use of position-location capability such as those provided by GPS and GLONASS for position location, navigation and search and rescue.



Theme Number Four was discover further knowledge and capacity-building: capacity -building for creating appropriate knowledge and skills in space technology, through education, training and research.

Theme Number Five for enhancing education and training opportunities for youth: providing educational / training opportunities for young scientists and engineers.

Theme Number Six was information needs and global approach: assisting developing countries in strengthening their information infrastructure to enable them greater access to information and fully participate and benefit from the ICT revolution.

Theme Number Seven is promoting spin-offs and commercial benefit from space activities: promoting spin-off products and services accruing from space technology development, for environmental monitoring, public safety, health services, remote sensing applications, computer and information technology development, etc.

And the last one is promotion of international cooperation: through promoting extensive international cooperation between developing and developed nations, taking advantage of the fading away of the Cold War tensions. Special bilateral, regional and multilateral agreements could be initiated for carrying out integrated global observations on disaster management.

In order to ensure the success of UNISPACE III and in accordance with General Assembly Resolution (1952/56?), several Regional Preparatory Conferences were held in Kuala Lumpur in May 1998 for Asia, and in Concepcion in October 1998 for Latin America and Caribbean, in Rabat in October 1998 for Africa, and in Bucharest in January 1999 for Eastern Europe. In addition to promoting regional cooperation in space science and meteorology, these Conferences also discussed issues related to UNISPACE III to formulate their common regional approach and role.

The major recommendations came from the Regional Preparatory Conferences.

For the Asia-Pacific, the major recommendations were: forge close cooperation between member States for enhancing and fully utilizing their capability to plan and utilize Earth observation data for national, regional and global benefits and for carrying out regional as well as global studies; involving policy- and decision-makers fully for

effective management and financial support, particularly for disaster management and mitigation; developing mechanisms for effective data exchange and transfer between member States to enable all States to benefit from space technology applications; and encouraging and supporting member States to leap frog into advanced telecommunication systems and build a robust satellite-based regional communication network by forging good cooperation between member States on issues of frequency planning and coordination, technical training etc. and also promoting communication industries.

The Africa and Middle East Regional Conference made the following recommendations: forge enhanced cooperation in capacity-building in remote sensing applications towards improvement of resources, infrastructure development; ensure total coverage of the region through economic and social councils by establishing new Earth Observation Ground Receiving Stations, if necessary. There are a number of gaps and the gaps have to be filled; (iii) the development of prospective, proactive and participatory science and technology policies and implementation strategies to derive maximum benefit from space for enhancing the living standards of people; the involvement of private sector participation in all aspects of the space industry, including related applications; and development and support for the Regional African Satellite Communication to achieve robust communication networking.

From the Latin America and Caribbean regions, the recommendations were: the identifying and establishing focal points for effective data exchange and dissemination; produce risk-micro-zoning maps (micro-seismicity, hydrometeorology, urban and rural protection etc.), through full access to and use of satellite imaging data and geographic information systems; and improving and benefiting from satellite communication networking by supporting regional/inter-regional coordination.

The Eastern Europe countries, the regional countries, made the following recommendations: develop regional systems for environmental monitoring of the Black Sea and the Caspian Sea for oil slicks, ship traffic, ecology and climate change, they were very specific recommendations; educate decision-makers in all aspects of practical applications of remote sensing for national development; increase awareness and active participation of member States, particularly through exposure to recent developments in satellite communication, satellite navigation and communication networking.

All regions stressed on the enhancement of education, training opportunities for youth, promotion of international cooperation, development of small satellite projects, promotion of space industry and spin-off benefits, involvement of the private sector industries and optimal use of space technology for achieving sustainable development.

Distinguished delegates, UNISPACE III was convened in Vienna, in accordance with the General Assembly resolution 52/56, from 19 to 30 July, as a special session of the Committee on the Peaceful Uses of Outer Space, open to all member States. The Conference was opened on 19 July 1999, in the presence of Mr. Kofi Annan, Secretary General of the United Nations and His Excellency Thomas Klestil, Federal President of Austria. I was unanimously elected as the President of the historic UNISPACE III Conference. Attended by more than 2,500 participants, including delegates from 100 States, as well as representatives of intergovernmental and nongovernmental organizations, industry and research institutions, UNISPACE III was an outstanding success. The rest is history.

Distinguished delegates, the Vienna Declaration, the outcome of the UNISPACE III Conference, embodies the hopes and aspirations of all member States and their determination to work together in the employment of space science and technology advances for the benefit of the entire humankind and improvement of their quality of life. You will hear more about these from the next two distinguished speakers, Mr. Camacho and Ms. Mazlan Othman. Thank you, for your attention.

**The CHAIRMAN** (*interpretation from Spanish*): Thank you very much. Let me express my thanks for that very interesting summary on the genesis and preparation of UNISPACE III and its goals, the impact that it had within the context of technological progress accompanied by the needs of developing countries, which are quite acute in order to what you said to overcome the digital divide.

I now give the floor to Dr. Sergio Camacho who is the Head of CRECTEALC, in fact, which is very well-represented in the space field(?), Sergio Camacho, Head of the Research and Development of Terrestrial and Space Matters, a very deep connoisseur of UNISPACE III and participated at the time of the Conference and he was for many years Director of the Office for Outer Space Affairs before Madam Mazlan Othman.

Now let me ask Sergio, who is someone who has worked a great deal in developing this theme in Latin America, to also give his impressions of future prospects here, following UNISPACE III, would he have to say to Madam Mazlan Othman concerning the recommendations that have already to a great extent then fulfilled, in a kind of informal basis but to have a debated discussion here. Do we need to extend the mandate or do we need to have new objectives and have a new mandate for the coming years? A little bit in that vein, in a kind of a critical observation here for the last 15 or 20 minutes this afternoon. Thank you.

**Mr. S. CAMACHO LARA** (Mexico) (*interpretation from Spanish*): Thank you Mr. Chairman. Good afternoon distinguished representatives, ladies and gentlemen. I am going to carry out an overview of UNISPACE III showing how we had a fairly unique organizational forum here with nearly no additional resources. That does not mean we did not use a lot of resources though, as you will see.

Now since I am speaking in Spanish I thought to kind of complete we would have English slides since I am not going to cover all of the text here that you are going to see on the slides. It will still be there.

Here you can see what is really a summary of what Professor Rao just explained to us. UNISPACE III was really organized within the existing United Nations resources and yet it was a major conference which achieved results similar to those of any other major global conference of the United Nations.

How did we do that? The atmosphere at that time was one of change. We were emerging from the Cold War and I think this was one of the very auspicious factors that took us from that point to conditions where we could have concrete and successful measures.

These are some of the points that were covered, rapid progress in science and technology and developing countries began to participate more fully.

Education, as Professor Rao mentioned, which were recommendations that came from all of the preparatory meetings. He said appeals to have education provided. This was another one of the motives here and not just in developing countries.

In space-faring countries, nearly everyone realized that the upcoming generations, the replacements for those who had developed the science and technology, had been neglected, the prime people thinking they are going to be there forever which was

not certain. Suddenly they realized that there was an upcoming breach for 20 years which would already not be covered. So because of this, great emphasis was put on the education and training aspect, particularly, as I said, in those countries mostly highly developed in terms of space.

That was the background. That was the atmosphere that we have surrounding this period. At that time, we had a reform in the United Nations as well and at that time this meant that there was going to be a downturn in available resources in the United Nations, in particularly concerning ourselves. The Conference Services resources had been cut by 30 per cent, Administrative Services 20 per cent, and the Office itself five per cent. That means one person, we lost one post. This was shortly before we decided to organize UNISPACE III.

There were changes in the Committee itself. There was revitalization of the work of COPUOS in 1994. COPUOS began to examine its working methods to make them more efficient. In 1995, the Committee agreed to work with maximum flexibility in an attempt to conclude the sessions as quickly as possible. The idea was this. We would be saving money. That is not necessarily true. You do not really make anything in savings if your Conference stops before hand if you have not informed the Conference Services that you are going to do so because contracts are signed and people have to be paid. So this was not a savings. But there was a spurt, a spurt that we had to work more efficiently.

Now in 1996, the Committee agreed to the use of unedited verbatim transcripts instead of verbatim records which were very costly, something like a savings of \$35,000. This was a savings for the United Nations but not for COPUOS, not for the Committee. It did not come to us. A little bit further on I will tell you what kind of arrangements we finally came to here.

The next year the Legal Subcommittee also began to utilize unedited transcripts instead of summary records.

The total savings for Conference Services was about \$645,000, savings realized by the Conference Services of all of the United Nations which meant that what the Committee was able to save another Committee in the United Nations was able to use it. That is what I mean it was not our money that was saved.

But one of the things that we did do at that time was to begin to set up some good points for achieving savings for ourselves with Conference Services, saying that we are going to need this as an expense as expenses go but we cannot guarantee this or that. We were just saying that COPUOS is now going to renounce such and such a resource and later will need to avail itself of this resource.

I think this was one of the steps that we took that allowed us to reach an agreement on the holding of UNISPACE III.

Here you have the agreements, a kind of a summary of the contents but I think that here so that the different States to the Parties to the Committee had to agree on before we could move forward with this major Conference.

So those were the antecedents, the background to the special arrangements we made. As I said, we did not originally come up with an agreement for UNISPACE III, at least not until 1996.

Moreover, not only did we not have that agreement, at that time we also were subject to criticism from several countries concerning world conferences that had been held by the United Nations in the 1990s. In 1995, the United States even called for a Moratorium on World Conferences. So this meant that also to reach this agreement, we had to find a very creative response, something that would say, OK, this is the atmosphere of the time, let us see what we can do and if we can do something a bit differently. So there was an exchange between the Office and other parties here, an exchange of information to see whether or not with existing resources could be done.

The first thing was we did not call it a conference at first because that was the term that was not trusted at that time. So instead of calling it a conference, we called it Special Session of the Committee. It is later on that we called it a conference when people saw that we were not going to ask for resources from the Fifth Committee.

Here you see the agenda that was before us. The condition was that the programme be well-defined and have clear objectives. One of the important things is that the Office worked with the Committee so that the dates were chosen whenever the schedule was clear in Vienna, that no other meetings were being held, and this was nearer July.

The Committee, therefore, UNISPACE III decided to introduce unique elements to be dealt with

here. It was not just to be an industry exhibition but the idea was to invite space-related industry and have them participate and show what had been done.

UNISPACE III was supposed to enhance opportunities for youth to participate in space activities, hence the Agreement to invite young professionals and university students to organize this activity for young people. It is called the Space Generation Forum, SGF.

Another point was that UNISPACE needed to come up with concrete results and results that could be followed up on and Madam Othman will present these, I think, later.

How was this organized? The Office became the Executive Secretariat. Now whereas in other conferences there is a budget to provide for personnel to carry out the Executive Secretariat function. This meant that the Office had to do its normal workload plus this and the Committee and the Scientific and Technical Subcommittee acted as Advisory Committees and as Preparatory Committees.

Mr. Jasentuliyana, Director, who was then appointed Executive Secretary. This was also savings. He was fully aware of the internal workings of the United Nations and had a lot of experience and the Conference Officers were five from COPUOS, others from regional groups, five, one from each regional grouping.

The structure of planning two Main Committees who considered all of the agenda items. Then a Technical Forum. Here we had the participation of the whole entire legal and scientific community, NGOs. All in all, we organized 38 workshops, seminars, roundtables, special events and the Space Generation Forum. All of this, of course, had a certain precedent because everything that was going to come out of this was going to go to the Main Working Committees to be considered for the final report aimed and including the negotiating part which was the Vienna Declaration.

Government support was necessary for this. When I said that we were not saving money here, what we were doing was negotiating with Conference Services so that what we were saving for the United Nations be exchanged for the promise of in-exchange having, let us say, interpretation days, an expensive item, and the Committee had a certain number of weeks then that it could be used over the 1996-1997 biennium. We could not pass money from one biennial period to another so what we saved we could not spend

in 1998-1999. So with the goodwill of the Conference Services saying that if the Committee was able to make a total saving of six weeks and they could give this six weeks to us for UNISPACE so we could have the two Commissions working in parallel.

All of this was discussed and agreed here and the necessary paragraphs that came out of the Commission so that we could get the support from the rest of the United Nations, this involved a great deal of coordination between the Secretariat and the Committee, but that was not enough.

Now the Office moved a certain amount of funds from one to another earmark, thus redeploying its regular budget resources to make this possible. The Administrative and Common Services of the United Nations also earmarked some money out of its budget to cover that part of the logistics. Furthermore, some of the services, Conference Services and Security Service, put their staff at the disposal of the Conference for the duration of the Conference since there were no other meetings held at the same time. The Chiefs of these various services asked their staff not to take vacation at that time but to support the Conference. So all of these resources were internal resources of the United Nations.

Also the local Information Service here in Vienna and in New York contributed. Furthermore, UNIDO, the IAEA and CTBTO also provided Conference Service staff for the Conference.

Now the support of governments, member States. Austria practically acted as the host country, even though it was not a host country in principle but it did provide the necessary space, all kinds of assistance, including financing the participation of 60 young people in the Space Generation Forum.

Other governments provided support in terms of staff, NASDA of Japan, which is now JAXA, NOAA of the United States and the Ministry of Foreign Affairs of France, provided an expert each. Also cash and in-kind contributions were made by the entities listed here, the European Space Agency co-sponsored all the Regional Preparatory Meetings which made it possible for participants in the regions to come to agreement as to the discussion within the framework of UNISPACE. The Secretariat provided the Conference with the documents it required. Rules of procedure, the way in which industry representatives and young people were going to participate through genuine participation not in the margins.

The Conference had the time, the Committee and the Subcommittees, the Scientific and Technical Subcommittee and the Legal Subcommittee, had the time to review the documents four times. So they had sufficient time to reach agreement on issues that needed to be ironed out, to be smoothed over where agreement needed to be reached.

Now summing up. It became possible as a result to make sure that the States live up to their commitment to carry out all work on the basis of consensus. It is not as if some paragraphs were adopted by one group of countries and others by others. They were all agreed by all, consensus.

The Secretariat obviously needed to have the necessary competence to prepare the essential documentation and member States and international organizations assisted the Secretariat by seconding experts.

This is a brief summary, because we are short of time, of the way how it worked. I am not going to go into every detail simply because there is no time but all this information has been made available. We have at the Office a document which sums up all of this information and before I get, 29 October is the date and all of this is available.

Again, there are recommendations as to the ways to minimize costs, maximize benefits for such conferences to be held in the future. There may come a time to have a new conference of this scale because there are new developments that need to be addressed.

One thing that was of great help in the organization of the Conference was the participation of NGOs, non-governmental organizations. Previously, these type of organizations had not been actively involved in this work. Now, of course, we have a number of NGOs that make regular and important contributions to the work of the Committee.

Now, to conclude, it is possible to reduce costs substantially if the work of the conference is absorbed within the existing resources, not only resources that are made available to the Office for Outer Space Affairs, but also the existing resources of the Secretariat, the governments, the agencies, and so forth. Still, if we are to use these resources, an event of this type has to be prepared at least starting two years before and there have to be very clearly defined rules in terms of how these resources are to be used and to make sure that a conference like that is prepared in a way with no undesirable financial implications.

And finally, voluntary contributions could make up the difference, all the difference, for an event of this kind and that happened in the case of UNISPACE III. This is a difference between an event that is just like another session of COPUOS and a major conference with all that that involves. It is the voluntary contributions, once again, that made all the difference. Thank you very much for your attention.

**The CHAIRMAN** (*interpretation from Spanish*): Thank you Sergio. Once again, Sergio Camacho has demonstrated something that we have known over the years that he has a skill and talent for humanizing the budget. Nothing is impossible. The promotion of the Space Conference of the Americas, however, proceeded along the same lines. Nothing is impossible. A new conference where the idea comes up immediately if it costs a lot of money, it is very difficult but there is a way to meet these challenges and this has been another excellent demonstration of how that can be done. Someone like Sergio, his institutional memory incarnate, someone who was involved in all of this personally. Thank you very, very much Sergio once again.

And the last panellist is Dr. Mazlan Othman, who needs no introduction. Madam Othman, you have the floor.

**Ms. M. OTHMAN** (Director, Office for Outer Space Affairs): Thank you Mr. Chairman, ladies and gentlemen. I will try to do this within 10 minutes if I can.

We have seen the concerted and intense efforts to hold UNISPACE III. The Office is pleased to be given the opportunity to report on how we fare, how we have moved forward from UNISPACE III, 10 years ago.

These are some of the things I will talk about but I do not have to talk about that now.

Just to remind you of the Vienna Declaration which, as you know, was a paper coming out of the General Assembly and the important thing for us to remember is that the Vienna Declaration contains 33 specific recommendations.

Here are the recommendations which I do not need to read out to you. They are here for completeness of the paper you will receive after this. You will see there are 33 recommendations.

Now, following UNISPACE III in the following years, the Committee decided to group those

recommendations into six major categories. Five of the recommendations came under protecting the Earth's environment, six under human security, five under advancing scientific knowledge and protecting the space environment, seven came under enhancing capacity-building and promoting public awareness, six came under strengthening and repositioning of the space activities within the United Nations, and four came under promoting international cooperation.

Now, the important thing is, of course, not just the recommendations but how do we implement them. For this, I should say that we should pay tribute to all the chairs of the Subcommittees, the chairs of the Main Committee and the Bureau members who worked very hard to push the implementation of UNISPACE III.

Part of the mechanism, of course, which is very obvious, is to implement those recommendations by considering them under the respective agenda items of the Committee and the Subcommittee, and the revised structure of the Committees and the Subcommittees allow this. For instance, there were the multi-year work plans that had Working Groups and some did not have Working Groups but they were very effective, and there was the opportunity to discuss some of those recommendations under single issue items in the one session and to be continued as the Committee or the Subcommittee decided.

We went through a prioritization exercise and through this exercise, we further established what were the priorities, which recommendations were priorities. And in the interim, several member States volunteered to lead certain actions and that led to the establishment of 12 Action Teams. Of course, implementation was also bolstered by national and regional efforts and follow-up activities by intergovernmental and non-governmental organizations.

Let us go on further to the mechanisms. We have in fact 12 Action Teams. Again, I will not read this. I think we are quite familiar with this. But what was also important in the implementation of UNISPACE III was that it was provided for in the Declaration that we would carry out a review after five years. And this review, which was at that time led by Niklas Hedman, who was still in the delegation of Sweden, that review did several things. First of all, of course, it established synergies with the Millennium Development Goals, this was something that was obvious, the Plan of Implementation of WSSD, the Plan of Action of the World Summit on the Information Society, and whatever work that was being conducted by the Commission on Sustainable Development.

There were established other synergies with other regional and global entities such as GEO and ESA's GMES.

Now following that review, we formulated a Plan of Action as a long-term strategy to implement the remaining UNISPACE III recommendations. So what was that Plan of Action? That Plan of Action complemented the original 33 UNISPACE III recommendations and also came up with complementary 41 specific actions. Why this happened was because some of the original recommendations, were motherhood(?) statements from which it was difficult to decide what the specific actions were and so we came up with 41 specific actions.

When this came up at the General Assembly, the General Assembly added 14 supplementary reaffirmative actions and it also recommended that the Committee should continue to consider the implementation of UNISPACE III until we decide that concrete results have been achieved and this is why we still consider this action, this under the agenda item.

So now the focus of the implementation of UNISPACE III shifted to the implementation of the actions contained in the Plan of Action that emanated from UNISPACE III + 5 as well as the supplementary actions recommended by the General Assembly. And to achieve this, the Working Group of the Whole of the Scientific and Technical Subcommittee continued to review the progress in the implementation of UNISPACE III.

So I am sorry if I have not listed your favourite achievement but I would like to just name a few here and the first one being the fact that the International Charter Space and Major Disasters was actually declared at UNISPACE III and we established eventually the UNSPIDER or the Platform for Space-Based Information for Disaster Management and Emergency Response.

Another notable achievement, and we all recognize this, was the establishment of the ICG of the International Committee on Global Navigation Satellite Systems. And recently we adopted the Space Debris Mitigation Guidelines of the Committee. We are still considering now and we will adopt the Safety Framework for the Nuclear Power Source Applications in Outer Space.

Also we know that it is the tenth anniversary of the Space Generation Group and we did establish a

Space Generation Advisory Council. Some of the other achievements relate to the work of the Office including the Inter-Agency Meeting which now reports to COPUOS instead(?) of the Scientific and Technical Subcommittee. And we continue to see an increasing number of accessions to the treaties and the conventions. We have also seen a revised structure of the agenda of the Scientific and Technical Subcommittee.

Other achievements, here, once again, I will not name them all but I think you can see that World Space Week, of course, was declared, together with the Vienna Declaration, and again several other things related to the work of the Office.

I should not escape this but there were resolutions pertaining to the launching State and registration practice which also came up with achievements that were considered to be implemented including the registration practice.

What is the status of the implementation, you ask? In order for us to decide whether something has been implemented or not, we had to have a criteria for it and at the forty-fifth session of the Scientific and Technical Subcommittee we decided what those criteria were. I will not read it because we do not have time. So if we apply those criteria, this is the status of the implementation. Of the 33 original recommendations, we have implemented 30 and I think we can give ourselves a pat on the back but there are the other remaining three which I will explain in a minute. The actions emanating from the UNISPACE III + 5 Action Plan, there were 41 of those, we implemented 27 and so the other remaining 14 and actions recommended by the General Assembly itself which totalled 14, we implemented eight and there are still six. And you know that the latest review of the implementation is contained in this document that I have listed here and if you want to find out why this is not yet implemented and who are the actors of the majority of the remaining actions and recommendations actually need to be implemented by national space agencies and member States which, as I said, are now the primary actors.

Let us go to the status of implementation of the original recommendations. There was recommendation five which talked about the minimizing the harmful effects of space activities, recommendation 19 establishing national mechanisms for the coordination of space activities, and recommendation 30 which called upon the National Committee to consider the recommendations of the Regional Preparatory Conferences. This was

mentioned by Professor Rao. This was very, very successful and emanating from those Regional Preparatory Conferences were also their own recommendations which, of course, we hope that they will continue to be implemented.

The Office will continue to revise this status report and the next one will be prepared for the forty-seventh session of the Scientific and Technical Subcommittee in 2010.

Mr. Chairman, distinguished delegates, I think you will agree with me that there were bumps in the road we took from UNISPACE III but no one can deny that we are all the richer for having gone through it. What we need to do now is ask ourselves, have we done enough? If not, how do we re-organize and/or re-energize ourselves? We should also ask ourselves at this juncture, are we in need of a new approach or a new strategy on how we are conducting our business in the context of new geo-political developments? If the answer is no, so OK, we can continue our business as usual. If the answer is yes, we need to set out a strategy and a road map. That path on the road map is not short and it is, as shown by Sergio Camacho, by no means a simple one organizationally. But if we have the political will and we have the consensus, we have showed that we can together, strategically and creatively, work to overcome those obstacles. Thank you Mr. Chairman.

**The CHAIRMAN** (*interpretation from Spanish*): Thank you very much Madam Mazlan. I have prepared a few concluding remarks but actually I think that your summary, in fact, has really expressed that quite well and it corresponds with what I thought. A million thanks.

And we have a few minutes in addition. Perhaps Sergio Camacho tacitly convinced the interpreters to provide some free time. I think we have got time for one or two questions so that the house can participate in case there are any. Ambassador González you have the floor.

**Mr. R. GONZÁLEZ ANINAT** (Chile) (*interpretation from Spanish*): Thank you Chair. I think that Madam Mazlan really summed it all up at the very end very clearly and we need a new strategy and what we have to do is to write to identify the two ways to get there, a good reference document, you will be in charge of taking this around, and secondly, have a qualitative jump here which would be the High-Level Advisory Group that would involve all the members of this Committee, in addition with all of the other efforts that we can deploy to achieve that. But we really have

reached a point in which we are in a ridiculous situation where the greater the threats we have to face which can only be prevented by space technology, the least less perception there is of the importance of this. Thank you.

**The CHAIRMAN** (*interpretation from Spanish*): Thank you very much Ambassador. I think that is a very excellent complement to what was said earlier the two avenues forward that you have just expressed. I think this is something that we all feel. I think this is something that matches the concerns of many delegations. What is also very important here is that UNISPACE III created a paradigm of this link between member States, the private sector and NGOs. That was very important and this has been maintained during our work with an aim indeed of having a kind of a holistic view of outer space issues.

I would like to give my conclusions. I totally identify with what Ms. Mazlan Othman has stated here. I will just conclude by saying that you have copies of the statements of Dr. Rao, as well as the documents and the summary records of 55/9 (54/9?).

Let me conclude by thanking the panellists, an exercise, I think, which was perfectly timed with its reflections. Please a bit of applause.

Now I am sure that no one is tired by jet lag or anything like that. We invite you to cordially share a glass with us at the cocktail.

*The meeting closed at 6.06 p.m.*