United Nations COPUOS/T.633

Committee on the Peaceful Uses of Outer Space

Unedited transcript

Fifty-fourth session

633rd Meeting
Friday, 3 June 2011, 3 p.m.
Vienna

Chairman: Mr. Dumitru Dorin PRUNARIU *(Romania)*

The meeting was called to order at 3.13 p.m.

The CHAIRMAN Good afternoon distinguished delegates. I now declare open the 633rd meeting of the Committee on the Peaceful Uses of Outer Space.

This afternoon we will continue and hopefully conclude our consideration of agenda item 4, general exchange of views. Item 5, ways and means of maintaining outer space for peaceful purposes and, item 8, report of the Legal Subcommittee at its fiftieth session.

Following the plenary there will be three technical presentations. The first one by a representative of Switzerland entitled 'Space Biology Group: Research and Space Support Centre'; the second by a representative of the Russian Federation entitled 'Space Medicine: from the flight of Yuri Gagarin up to interplanetary expedition'; and the third, by observers of the World Space Week Association entitled 'World Space Week Report and Recognition'.

General exchange of views (agenda item 4)

Distinguished delegates I would now like to continue and hopefully conclude our consideration of agenda item 4, general exchange of views.

The first speaker on my list is the distinguished representative of Burkina Faso.

Mr. O. DIALLO (Burkina Faso) (*interpretation from French*) Thank you Chairman. I shall read this statement on behalf of His Excellency Ambassador Salif Diallo, who has been unable to attend.

Chairman, my delegation would like to extend to you its warmest congratulations and hail the sterling fashion with which you are conducting these deliberations. It avails itself of this opportunity to express its gratitude to the chairs of the Legal Subcommittee and the Scientific and Technical Subcommittee for their endeavours in discharging their missions.

At a time when we are celebrating the fiftieth anniversaries of the first session of the Committee on the Peaceful Uses of Outer Space and the first manned space flight, I would like to express our appreciation to all of those people who, with self sacrifice and discernment, have invested their efforts for many years in order to ensure that COPUOS plays its role to the full, one which is encumbent upon it in regulating space activities.

Chairman, delegates. The Committee on the Peaceful Uses of Outer Space ever since its inception has shown how useful it is internationally indeed, through the constant challenges it faces and the many actions it has taken in support of non-militarization and non-pollution of space, COPUOS today is viewed as a reference framework for upholding peace and international security and supporting the development efforts of States. Current thinking on the long-term viability of space activities, particularly the prevention of an arms race in space as well as the elimination of space debris and the promotion of exclusively peaceful

V.11-83713 (E)

use of outer space, should be viewed as part and parcel of these endeavours. It is imperative for the Committee to keep a watchful eye, day by day, on the consolidation of the legal arsenal governing space activities given the expansion and diversification of space activities as well as the unstintingly growing increase in the number of players in outer space.

Chairman. The development of space technologies and the many applications stemming therefrom make space today a place for promoting socio-economic activities as well as a powerful lever for preventing and managing natural disasters. As a non-space country, Burkina Faso is especially interested in the application of space technologies in fields such as telecommunications, satellite positioning, remote sensing, health, education, environmental and natural resource management and disaster prevention and management or indeed weather forecasting.

It is from this standpoint that it hosted a regional workshop on telemedicine in May 2008 which provided conclusions that have made it possible to create a directorate for promoting telemedicine. In November 2008, Burkina Faso also hosted a UN mission for the exploitation of space-derived information for disaster management, UN SPIDER, in order to explore opportunities for cooperation. During the major flooding which caused enormous loss of life on 1 September 2009, Burkina Faso then benefited from assistance from UN SPIDER in managing disasters through satellite imagery.

In recent years the West African subregion has experienced disastrous consequences as a result of flooding and natural calamities. In order to reduce the vulnerability of this subregion, the establishment of prevention and disaster management mechanisms and systems is essential, that is why Burkina Faso would like to avail itself of this forum to thank UN SPIDER in advance for the subregional workshop scheduled to take place in our country in the second half of 2011 to benefit West African countries in order to agree on a regional common strategy for preventing and managing disasters. Flooding is by far one of the most widespread problems in this part of the world, Burkina Faso is ready to play its role in organizing the workshop. We are convinced that this workshop will contribute to raising awareness on the usefulness and relevance of space technology in disaster prevention and management in the West African subregion. It will be a launchpad for capacity building in respect of our technical structures in this field, that is why one of the missions entrusted to my delegation during this session is that of finalizing, with the UN SPIDER office, the timetable and content for this subregional workshop.

Chairman, distinguished delegates. While space technology's advantages are unanimously acknowledged, nonetheless the transfer of such technology towards developing countries is poor thus depriving a large majority of people of the benefits of a common asset of humanity which is outer space. Telemedicine and tele-epidemiology are interesting alternatives, recognized by the World Health Organization, for our population which are often remote from major population centres and often disadvantaged and without social coverage.

As is the case for most developing countries, Burkina Faso faces a problem of satellite availability and bandwidth. With respect to satellite positioning our country has just equipped itself with a network of nine permanent GNSS stations, one of which will be incorporated very soon in the GNSS international service network. Thus the intensification of international cooperation in the peaceful uses of outer space should be among the priorities of the Committee if we wish to ensure that all nations in the world may benefit from the virtues of space technologies.

Burkina Faso sees in COPUOS a framework of choice for expressing international solidarity and providing a response to the socio-economic aspirations of the populations of the whole world. Thank you.

The CHAIRMAN (*interpretation from French*) I, too, would like to thank the distinguished representative of Burkina Faso.

(*continued in English*) The next speaker is the distinguished representative of South Africa.

Mr. X. MABHONGO (South Africa) Thank you Mr. Chairperson. On behalf of the South African delegation I wish to express our sincere appreciation to see you presiding over this fifty-fourth session of COPUOS, please be assured of my delegation's support for your able leadership in the coming days. Furthermore, we wish to express our appreciation for the work of UNOOSA under the able leadership of Dr. Mazlan Othman in ensuring the smooth running of this session.

As we commemorate the successes associated with the fiftieth anniversaries of human space flight and COPUOS, my delegation expresses our sincere sympathies to the victims of the recent natural disasters in Japan, the United States, Spain and Portugal.

We attach critical importance to the use of space-based technology to mitigate and respond to natural and human-made disasters as well as for the effective management of, for example, climate change, global health and food security. In this regard, South Africa's aim is to extend the benefits of space technology through both South-South and North-South cooperation, therefore we are pleased with the progress of joint projects between our newly established space agency and space centres in Algeria, Brazil and China.

The South African space landscape is evolving significantly and embraces innovations in space science and technology to address the developmental needs of our country. To that end, a national space regulatory body and, as mentioned earlier, a national space agency, are now in place to advance South Africa's space programme.

New members of the South African Council for Space Affairs were appointed in June 2010. SACSA's mandate is to support safe, reliable and sustainable space activities that benefit society through policy and regulatory measures in response to national and international opportunities and challenges. Whereas SACSA is also responsible for ensuring that all South African space related activities are undertaken in compliance with international agreements, the newly established South African National Space Agency (SANSA) is responsible for the implementation of South Africa's space programme and support the creation of industrial development according to government policies.

Mr. Chairperson. I take this opportunity to inform this session that preparations for the 62nd International Astronautical Congress, that will be held in Cape Town from 3 to 7 October 2011, are progressing well. The IAC enjoys the support of all space-related stakeholders in South Africa, including the government, the private sector and academia. This is the first time that the IAC will be hosted by an African country and South Africa is encouraging African leaders responsible for space science and technology to participate in the IAC. The first day of the Congress is envisaged to be an Africa Space Day, building on the programme of the African Leadership Conference on Space Science and Technology for Sustainable Development which will be held in Kenya in September 2011. It is therefore a pleasure for me to extend a warm invitation to all delegates to attend the IAC in South Africa and we look forward to welcoming you to our country.

Mr. Chairperson. We are also pleased to announce that the South African bid to host the Square Kilometre Array project was endorsed by the African Union. The construction of a demonstrator radio telescope called MeerKAT is making good progress. The first seven dishes of the precursor instrument, known as KAT-7, were completed in December 2010. Once fully completed, MeerKAT will be the largest and most sensitive radio telescope in the southern hemisphere. The South African government regards the SKA as a perfect opportunity to enhance the development of Africa's scientific capacity, research efforts and industrial development. We believe that involvement in high-tech projects, such as MeerKAT and the SKA, strengthens the diversification and competitiveness of developing countries space capabilities in their efforts to become knowledge-based economies. Linked to the construction of the MeerKAT telescope is South Africa's capacity building programme that is open to all African countries to train African technicians, engineers, information technology experts and, ultimately, African astronomers.

Mr. Chairperson. My delegation is concerned with the harmful effects of an increasing spread of space debris which amplifies the possibility of collisions in space as well as the interference in the operation of space-based objects. It is therefore important that we work together in ensuring that we preserve and sustain space activities that mitigate the spread of space debris. In this regard, my delegation welcomes the decision of the Working Group on the Long-Term Sustainability of Outer Space Activities for the establishment of expert groups on this and other related matters. We hope that we will be able to adopt the terms of reference of this Working Group.

South Africa places great importance to the work of the Scientific and Technical and the Legal subcommittees. While we note the good work that has been achieved, we believe that through increased coordination and cooperation the work of these two subcommittees could be improved. It is therefore for this reason that we support keeping the two weeks period allocated to the deliberations of the Legal Subcommittee.

In conclusion, we welcome the membership of Tunisia and Ghana's intention to attain membership of COPOUS and ratify the required space-related international agreements.

I would like to assure you, Mr. Chairperson, of my delegation's commitment to all efforts in the field of space cooperation and especially the value-added effects of space cooperation related to sustainable development, technology transfer and capacity enhancement among developing countries and between

developing and developed countries. We would like to express our sincere hope that this form of cooperation will intensify in the coming years. Thank you.

The CHAIRMAN I thank Your Excellency for your statement on behalf of South Africa.

The next speaker on my list is the distinguished representative of Poland.

Mr. P. WOLANSKI (Poland) Mr. Chairman, ladies and gentlemen. Mr. Chairman my delegation is happy to see you again chairing this session of the Committee, we deeply believe that your experience, knowledge and leadership will contribute to the success of this session. I would like to assure you that you have the full support of the Polish delegation.

We also appreciate very much all the efforts of Dr. Othman, Director of OOSA, and all the staff of OOSA with the smooth and successful operation of their Office to the benefit of all participants. We would also like to congratulate NASA on the successful last flight to the International Space Station of the Space Shuttle Endeavour as well as Romania with their recent admission to the European Space Agency.

The Polish delegation would like to convey deep sympathy to the people of Japan with the recent devastating earthquake and tsunami which happened on 11 March and resulted in significant human casualties and property loss.

The Ministry of Economy and the Ministry of Science and Higher Education support Polish space activity under ESA PECS agreement. This year the Polish Government will adopt a long-term plan of the activity of developing of space technology and use of satellite systems in Poland. One of the important aspects of this plan is to bring our country soon to the full ESA membership. Also I would like to mention that the Polish parliament recently adopted an amendment to the budget which increase _____(?) our contribution to the PECS agreement with ESA.

This year on 7 April we celebrated in Poland the fiftieth anniversary of the first human flight, the flight of Yuri Gagarin. The celebration took place in the _____(?) of Warsaw University of Technology with the active participation of the Polish astronaut General Miroslav Hermaszewski who, in 1997, spent a week on board the Salyut-6 Space Station. He was 89 _____(?) and represented four nationalities who were sent into space at this time. At this event, His Excellency Ambassador _____(?) of the Russian Federation, President of the Polish Academy of Sciences, the delegation of ESPI with Karl-Uwe Schrogl, a representative of the Institute of Space Research of the Russian Federation, actively participated as well as many distinguished Polish scientists.

Scientists and engineers from the Nicolaus Copernicus Astronomical Centre in Warsaw and the Space Research Centre of the Polish Academy of Sciences are engaged in building, in consortium with Austria and Canada, the BRITE astronomical satellite devoted to the study of the stars. Also the Space Research Centre of the Polish Academy of Sciences actively participated in many scientific international missions. Among others, a special penetrator MUPUS, built in the Space Research Centre in Warsaw for the Rosetta spacecraft which is headed now for the comet Churyumov-Gerasimenko. They are also participating in IBEX and Herschel space projects. Additionally, another special penetrator CHOMIK was built in the Space Research Centre in Warsaw for the Russian Federation mission to the Mars satellite Phobos, so-called Phobos-Grunt. This penetrator was already delivered to the Institute of Space Research of the Russian Academy of Sciences in Moscow.

Poland is a full member of EUMETSAT. Linked to EUMETSAT is the Institute of Meteorology and Water Management Satellite Centre in Krakow which has been continuously working and has been receiving pictures and other information from the meteorological satellite for more than 40 years.

GPS, GNSS and other satellites are used in Poland for geodesy and scientific programmes. Three years ago we completed the construction of 100 reference stations for the European Reference Network. Realization of a multifunctional system for precise satellite positioning in Poland is by the mainland surveyors and cartographers office and it has more than 1600 users. Several projects in the field were conducted by the Krakow University of Science and Technology, the Warsaw University of Technology, the Institute of Geodesy and Cartography and the University of Warmia and Mazury, as well as the Space Research Centre of the Polish Academy of Sciences.

We are also actively engaged in remote sensing. The Institute of Geodesy and Cartography as well as many universities, conduct research and practical use of the space-based technology in this field. In _____(?) Centre for Telecommunication provide worldwide telecommunication services using global and regional telecommunication satellites, such as Intelsputnik, Intelsat, Inmarsat and Eutelsat. It also

provides continuous connection of Polish operations with all places in the world, on land, sea and air.

The education on space is continuously widening in Poland, this includes special educational programmes for basic and high schools. Special programmes on space education exists at the Warsaw University of Technology and other universities. ESA granted special project for support education activities for students at the Warsaw University of Technology and Wroclaw University of Technology.

In the Warsaw University of Technology, Wrocław University of Technology and Krakow University of Science and Technology _____(?) project related to small satellite are performed. Students groups are engaged in construction of ESA student projects such as ESEO, ESMO, REXUS/BEXUS, and at the Warsaw University of Technology, PW-Sat nanosatellite is constructed which will test the technology of de-orbitation of satellites after their operational phase aiming to decrease the amount of space debris in low-Earth orbit. The launch of this satellite is planned on the maiden flight of ESA's new rocket Vega.

Also this year, workshops and seminars related to the space technology, use of space technology in geodesy, space physics and near-Earth objects with participation of scientists, engineers and students were organized in Poland. In April a delegation of ESPI visited Poland and were received by the members of the Polish parliament, the Ministry of Science and Higher Education and the Ministry of Economy. Also during this year the _____(?) seminar on users of space technology for security, geodesy and navigation propulsion will be organized.

During the Polish presidency of the European Union which will start on 1 July of this year, Secure World Foundation, ESPI, will organize a seminar presenting and discussing the optimal use of the space applications in the support of humanitarian effort during the _____(?) large scale crisis. The seminar will combine discussion and _____(?) of simulation of humanitarian operation with active involvement of all participants. This event will be organized in coordination with related activities of the Polish Ministry of Internal Affairs and the Civil Protection Mechanisms of the European Union. Thank you Mr. Chairman and distinguished delegates for your attention.

The CHAIRMAN Thank you Professor Wolanski on behalf of Poland. Just a small correction to the information you provided, your cosmonaut flew in 78 not 87.

The next speaker on my list is the distinguished representative of Germany, His Excellency Ambassador Luedeking.

Mr. R. LUEDEKING (Germany) Thank you very much Mr. Chairman. Mr. Chairman, distinguished delegates, first of all I would like to express the appreciation of my delegation to you, Mr. Chairman, and your team for the work you have accomplished during the past year and preparation for this session. We are convinced that the fifty-fourth session of COPUOS will be a productive meeting which successfully brings relevant space topics to the forefront. We have quite a few of them this year and Germany is prepared to make its contribution to all of them.

Mr. Chairman, space technology makes a crucial contribution to the promotion of research, development, education and innovation. It also fosters growth, the creation of highly qualified jobs, the improvement of our quality of life, the protection of our Earth, our safety and, international cooperation. Given the increasing significance of various global challenges, space-based applications will become even more important in the future. In its new space strategy, the German government is therefore focusing on space technology and the way it can be used to tackle these challenges. However, our strategy is based on the general orientation that all space operations must serve the needs of the Earth and society.

Germany has placed its new space strategy on three guiding principles. First, the focus is on benefits and needs, improving people's living conditions is an overarching goal, in other words our space projects will be benchmarked by their contribution towards solving societal challenges.

Second principle is sustainability. Space infrastructures for Earth observation, communication or navigation, that provide us with all respective information in these fields need to be defended from potential threats as more and more space-based systems orbit our Earth these threats are on the rise. Space debris or decommissioned satellites, natural causes such as solar storms and asteroids, as well as targeted interference from Earth, therefore Germany fully supports the draft code of conduct on outer space activities referred to earlier in the statement on behalf of the European Union and in particular during the high-level segment.

Thirdly, Germany intends to intensify its international cooperation. International collaboration is increasingly important, for example the International Charter Space and Major Disasters. Germany signed the Charter last year and will now contribute to its goal in an even more intensive manner. Large and highly complex space projects which affect the interests of the global community need the support of many countries. By facing up to challenges such as the preservation of the natural basis of human life, the acquisition of knowledge or the improvement of our living conditions we can but only by means of international cooperation, safeguard our international interests in an intelligent and effective way. To be prepared for cooperation we will strengthen the national space programme and Germany's technological basis, systems competence and innovative technologies are fundamental assets in order to remain a major international player in space affairs. A space project such as Ariane 5, the International Space Station and the climate satellite, Merlin, provide spectacular proof of what cooperation can accomplish.

Let me, at this juncture, make a few remarks regarding the UN SPIDER programme, something that is particularly close to hearts. You may remember that in a joint effort by UNOOSA, Germany and many other delegations, UN SPIDER that is the United Nations Platform for Space-based Information for Disaster Management and Emergency Response, was established as a programme at the Office for Outer Space with offices in Bonn and Beijing. This strategic investment in the use of Earth observation is intended to serve and benefit all nations particularly developing countries.

UN SPIDER is a programme designed to make strategic use of space technologies to prevent harm to people. In the face of the increasing number of natural disasters in recent times, UN SPIDER has helped to limit human losses and economic damage. Germany is delighted by the recognition given to, and the success achieved by, UN SPIDER. We must now devote our attention to how UN SPIDER can be implemented on a sustainable basis. Germany has contributed substantially both in terms of expertise through the German Aerospace Center (DLR) and through voluntary financial contributions. We have provided the UN SPIDER office with 150,000 Euro per annum, two senior staff members from DLR for four years and two associate experts. In addition, Germany is paying for infrastructure and rent. However, we have doubts as to whether the UN SPIDER programme can be implemented on a sustainable basis whilst depending heavily on voluntary contributions. Natural disasters will continue to strike the planet, a more substantial part of the programme needs to be funded through the regular budget. Let me emphasize that we are not asking for increase in the regular budget of the UN but COPUOS member States have to decide how important and useful UN SPIDER really is to member countries.

In this context, I want to draw your attention to a letter from the German Aerospace Coordinator, Parliamentary State Secretary Peter Hintze, which has been circulated a few days ago. In line with this letter I would like to propose that, as a result of this session, COPUOS sets out its clear views in these issues with a view to strengthening SPIDER by putting it on a more sustainable basis.

I would like to end my statement with this plea and I hope that as a result of our discussions and deliberations and in agreeing on the text of the final report we will do everything possible to achieve this objective, namely, to put the UN SPIDER programme on a sustainable basis and to ensure that the necessary resources are made available to it. Thank you Mr. Chairman.

The CHAIRMAN Thank you Excellency for your statement on behalf of Germany.

The next speaker on my list is the distinguished representative of the United States of America, Mr. Ken Hodgkins.

Mr. K. HODGKINS (United States of America) Thank you Mr. Chairman. Mr. Chairman I wish to join those speaking before me in expressing condolences to the people of Japan for the tragic loss of life as a result of the devastating earthquake and tsunami in March of this year.

Mr. Chairman, I would like to congratulate you and the rest of the bureau for another year of outstanding leadership, we look forward to working with you to ensure successful outcome for this session. I would also like to express our deep appreciation to the staff of the Office for Outer Space Affairs for their superb work over the past year and for their diligent efforts to prepare for our meetings over the coming days.

I would like to note for member States that President Obama approved and released a new US national space policy in late June 2010. The new policy calls for increased emphasis on international cooperation to promote the peaceful use of outer space in a wide range of areas. The United States will expand its work in the United Nations and other organizations to address the growing problem of space debris and to

promote best practices for sustainable use of space. The US will also pursue pragmatic transparency and confidence building measures to mitigate the risk of mishaps, misperceptions and miscalculations in space. The new policy affirms the long-standing US policy that we are open to space-related confidence building in arms control concepts and proposals provided they meet the rigorous criteria of equitability, effective verifiability and consistency with our national security interests.

Under the new policy, the United States intends to promote commercial space regulations, international standards that promote fair market competition and the international use of US capabilities, such as launch vehicles, commercial remote sensing services, in the civil services of the Global Positioning System. Finally, the policy encourages the United States to pursue enhanced cooperative programmes with other space faring nations in space science, human and robotic space exploration and in use of Earth observation satellites to support weather forecasting, environmental monitoring and sustainable development worldwide. A copy of the US national space policy and a related fact sheet can be found on the web at www.whitehouse.gov

During the past year we have continued to witness extraordinary international, scientific and technical accomplishments in our quest to explore space. 2010 marked another year of progress in which the International Space Exploration Coordination Group fulfilled its mandate to provide a forum for space agencies to share their space exploration interests and plans with a view to working collectively towards the further development and implementation of the global exploration strategy.

Since the Committee met in 2010, NASA has completed two Space Shuttle missions both to the International Space Station. The final Space Shuttle mission is scheduled to take place next month. I would like to note that on 2 November 2010 the ISS partnership celebrated 10 years of humans living and working continuously on the ISS. More than 196 people have visited the on-orbit complex by that date and at the time the ISS had completed 57,361 orbits, travelling some 1.5 billion miles. The NASA Lunar Reconnaissance Orbiter (LRO), launched in June 2009, is now one and a half years into an exploration mission of up to five years in polar orbit of about 31 miles above the lunar surface, the closest any spacecraft has orbited the Moon. LRO is producing a complete map of the lunar surface in unprecedented detail searching for resources and safe landing sites for human or robotic explorers, and measuring lunar temperatures and radiation levels.

The Mars Reconnaissance Orbiter (MRO) continues to produce valuable science and stunning images with its advance set of instruments. Since its arrival at Mars in 2006. MRO has returned more data about the red planet than all spacecraft combined. The Mars Exploration Rover, known as Opportunity, continues to produce scientific results while operating far beyond its design life. The mission, designed to last 90 days, celebrated its seventh anniversary in January of this year. Although its twin, known as Spirit, may have completed its useful life, Opportunity is still very capable of exploration and scientific discovery. Meanwhile development continues on the Mars Science Lab, recently named Curiosity, that will be launched in November 2011.

In 2010, NASA space telescopes continued to make unprecedented observations. Hubble with its imagery, GLAST looking at black holes and the origins of cosmic rays, Spitzer looking at the universe in infrared, Chandra with its X-ray observatory, Kepler searching for planets and, Fermi exploring the most extreme environments in the universe, all contributing enormously to the world's knowledge of outer space. Not to be forgotten in its relative silence, NASA's New Horizon's mission to Pluto which passed by Jupiter in 2008 is currently on an interplanetary cruise phase and is due to arrive at Pluto in 2015.

Of special note, Mr. Chairman, I am very pleased to report that NASA's Voyager-1 spacecraft launched more than 33 years ago in September 1977 has, as of December 2010, reached a distant point at the edge of our solar system some 17.4 billion kilometres from the Sun where there is no outward motion of solar wind. It is the most distant human-made object in space and, along with its sister spacecraft Voyager-2, is still providing data to five science teams.

The US Geological Survey of the US Department of Interior, continues to operate the Landsat-5 and Landsat-7 satellites and make their data available to users worldwide. Landsat provides essential information for land surface monitoring, eco-systems management, disaster mitigation and climate change research. Both Landsat-5 and Landsat-7 are well beyond their operating lives with Landsat 5 in its twenty-sixth year and Landsat-7 in its eleventh year of operation and I would like to note that next year will mark the fortieth anniversary of the launch of Landsat-1.

Since 2008 when the full US Landsat image archive was made available to users free of charge over the Internet, we have witnessed phenomenal growth in the delivery of Landsat scenes to users worldwide. From an average of just over 50 scenes per day in USGS's best sales year to more than 3,000 scenes per day in 2009. By December 2010, the USGS had provided 4 million Landsat scenes to users in 180 countries. The free availability of this GIS-ready land imaging data is having a tremendous global impact on Earth science and land surface monitoring.

The first commercially operated spacecraft to re-enter intact from Earth orbit was achieved by SpaceX, a US company in December 2010. The dragon capsule was launched from Florida, circled the Earth twice in a test mission and was successfully recovered as planned in the Pacific Ocean. This occasion also marked the first ever commercial re-entry licence granted by the US Federal Aviation Administration.

Finally, Mr. Chairman, I would like to note that the International Astronautical Federation has chosen the Global Positioning System programme to receive the Federation's special sixtieth anniversary award. This prize is awarded specifically to recognize an outstanding achievement by a project in the area of space applications that is demonstrated through its successful implementation and measurable benefit to humanity. Thank you.

The CHAIRMAN I thank the distinguished representative of the United States for your statement.

The next speaker on my list is the distinguished representative of Spain.

Mr. S. ANTÓN ZUNZUNEGUI (Spain) (*interpretation from Spanish*) Thank you very much Mr. Chairman. Chairman, Spain would like to take this opportunity to congratulate you for the agile and flexible way you have conducted consultations on 1 June which resulted in the adoption of the declaration on the fiftieth anniversary of the first manned space flight and the fiftieth anniversary of COPUOS. We are sure that you will apply the same excellent qualities to making sure this session is successful.

This delegation would like also to commend Dr. Mazlan Othman and the entire team of OOSA for the extraordinary efforts undertaken to make sure that the commemorative events are very well organized.

Mr. Chairman, Spain fully associates itself with the statement made by the representative of Hungary on behalf of the European Union. Also this delegation already outlined the historic magnitude launched by Yuri Gagarin during the commemorative segment but we would like to highlight once again the scientific revolution that took place as a result. Since then the breakthroughs and the development of space science and technology have left us tremendous progress in such areas as medicine, material science, navigation, electronics, communications and others. This Committee and its subsidiary bodies have been fundamental to making sure that this progress was accomplished in a spirit of collaboration and peaceful competition and it has become a unique platform for international cooperation in outer space.

Mr. Chairman. Spain has not been outside the scientific and technological progress that made it possible for man to explore the universe. We have our own strategic plan for the space sector for 2007-2011. In the framework of that plan, Spain has continued developing initiatives as part of the national plan for the observation of the Earth, the programme for observation satellites, the Ingenia satellite, and others such as the Paz satellite incorporating radar.

On the other hand, Spain continues its participation in the European Space Agency's activities. We have strengthened five major pillars and have become one of the important centres for the activities of ESA. The Astronomical Research Centre is now based in Madrid. Apart from the national programme and participation in ESA's programmes, Spain has also maintained agreements with other international space agencies. It has taken part in the Mars Science Laboratory Programme which involves the development of the Martian robot Curiosity by NASA which will be launched in the course of the year, 2011.

With Roscosmos of Russia we have important cooperation on the basis of the World Ultraviolet Laboratory and Observatory led by Cosmos. Also Spain participated with France in developing technology for the software and hardware required for the Prisma demonstration mission led by Sweden. The test period has already been concluded successfully.

Mr. Chairman. For 50 years this Committee has developed formulae to make sure that outer space activities take into account the fragility of that environment. Spain welcomes the latest progress in this regard in particular we emphasize the adoption by the General Assembly of recommendations to improve the practice of registering space objects, guidelines for space debris mitigation and the safety framework for the use of nuclear power sources in outer space.

Furthermore Spain welcomes the fact that for the first time in its forty-eighth session the Scientific and Technical Subcommittee of COPUOS included the agenda item, sustainability of space activities for the long term and will set up a working group, an ad hoc group for that purpose. Regulating space activities particularly the issue of space debris today is one of the great challenges confronting the international community if we want to continue using outer space in a safe manner. Therefore we hope that in this session the Committee will endorse the document on the mandate and working methods of that working group so that it can start its work without delay.

Beyond elaborating norms and guidelines of the legal/technical nature to regulate outer space activities, this Committee has acted as a catalyst for a number of initiatives for the use of outer space for the benefit of human kind. In particular, I would like to highlight the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (SPIDER). Spain has followed with great attention and has contributed financially to that programme, it will consider with interest the workplan for the 2012-2013 biennium which will be presented during this session.

Equally for satellite communications, Earth observation systems, navigation by satellite, all of these are indispensable tools that help us find solutions for sustainable development. Therefore Spain welcomes the fact that the General Assembly of the United Nations has invited this Committee to consider how it can best contribute to the Conference on Sustainable Development to be held in Rio de Janeiro in 2012. Spain is convinced that COPUOS can bring real value added to Rio+20.

Chairman. The road already covered by COPUOS on the 50 years has been very successful still, in spite of the remarkable achievements, a lot remains to be done. Therefore Spain is grateful to the chairman of the Committee for 2008/2009 His Excellency the Ambassador of Colombia, Ciro Arevalo Yepes, for his working paper toward a United Nations space policy. Reviewing this document is on the agenda for this session and the future role of the Committee. The Committee should consider calmly and in depth the substance of its work and not neglect issues of form improving its methods of work. Spain has great interest in continuing to study the ways of increasing efficiency and effectiveness of this Committee and its subsidiary bodies. Among these measures Spain supports the proposal that, as of 2012, unedited transcripts be used as suggested by the Legal Subcommittee, this would lead to considerable savings. This type of measure should be seen as a necessary way to maintain COPUOS as a dynamic forum that will continue to be the principal point of reference for the international community in all issues pertaining to the peaceful uses of outer space. Thank you Mr. Chairman.

The CHAIRMAN I thank the distinguished representative of Spain for his statement.

The next speaker on my list is the distinguished representative of Indonesia.

Mr. S. PRABOTOSARI (Indonesia) Mr. Chairman. On behalf of the Republic of Indonesia let me congratulate UN COPUOS on the occasion of this fiftieth anniversary and _____(?) contributed to human space flight is also celebrating its fiftieth anniversary this year.

The Indonesian delegation fully associates itself with the statement of the G77 and China delivered yesterday. As a member of COPUOS in 1973 Indonesia has seen and been part of the organization's progress for many years. Indonesia has benefited from the advancement of space technology and _____(?) including managing natural resources, telecommunications, navigation, banking and observing climate change.

As a disaster prone country Indonesia has also utilized space technology for disaster mitigation under the framework of UN SPIDER, something from which Indonesia has benefited greatly in the last few years. In showing our commitment to actively participate in the use of space based technology to mitigate natural disasters, the government of the Republic of Indonesia will host one of the regional support offices of UN SPIDER. To this end, _____(?) institution in Indonesia are currently preparing the necessary framework to accommodate such cooperation.

Mr. Chairman, acknowledging the benefit from space technology Indonesia is of the view that it is of paramount importance to ensure security, safety and safeguard the exploration and use of outer space. Therefore the development of space technology should not only be able to enhance prosperity but also generate peace. We believe this goal could be attained with the good will and cooperative spirit of the member States of COPUOS through the work of its two subcommittees.

_____(?) space technology have developed _____(?) far and fast in the last 50 years _____(?) space capabilities among member States still exist. In

this regard, Indonesia is of the view that _____(?) disseminate and transfer space technology as well as for capacity building should be strengthened through cooperation and distributing the benefit of space technology to all mankind especially to developing countries.

To increase participation of various actors from governmental and non-governmental entities in space activities as well as the commercialization of outer space in recent years, create a challenge to international _____(?) peaceful uses of outer space. In this connection, the Indonesian delegation believes that space law is very important to safeguard and ensure peaceful uses in outer space. In relation with the ongoing discussion of the issue of definition and delimitation of outer space, Indonesia would like to reiterate its view that the agreement on this matter is very important to ensure legal _____(?) between airspace and outer space law and the implication of its regime.

Mr. Chairman, taking into consideration the nature of outer space as a limited natural resource, the Indonesian delegation would like to underline the importance of using the resource in a reasonable and balanced manner to ensure its long term sustainability. Sustainable use of space should be guaranteed by clear regulations, rules and recommendations. In this connection Indonesia welcomes the establishment of the working group on long term sustainability of outer space under the Scientific and Technical Subcommittee and hope that this working group will contribute to ensuring that space activities are conducted in a sustainable manner and at the same guarantee the equitable access of all States to outer space.

Realizing the incredible benefit of space exploration and _____(?) of space technology Indonesia attempt to promote space technology and enhance space awareness by convening Space Week annually every October. Furthermore, in celebrating the joyful occasion of the fiftieth anniversary of UN COPUOS, Indonesia is hosting the 2011 Asia-Pacific round of the Manfred Lachs Space Law Moot Court Competition from 3-5 June 2011 in Jakarta and the International Conference on the Law of Outer Space from 6-7 June 2011 in cooperation with the International Institute of Space Law.

To conclude, I would like to reiterate Indonesia's firm commitment to _____(?) for international cooperation for the peaceful uses of outer space for the benefit of mankind and the work of this Committee. Thank you.

The CHAIRMAN I thank the distinguished representative of Indonesia for your statement.

The next speaker on my list is Her Excellency Ambassador of France, Ms. Florence Mangin.

Ms. F. MANGIN (France) (*interpretation from French*) Mr. Chairman, Your Excellencies, distinguished delegates, colleagues. Let me first of all express, on behalf of my delegation, our congratulations to you Sir on the way you have conducted our work. France welcomes the fact that you have been able to put your great experience and direct knowledge of space exploration as a former cosmonaut and director of the Romania Space Agency at the service of this Committee. Your presence here is a sign of the special interest shown by Romanian authorities in the development of space activities and my delegation and myself are happy to see that.

In this fiftieth anniversary year of COPUOS France would like to welcome the overall accomplishments of this institution. It has played a primary role in facilitating international cooperation with regard to space activities specifically by encouraging a growing number of countries to take part. Talking about the composition of the Committee France welcomes the nomination of Azerbaijan and supports it. The Committee has taken an important part in putting in place an international legal framework making sure that there is a whole set of fundamental outer space treaties in place.

Mr. Chairman. France would like to reiterate its commitment to maintaining outer space for exclusively peaceful purposes. Space must remain a place apart, exempt from conflicts, a place whose great benefits can be put at the service of all humanity. In our view, space activities should be governed by three principles. First, free access to space for peaceful uses. Second, preservation of security, safety and integrity of satellites in orbit and third, respect for the right of each State to legitimate defence.

France welcomes the work of the forty-eighth session of the Scientific and Technical Subcommittee and the fiftieth session of the Legal Subcommittee. Our Committee has contributed this year, yet again, to the progress on international cooperation and legal codification of space activities and, while we can rightly rejoice and welcome this success, we must not forget that there are still major challenges remaining. Be it retaining ecological balances, counteracting global warming, ensuring transport safety, fighting the various international illegal trafficking activities or managing natural disasters. To assure long term

sustainability for outer space activities is the first of the challenges that we must take up together to ensure that outer space activities continue into the future, a safe environment in near-Earth space is no longer guaranteed unless we approach it on a long term basis. Not only the space debris situation has become a real source of concern but also the growing number of actors in outer space makes it indispensable that we draw up a set of rules for the good conduct of space operations to avoid interference, collisions and other incidents that could impede the use of outer space by all including the new arrivals in the space arena.

In this regard France hopes that, under your leadership and under the leadership of Mr. Martinez, the head of the working group on the long term sustainability of space activities will be able to finalize and adopt terms of reference and a plan of work to be able to contribute to the next session of the Scientific and Technical Subcommittee in 2012. Furthermore France reiterates its support to the European project to draft an international code of conduct for outer space activities which would apply both to civilian and military activities with the idea of strengthening, through measures of transparency and confidence building, the safety of space activities in the face of new risks caused by various types of uses of outer space.

To resolve the sum total of these issues, Mr. Chairman France resolutely supports international cooperation which is indispensable in the space arena. Thus French space activities have been part and parcel of cooperation on many levels. First on the bilateral level, I would like to cite the French/Indian project, Megha-Tropiques. In the second part of this year a satellite will be launched to a low angle equator orbit by means of an Indian launch vehicle. This mission will be focused on the study of the inter-tropical zone, the water cycle and energy exchanges between the Earth and the atmosphere.

At the European level, France's space activities form part of exemplary cooperation with other European nations as part of the European Space Agency. Finally, through ESA programmes these activities have been inscribed into a broader context with other partners. I am thinking specifically of the International Space Station, ExoMars and Soyuz. In this regard, the project to launch a Russian Soyuz rocket from French Guiana is an excellent illustration of this type of international cooperation.

The Soyuz facilities in Guiana today are ready and a complete simulated cycle of the entire timeline has been tested in May of this year. The Soyuz launch vehicle will be used for the first launch from French Guiana, it will be delivered to Kourou soon and then will be followed by two satellites. This launch is planned, as of now, for October 2011. It will be a very important event for Europe because the two satellites to be launched in that way will be the first in Europe's Galileo constellation of satellites. The Kourou base in Guiana, the launch facility for Europe, will also host a new Vega launch vehicle from the European Space Agency for the first launch planned for late 2011 early 2012. Vega, as you know, will complete the array of launch vehicles available for Europe and the Vega/Soyuz/Ariane trio will thus make it possible in the years to come to meet the needs of European authorities both in the institutional and the commercial spheres.

Finally, since my delegation already had a chance the day before yesterday during the commemorative segment to point out the National Centre for Space Research (CNES) is also celebrating its fiftieth anniversary this year and I invite you to visit the CNES stand in the Rotunda as part of the international exhibition which will present throughout the month of June the role played by my country France in this great space adventure. Students of Vienna's French Lycée have contributed to decorating the stand and I will there happy to welcome you every day and show you what they have to show during lunch break throughout this session. Thank you very much.

The CHAIRMAN (*interpretation from French*) We also thank you your Excellency for your statement on behalf of France.

(*continued in English*) The next speaker on my list is the distinguished representative of the Russian Federation.

Mr. G. BARSEGOV (Russian Federation) (*interpretation from Russian*) Thank you Mr. Chairman. Mr. Chairman, this is in many ways a special session of the Committee and in this context the delegation of the Russian Federation would like to welcome you as our wise and skilful leader and as a cosmonaut who knows first hand both the romance and the complexities of space exploration.

Mr. Chairman, the Russian delegation, like many of our colleagues, would like to express its condolences and sympathy in view of the tragedy that struck the people of Japan earlier this year. At that difficult time Russia immediately expressed its solidarity with Japan. Our delegation, for its part, would like to express a wish that technology related consequences of that tragedy might be overcome with

the greatest efficiency and that the wounds heal in human hearts.

Mr. Chairman. In 1961 mankind's dream to fly to the stars became reality. That accomplishment was based on the titanic efforts of researchers, scientists, designers, who were able to translate into reality innovative ideas and solutions. Of course, we must not forget the exemplary exploit of the Earth's first cosmonaut, Yuri Alekseyevich Gagarin, whose thoughtful and competent actions ensured this brilliant success.

That outstanding human being ushered in a qualitatively new era in space exploration and gave the citizens of our planet an entirely new vision of the world. As is well known, the United Nations General Assembly made the decision to declare 12 April an International Day of Human Space Flight, we are convinced that such a show of respect for that historic event is of great significance, particularly for future generations. It will be up to them to define new ways to make joint efforts to ensure that space activities, while remaining exclusively peaceful, live up to the increasing needs of humankind and the need to maintain stability and security in the world and comply with the fundamental principles enshrined in the UN Charter.

It is these lofty goals that are served by the UN Committee on Outer Space. Its record includes the development of important universal multilateral treaties on space activities that laid the foundation for contemporary international space law preparing and thematically fleshing out three global conferences on space exploration and peaceful uses of outer space. The achievements and the prospects of the Committee are inalienably linked to the multifaceted and much needed work of the Office for Outer Space Affairs. That Office is indeed a generator of new ideas in terms of developing and effectively using scientific and technological knowledge and the practical potentialities of space technologies. We would like to convey to the leadership and all staff of the Office our gratitude for this dedicated service to our lofty ideals.

Mr. Chairman. The Committee has before it a broad array of issues to tackle in the context of overcoming global threats. In essence, what we are talking about here is creating a strategic basis for pooling the efforts of nations over such issues as developing models for cooperation in the sphere of real-time Earth observation and monitoring global changes, preventing natural disasters and catastrophes, writing a script for counter-acting the asteroid threat. Which script or which programme will, in time, make it necessary for us to define possible legal approaches and maybe we will need to create, within the framework of the United Nations, an appropriate group of governmental experts for that purpose.

We are fully aware of the need for more actively becoming involved, for us Russia in a number of useful initiatives and please believe me when I say Russia will take additional and decisive measures in order to overcome some of the shortcomings that unfortunately have happened. Of considerable significance also, in our view, would be finding a way for the Committee to analyse the possibilities of raising practical benefits from space exploration. This is a whole set of issues and it touches upon national and international institutional frameworks that need to be set up for developing cooperation in applying space technologies and also the sphere on trans-border services, there are untapped resources in that regard still. The results achieved by Russia in that sphere can, in our view, be of some interest to the international community.

For example, in Russia we developed a doctrine for intergovernmental agreements on the protection of rocket and space technologies, something that has already been translated into practice in our work with such partners as the Republic of Korea, Brazil, Ukraine, Kazakhstan and Belarus. These agreements raise the bar very high in terms of regulating the relations among States in a very sensitive sphere where national interests enter into very intricate interactions with internationally accepted needs for technological exchanges and the requirements of expert control regimes already in place. The purpose of such agreements is to make sure that various countries could, on a mutually beneficial basis, ensure mutual advantages set up conclusively safe legal environments for full fledged cooperation in outer space on the basis of a policy and a set of methods that make sure that legitimate expert controls are in place. That seems to be something that is of interest to many countries including developing countries.

Mr. Chairman. The decision to put on the agenda of the Scientific and Technical Subcommittee of COPUOS the issue on the long term sustainability as it applies to outer space activities was, to some extent, the result of a deliberate decision striving to create consensus. The very wording of this item quite frankly was borrowed from the national practice of some States rather than from the existing principles and norms of international space law. For example, we know that the United States has its own national security strategy which defines priority guidelines for raising the

sustainability in the development of the United States space industry.

In Russia this concept, sustainability, is not something that is systematically used in reference to space activities. In our own legal and normative system and our own decision making practice, we do very well with other terms that we think are fairly meaningful and _____(?). Of course, I do not want to turn this into an insurmountable problem it is more a matter of national glossaries. Still, to ensure successful work here, it would be helpful to all of us to draw up an indicative list or glossary of elements that go into this concept of sustainability specifically as it refers to space activities. We would be receptive to suggestions from colleagues and for our part we have some thoughts which we believe might make a constructive contribution toward a final package decision we might take here regarding the scope and methods of work of this Committee's working group on the long term sustainability of outer space activities. The chairman of the working group, Mr. Martinez, is an excellent organizer and he has a broad and realistic vision of the issues involved. We are prepared to offer him every support in his important work. We sincerely hope that this current session will make it possible for us as a group to evaluate all the various suggestions and initiatives and take a thoughtful well considered decision. Thank you very much Mr. Chairman.

If I can take one more minute of your time, just an item of information. In addition to the email invitations we have already sent out, let me just remind distinguished delegates that the permanent representative of Russia invites you, the Office for Outer Space Affairs and all, I emphasize that, all participants in this session to give us the honour by attending a reception at the Russian Mission on the occasion of the two well known anniversaries. Thank you very much for your attention.

The CHAIRMAN (*interpretation from Russian*) Thank you distinguished representative of the Russian Federation for your statement. A small remark, the interpreters have a text of your speech and you can read at a normal pace. The interpreters have a text you do not need to monitor interpretation, just read as you normally would. Thank you.

(*continued in English*) The next speaker on my list is the distinguished representative of Chile.

Mr. A. LABBÉ (Chile) (*interpretation from Spanish*) Thank you Chairman. May I express to you Chile's satisfaction in seeing you chairing our proceedings. We have followed very closely your performance as Chair of the Committee and we appreciate the bold efforts you have made to ensure that this historic session may unfold as a resounding success. We also congratulate the other members of the bureau, the Director of OOSA, Ms. Mazlan Othman, Niklas Hedman and the staff members of the Secretariat that have not shrunk from any challenge in attempting to produce a session which has been as brilliant as it has been fruitful.

We also associate ourselves with the expressions of solidarity and condolence which have been voiced in expressing the collective feelings we have, given the tragedy which the people of Japan have suffered. We extend that solidarity with special appreciation of the gravity and harshness of this sort of tragic event since we too are in the danger zone in the Pacific for such seismic events. First and foremost, we wish to highlight the courage, stoicism and social discipline which we were able to see in the noble people of Japan and we are sure that this painful experience will ensure that they emerge more united, more vibrant and greater than ever.

Mr. Chairman, the anniversaries which we are celebrating at this session are the source of both satisfaction and reflection. Satisfaction with humanity's advance towards a dimension which, for centuries, captivated the imagination and dreams of civilizations and which bequeathed us imagery in mythology and poetry which still embellish the arts to this day. Satisfaction at the feat of the great Russian nation which having given us Solzhenitsyn and Shostakovich also gave us Yuri Gagarin whom we shall always admire as the trailblazer in space as an exemplary human being. Satisfaction as well with the wealth of international cooperation which we have managed to accumulate over five decades and of which this Commission is an eloquent demonstration. Lastly, satisfaction because multilateral consideration of outer space gathers together not only States but also academia, the private sector and civil society, natural players in any collective endeavour in a globalized world and which is so globalized precisely as a result of so many space applications contributing to human well being and security. Then, a source of reflection because this United Nations body, as a consequence of the reform process launched in New York in 2005, has not shirked the imperative of critical self appraisal in order better to respond to the challenges of the modern day multilateral world.

This Committee, as we well know, emerged during the Cold War and some of its characteristics and practices have come down to us from an era of ideological and geopolitical confrontation which today

has been superseded by interdependence inherent in globalization and the conviction that the problems of humanity cannot be resolved by any single nation or group of States but rather they require concerted action in the major domains of peace and security, development and human rights. The endeavour to improve the functioning of COPUOS and its subsidiary bodies must be shouldered by all of us with goodwill and in an attempt to adapt them to the paradigms and necessities of the present and spurning the ideological distrust and inflexibility that are as antiquated as they are dysfunctional. Thus, Chile restates its enthusiasm with the constructive, pragmatic and de-ideologized dialogue which is underway as well as its appeal to address the multilateral agenda with holistic visions which stimulate synergy among all the actors and players concerned by global questions. We also its hail its profound aversion for confrontational positions and its political decision to address the space agenda with eyes and ears wide open, embracing visions of the twenty-first century for problems of the twenty-first century seeking the development and security of human beings in the twenty-first century.

Chairman I do not purport to cover, in the short time assigned to delegations, all of the important items on our agenda. They were all addressed in the G77 and GRULAC statements to which Chile belongs. However, there is no doubt that the most pressing issue which we shall be addressing during this session is the long term sustainability of human activities in outer space. Our presence in these bounds as had adverse affects which must be addressed from various standpoints including within the competencies of this Committee and its subsidiary bodies tackling the singularly technical nature of the problem. We restate our congratulations to the working group headed by our able and indefatigable South African colleague Peter Martinez and, as of now, we express our resolve to adopt at this session the terms of reference for future activities in this area.

Chairman. Multilateralism has been built on the normative standard setting regulation of human activity among other pillars in areas which require the security and certainty afforded by the rule of law. COPUOS, through its Legal Subcommittee, has made a substantial contribution to the creation and conceptual consolidation of space law, Chile belongs to that school of thought which wishes to continue making progress in this codification and which senses there is also a need to negotiate, in a competent forum, an instrument which will prevent the deployment of arms and weapons in outer space.

At the same time, our country notes that, over the last three decades, there has not been a consensus on the question of negotiating legally binding instruments as stipulated in the law of treaties but we also note that the requirements for regulating human activity in outer space have been and continue to be addressed through so-called soft law instruments of a flexible nature and which are perhaps better tailored to the dizzying technical progress which marks our time.

These soft law instruments are being implemented by various players in outer space and, for the time being, they govern the important activities of the private sector in space and, as recent economic history as demonstrated, the action of the private sector needs regulating in a way that effectively preserves the common good without stifling enterprise and the dynamism of markets and which, at the same time, may spawn mechanisms for settlement of disputes. So called soft law first plays an important role which is bolstered when players in outer space incorporate the norms of soft law in their domestic law. Therefore this is the normative path which supplements traditional codification and which warrants our fullest attention and support. Chile is ready to travel, pragmatically and imaginatively, any road which will make it possible for space law to progress.

Chairman, Chile will continue to work intensively in support of the advance of multilateralism in outer space in particular it will seek to optimize the contribution of space applications to development and human security with special emphasis on the swiftest possible achievement of the Millennium Development Goals and the preservation of our planet. It will do so in global fora such as COPUOS as well as in regional and subregional ones.

In national terms our country is working to enhance its cooperation on space affairs with various partners such as the European Union, Argentina, Brazil, Canada, China, Republic of Korea, Ecuador, the United States, the Russian Federation, India, Japan and Mexico, among others. We wish to draw attention to the fact that our delegation comprises representatives of the State, of academia and of the private sector, in other words all the key players on space affairs and all of them are keen to take advantage of this historic opportunity to interact with their colleagues from around the globe and to open up new avenues for both multilateral and bilateral cooperation. This endeavour is buttressed by the advance in the process of consolidating our domestic legal framework which our space sector requires. In a nutshell, Chile is progressing towards full maturity to becoming fully fledged and it

hopes sooner rather than later to win its spurs as a player in space.

Chairman, let us express the wish that at this COPUOS session we may achieve the necessary consensus to embark upon a new phase in the multilateral treatment of the peaceful uses of outer space. A phase that bears the stamp of globalization, of interdependence and of the imperative to cooperate as well as a number of clear, attainable objectives geared to human wellbeing, human security and full enjoyment of human rights by persons, by people, by individuals, who should always be the ultimate beneficiaries of all our efforts and all our energy. Thank you.

The CHAIRMAN I thank the distinguished representative of Chile for his statement.

The next speaker on my list is the distinguished representative of Venezuela.

Mr. M. CASTILLO (Venezuela) (*interpretation from Spanish*) Thank you Chairman. On behalf of the delegation of the Bolivarian Republic of Venezuela may I congratulate you and the other individuals in the bureau on your chairing of the proceedings of the Committee and wish you every success over the coming days of work. The Bolivarian Republic of Venezuela endorses the words of solidarity expressed by other delegations to the people of Japan in connection with the natural disaster which afflicted that country in March of this year. This delegation endorses the statement made by His Excellency Ambassador Ali Soltanieh of the Islamic Republic of Iran on behalf of the Group of 77 and China as well as the statement made by His Excellency, Ambassador Freddy Padilla of Colombia, on behalf of the Group of Latin America and Caribbean Countries (GRULAC).

Chairman. I would like to inform you that on 26 May 2011 in the city of Caracas the People's Minister for Science, Technology and Intermediate Industry signed the contract for the construction and launching of the first Venezuelan remote sensing satellite, the VRSS-1 as it is known by its English acronym, in cooperation with the People's Republic of China through the Great Wall Industrial Corporation. This will be the second Venezuelan satellite to be launched into space by the end of 2012 for exclusively peaceful purposes and geared to Earth observation. What I have said demonstrates the commitment of the national government, which it entered into as of 1999, to devise and carry out a public policy on space issues and the peaceful use of outer space intended to promote technological independence and the use of space technology for social wellbeing and inclusiveness while also meeting governmental demands for communication, Earth observation and further space applications.

During this decade of technological boom, the Venezuelan space development has passed through a process which spans the creation of commissions, a specialized centre and the Bolivarian Space Activities Agency which has been operational since 1 January 2008. This Agency has amongst its functions the task of promoting and stimulating scientific research and technological development on space matters. It is upon that basis that it works to implement three space programmes namely, the Venesat-1 programme, that is the Simón Bolívar satellite. Secondly, the Research and Development Centre programme for manufacture of small satellites and, the VRSS-1 space programme, that is the Venezuelan remote sensing satellite which I have just referred to. All of which are coordinated by the People's Ministry for Science, Technology and Intermediate Industry.

The Venesat-1 programme, or the Simón Bolívar satellite, developed in cooperation with the People's Republic of China, contributes to the promotion of cultural values, education, health, provision of rural telephony services, Internet, telemedicine and education programmes, as well as broadcast of radio and television signals nationally. At present. there are 2,427 antennae installed across the country's territory. Furthermore, the coverage over the Caribbean and South America will help to bolster Latin American and Caribbean integration as well as international cooperation in the region. Starting with its launch on 29 October 2008 in Xichang in China, the Simón Bolívar satellite has been in the same orbital position, 78° West, and it functions to 100 per cent of its nominal design capacity. It is controlled by 30 national specialists, working 24/7 and which belong to the Venezuelan Space Agency.

In November 2009, the satellite monitoring system (CSMB) was installed at the Manga Earth station located in Montevideo, Uruguay. This will be used to monitor the southern beam of the Ku-band of the Simón Bolívar satellite, guaranteeing efficient administration of satellite capacity for communication services in Uruguay, Bolivia and Paraguay. By June 2011, the 26 remaining professionals currently finalizing their doctoral studies in China will return to Venezuela.

With respect to the research and development centre programme for manufacture of small satellites, we are seeking to generate our own indigenous space

technology through the fostering of integrated scientific networks connecting with the space sector, fostering research in cross-cutting areas such as material sciences, electronics, chemistry, telecommunications, education, informatics, geomatics, geophysics, and so on.

Lastly, we would highlight the VRSS-1 satellite programme geared to strengthening governmental decision making on energy issues, agriculture, health, education, environment, land and urban planning and comprehensive risk management. In a nutshell, the national government in implementing its lines of actions in space for the short and medium term has managed to install a satellite platform for interconnection of telecommunication networks of the State, in the new socio-economic model through this Venesat-1 programme. It has managed to introduce space technology applications in the public sector, supporting governmental decision making on energy, agriculture, health, education, environment, planning, land management and comprehensive risk management, through the training of human skills for remote sensing and geographic information systems with the beginning of the VRSS-1 programme.

Thirdly, it has managed to create national capacity both in training human talent and in developing cutting edge physical infrastructure, hosting our technological potential for satellite control Earth stations, manufacture of small satellites, satellite operators and satellite technology Ph.D. studies.

Chairman. The training of human talent plays a vital role in national space activities. Today, Venezuela has more than 1,100 officials trained in remote sensing and geographic information systems as well as 52 professionals who have graduated from the Indian Institute for Remote Sensing and the Space Research Institute of Brazil. It has 527 educators for the teacher training programme for the national educational system begun in 2007 and 404 professionals trained in national geomatics workshops as well as 121 trained in GNSS courses.

We should add to all of this the implementation of the technological and scientific exchange programme organized jointly by our space agency and the European space institution, EADS Astrium, geared to training Venezuelan professionals in designing satellite platforms, operating satellite control Earth stations and space programme management, taking in 90 professionals skilled in satellite operations and space project management. We are also coordinating with Willis Limited in order to hold a basic course on the safety of satellite platforms and this should be achieved by the end of June 2011.

In the same vein, we would underscore the institutional participation of our space agency in academic and scientific space activities. During 2010 the Agency attended as a conference lecturer the third International Conference on Telecommunication, Information Technology and Communication in Quito, Ecuador. We also attended as conference lecturers the symposium on Small Satellite Programmes for Sustainable Development in Graz, Austria, as well as a course on application of GNSS for human benefit and development as well as the sixty-first International Astronautical Congress both held in Prague, Czech Republic.

We can also report with satisfaction that during 2010 our Agency published five articles in Index to Scientific Reviews on central issues such as space management, telecommunications and gravimetric studies on the basis of satellite data in Venezuela and these are available on Venezuela's stand in the Rotunda. Continuing with information pertaining to Earth observation, I would like to point out that between 2007 and the current day the national government has acquired, processed and catalogued more than 50,000 SPOT-4 and SPOT-5 satellite images of which 20,000 have been granted to State bodies and to academia and this process will be strengthened further with the launching of the VRSS-1 satellite.

With the respect to the project on applications of satellite technology and social programmes, our Agency in coordination with the Ministries of Education and Health of the country is implementing a project for telemedicine and tele-education in the indigenous communities of the Municipality of Antonio Diaz, in the Delta Amacuro state. At the end of 2009/2010, we had satellite interconnection of schools and out-patient centres, access to the Internet for educational and medical purposes, installation and operation of 32 informatics and telematics centres, installation of solar panels in communities, strengthening of _____(?) systems in schools as well as the development of training material on telemedicine and tele-education. As well as the training of teachers, training of health professionals, passers-by and residents as well as involving indigenous people in the work sphere by way of technical support.

Chairman. Switching to other areas now and as part of its functions and purview our Space Agency coordinates with various national bodies for the introduction of space technology as a support tool for public administration. The stand outs are the

strengthening of the national seismological network of the Venezuelan Foundation for Seismological Research (FUNVISIS) a proposal for efficient management of satellite images in conjunction with the National Observatory for Science and Technology and Innovation and the Institute of Engineering in the use of space technology for disaster management and supporting civil defence units. We are planning research activities related to tracking of the orbital path of the Simón Bolívar satellite in conjunction with the Astronomy Research Centre.

In this regard, during the month of November 2010 in Caracas we held the training course for the operation of the International Space Map for Disaster Events in conjunction with the National Commission for Space Activities of Argentina (CONAE). This action facilitated the activation of the International Charter making it possible to obtain satellite data belonging to the JAXA Agency in Japan, the RadarSat operator in Canada and the CNES SPOT Centre in France, geared to dealing with the natural disaster which took place in December 2010 in the coastal area of the country owing to the adverse affects of climate change.

In connection with the international commemoration of the fiftieth anniversary of the first manned space flight by the Russian cosmonaut Yuri Gagarin on 12 April 1961 and the fiftieth birthday of COPUOS, the Space Agency of Venezuela in coordination with the Embassy of the Russian Federation accredited in our country organized in Caracas during April 2011, an event known as Space for Peace which benefited from a photographic exhibition, the projection of films and a chat cycle.

Chairman, in the Year of International Cooperation the Agency is working in conjunction with representatives of the People's Ministry for Foreign Relations in order to review, sign and ratify, international treaties and to analyse future cooperation strategies. During 2009-2011 we drafted and discussed instruments of bilateral cooperation with Argentina, France and Russia. In 2011 we signed a cooperation agreement with Bolivia and we are continuing to make headway in implementing cooperation programmes with China, India, Brazil and Uruguay.

Lastly, on behalf of my government, I would like to restate our readiness to cooperate with a view to contributing to a productive debate and express our wish that the work at this session may be a success. Thank you.

The CHAIRMAN I thank the distinguished representative of Venezuela for his statement.

The agenda item 4, general exchange of views, we have one last intervention for this afternoon, the European Space Policy Institute.

Ms. J. ROBINSON (European Space Policy Institute) Thank you Mr. Chairman. Mr. Chairman and distinguished delegates, it is a privilege to introduce to you the latest activities of the European Space Policy Institute (ESPI) a large number of which are relevant to the work of this Committee.

ESPI is a leading space policy think tank and its mission is to provide decision makers with an informed view on mid to long term issues relevant to Europe's, as well as global space activities. In this context, ESPI acts as an independent platform for developing positions and strategies. ESPI also organizes a global research and academic network, so called ESPRAN, and cooperates closely with other like minded governmental and non-governmental institutions.

Since the last session of the Committee ESPI has undertaken various initiatives of potential importance to this Committee's work. I would especially like to highlight our activities focus on space applications in Africa.

In this connection, in September 2010 ESPI published a report, prepared in cooperation with the Belgian EU Council presidency as a contribution to its conference on European/African cooperation in space applications. The main source for this report was an Africa/Europe Round Table that ESPI organized during the 2010 Scientific and Technical Subcommittee.

Also in late 2010 and early 2011, ESPI published a number of studies and policy papers covering areas such as space applications, technology, security and regulations. Specifically, two reports on transparency and confidence building measures in space could serve as a contribution to the work of the working group on long term sustainability of outer space activities. All ESPI reports can be downloaded at our website at www.espi.or.at.

The Institute likewise continues to serve as the editor of the Yearbook on Space Policy, the next edition of which covering the period 2009-2010 will soon be available. The volumes of the series entitled 'Studies in space policy' are prepared by the Institute as well as external researchers. These two book series are published by SpringerWienNewYork.

ESPI believes that its initiatives including a broad range of publications can effectively support the work of this Committee. Following the award of the special consultative status with the Economic and Social Council, ESPI visited the relevant department at the UN Headquarters in New York to discuss future cooperation.

To conclude, I would like to take the opportunity to invite all delegates to our reception and exhibition opening on 7 June 2011 at 7 p.m. at ESPI. We are especially honoured to have the chairman of the Committee as the introductory speaker at this event. Thank you Mr. Chairman.

The CHAIRMAN Thank you Ms. Robinson for your very consistent and condensed statement.

Ways and means of maintaining outer space for peaceful purposes (agenda item 5)

Distinguished delegates, I would like now to continue and hopefully conclude our consideration of agenda item 5, ways and means of maintaining outer space for peaceful purposes.

I have just been informed, distinguished delegates, that agenda item 8 has been postponed until Monday morning. We conclude with agenda item 5 now and the technical presentations.

The first speaker on my list is the distinguished representative of the Russian Federation.

Mr. G. BARSEGOV (Russian Federation) (*interpretation from Russian*) Thank you Mr. Chairman. Russia's approach to this highly important item of the agenda on ways and means of maintaining outer space for peaceful purposes a priority item I would say, was defined and continues to be motivated by principled interest in keeping that environment free of weapons, open to exclusively peaceful cooperation.

Obviously the strategic situation in the world would be unpredictable if weapons were deployed in space, first of all because of the global reach of such space based weapons. In view of technological characteristics it would be used selectively and in that it would be different from weapons of mass destruction which, for decades, has performed the function of a nuclear deterrent. The same difference is a factor that, under certain circumstances, could lead certain politicians to perceive space based weapons as the kind of weapons that can really be put to use. Removing barriers in terms of the perception of the strategic situation could lead to fatal changes in the process of political and strategic decision making in those countries that own such space based weapons and of course certain response measures would be forced on the part of other countries. The result would be a reproduced confrontation and rivalry which would then extend into a new sphere with far more unpredictable consequences.

It is well known how difficult it is to monitor compliance with disarmament agreements on Earth, it would be even much more difficult in outer space, if at all possible. Russia proceeds from the understanding that the actions of States which might lead to the deployment of weapons in space and the adoption of doctrines envisaging the possibility of the use of force in outer space would undermine the moral basis and the political logic underlying the strengthening of the non-proliferation mechanism. It would also undermine the fundamental principles and norms of international outer space law.

In 2001, at its fifty-sixth session of the UN General Assembly, Russia made two proposals to draft a comprehensive international legal instrument on the non-deployment of weapons of any kind in outer space, non-use of force or the threat of force with regard to space objects and, while such an agreement is being prepared, to introduce a moratorium on the deployment on means of combat in outer space. Later, Russia made a statement to the fact that it would not be the first to deploy weapons of any kind in space and called on space faring nations to join that initiative. The Russian/Chinese initiative put forward at the Conference on Disarmament and implemented in a draft treaty on that subject further consolidated work along those lines.

Mr. Chairman. New opportunities to move toward the final objective that we all seek could be provided by comprehensive transparency and confidence building measures in outer space. Based on the many years of work within the framework of the UN General Assembly, last year saw the publication of the final report by the UN Secretary-General which synthesizes all of the various existing proposals by States on this issue. In accordance with UN General Assembly resolution 65/68, it was decided to set up by the year 2012 a group of government experts who will be asked to synthesize and develop such proposals and develop recommendations as to their implementation in international practice. We believe that this Committee, while strictly adhering to its own area of competence, might note in its report our interest in that real tangible progress in an area that is adjacent to the set of issues we are considering here.

All of us need to also give some thought to the matter of establishing coordinated work for our own working group on the long-term sustainability of outer space activities which should be coordinated with the Group of Government Experts I referred to earlier. It is obvious that the mandate of the working group in regard to voluntary measures to promote the safety and sustainability of space activities as well as providing information regarding the situation in outer space can and should be correlated in a skilful and mutually beneficial way with the efforts that will be undertaken by the Group of Government Experts. We hope to meet with understanding among our colleagues since the principles and the organizational methods for an effective policy in this very important area require a highly responsible approach based on a conceptually broad vision of all the various components of this complex issue.

Mr. Chairman. In recent years the Committee and its subsidiary bodies have seen considerable changes occur in the methods of work. Still, so far it has not been possible to live up to the new possibilities in terms of the forms and methods of our work under that priority item of the agenda. When dealing with a situation we are in clearly there is a need for an in-depth consideration of the issue of maintaining peace in space. There are reasonable noteworthy ideas and proposals in that regard, what is lacking is a systematic approach to work in this area. Still we are not inclined to consider the situation as too dramatic and here are the reasons for that.

First, one cannot but take into account the fact that a number of aspects of space activities pertaining to maintaining outer space for peaceful uses is being considered in various ways under various agenda items of the Scientific and Technical and the Legal Subcommittees. I refer in particular to streamlining the mechanism for the peaceful development of outer space, strengthening and developing an international legal regime regulating space activities and important components of the work to ensure safe space activities and predictability in outer space. We can suppose, with a great degree of certainty, that a package solution regarding the scope of activities of the working group on the long term sustainability of space activities. What else would give us an opportunity to enhance our own understanding of the issues, ways to maintain space for peaceful purposes and get a clearer idea of the new emerging aspects of the issue.

Second, at present a propitious situation has arisen for real progress in considering confidence building measures in outer space. The Group of Government Experts has been set up, our own working group on the sustainability of outer space activities plans to consider a number of issues which also objectively touch upon the scope of competence for the Group of Government Experts. Furthermore, the European Union has a draft code of conduct for space activities which is essentially an extension of the same topic and it is planning a new political and diplomatic forum on that issue. In all of this, all of us will have to think about coordination mechanisms.

Third, the events and processes cited above confirm the most important thing, the inter-relatedness and interdependence of all elements that go into the issue of maintaining outer space for peaceful purposes. We proceed from the optimistic presumption that the overall evolution in States' approaches to this set of issues will have a positive effect on this Committee's work under that priority agenda item. Thank you very much Mr. Chairman.

The CHAIRMAN (*interpretation from Russian*) Thank you distinguished representative of the Russian Federation.

(*continued in English*) The next speaker on my list is the distinguished representative of Japan.

Mr. T. OSAWA (Japan) Thank you Mr. Chairman and distinguished delegates. Also on behalf of the people and the government of Japan I would like to express my sincere gratitude for the kind words and the great assistance you have extended to us following the difficult and tragic situation resulting from the historic 11 March earthquake and tsunami.

Mr. Chairman, it is a great pleasure for me to address the fifty-fourth session of COPUOS on the auspicious occasion of the fiftieth anniversary on agenda item 5, ways and means of maintaining outer space for peaceful purposes. In order to develop and maintain applications for the peaceful use of outer space, it is crucial that we build concrete bilateral and multilateral ties between interested parties. On that note, Japan has held a bilateral conference with the United States on GPS every year since 2001. At the latest meeting, held in January, Japan reported on the status of its operational MT-SAT satellite based augmentation system and the Quasi-Zenith satellite system programmes. While the United States describes the current status of their GPS system most countries took this opportunity to reaffirm the importance of sharing the interoperability and compatibility of all current and land GNSS with GPS and QZSS.

With respect to multilateral relations, developed under the COPUOS umbrella, Japan

strongly supports the International Committee on GNSS (ICG) established as a venue for broad information exchange about international and regional global navigation satellite systems and actively participate in discussions to promote increase in _____(?) and compatibility among international and regional GNSS providers.

Japan is pleased to be hosting the ICG-6 this September in Tokyo where we will work to cooperate with GNSS as provider and user countries more closely than ever before. It is our expectation that the activities of ICG-6 will aid in the expansion of world GNSS projects and applications. Furthermore, Japan will act as co-host of the Asia-Pacific Regional Space Agency Forum (APRSAF) a forum in which regional _____(?) countries can share the status of their space policies and plans as well as _____(?) their common interest through space utilization. This year's forum will be held from 6-9 December in Singapore, we look forward to your participation. Through these avenues of the exchange of views Japan strives to do its part to ensure the future of the peaceful use of outer space.

Mr. Chairman, on behalf of Japan I would like to re-confirm how important COPUOS is in the promotion of the peaceful utilization of space not only for those countries which partake directly in space activities but for those who, in the context of this Committee, have the ambition or desire to participate in the future. Japan has been taking part in multilateral discussions through COPUOS since it was first established and has contributed to the rule making processes and other achievements including the development of space treaties, principles and guidelines. Needless to say, Japan operates its space activities in full compliance with these rules and developments. In order to encourage broader country participation in the rule making process, Japan feels it is practical to establish soft laws which are not legally binding and we will cooperate fully in their formulation process.

Mr. Chairman I am delighted that long term sustainability of outer space activities is a topic for discussion by the subcommittee as this issue is key to the long term use of outer space for peaceful applications. During the last subcommittee, it was decided that four expert groups will _____(?) to better tackle the multifaceted nature of this agenda item. Japan will participate in each of these groups and recommends Dr. Obara, Director of the JAXA Space Environment Group, as co-chair for the expert group dealing with the matter of space weather. Japan looks forward to contributing its views and hearing the views of others especially with respect to the development of long term measures for sustainability of space activities. In particular we plan to share the technical knowledge and safety information we have accumulated through our space activity experiences in the hope that all information generated through the discussion can be summarized in a timely fashion and appropriately distributed, lending further to the overall development of ways and means of maintaining outer space for peaceful purposes.

Mr. Chairman. Our predecessors worked hard over the last 50 years to create a strong foundation for us. _____(?) we can shape the future of space utilization it is Japan's hope that this foundation will continue to be used to ensure the sustainable and peaceful use of outer space. It can only be hoped that 50 years from now our contribution will be looked upon as an excellent example of the ways and means through which outer space can be maintained not just peacefully but sustainably for generations to come. Thank you very much for your kind attention.

The CHAIRMAN I thank you very much Excellency for your statement.

The last speaker on my list for agenda item 5 for today is the distinguished representative of the United States.

Mr. K. HODGKINS (United States of America) Thank you Mr. Chairman. Mr. Chairman today there is an unprecedented level of international cooperation in space, the United States has a long and successful history of civil space cooperation with other partners. Over the past five decades, the US has concluded more than 4,000 agreements with more than 100 nations and international organizations and the level of new cooperation is rising each year. During the past year NASA signed 75 new international agreements with over governmental and non-governmental entities. The number of nations investing in space activities has also steadily grown and there is now a significant private sector presence in outer space. Looking to the future, international space cooperation will continue to be fundamentally important to the US.

Since our last meeting the United States has engaged in a variety of international ventures that will produce significant benefits in the use of outer space for peaceful purposes. For example, the United States has many productive bilateral relationships on satellite navigation issues. The US wishes to compliment Italy and the European Commission on its successful hosting of the fifth meeting of the International Committee on Global Navigation Satellite Systems,

ICG-5, and the meeting of the related Providers Forum in Turin, Italy, 18-22 October 2010. We commend the Office for Outer Space Affairs for its outstanding performance in assisting with the planning and organization of this meeting and for its continued support as the executive secretariat for the ICG and Providers Forum. The US continues to provide financial support to OOSA in support of GNSS related activities including regional workshops and support to the ICG and Providers Forum.

The US also has many productive bilateral relationships on satellite navigation issues. We meet regularly with India, Japan, Russia and the European Commission, to discuss ways in which we can enhance interoperability among systems and improve services for the global user community.

From a broader perspective the US is reaching out to other nations to consider international cooperation. Our objective is to promote common space exploration objectives and cooperative or complimentary space exploration missions along with the development of new technologies that will open up many opportunities for exploration and discovery.

Similarly, the United States works through the Group on Earth Observations (GEO) with the other 79 member countries, the European Commission and 46 participating organizations to establish a global Earth observation system of systems. The GEO vision for GEOSS is to realize a future wherein decisions and actions for the benefit of humankind are informed via coordinated, comprehensive and sustained Earth observations and information. The United States is also a member of the Committee on Earth Observation Satellites (CEOS). CEOS has been recognized as the principal space segment coordination mechanism for GEO and is coordinating space agency support to GEOSS.

In light of these developments and the accomplishments of COPUOS, my delegation remains unconvinced of the need for action to be taken by this Committee related to concerns regarding the weaponization of outer space. There is no scarcity of appropriate multilateral mechanisms where disarmament matters can be discussed. COPUOS is not and should not become one of them. COPUOS was not created to deal with disarmament.

More than five decades ago the General Assembly adopted resolution 1348 which established the Ad Hoc Committee on the Peaceful Uses of Outer Space. The resolution marked a significant step forward for the world community in that it established COPUOS as the only standing body of the General Assembly to consider international cooperation in the peaceful uses of outer space. At the time the concept, which is still valid today, was to establish COPUOS as the body of the General Assembly concerned exclusively with promoting international cooperation in the peaceful uses of outer space. It was clear that there would be entirely independent efforts to deal with disarmament issues, these would include fora such as the First Committee of the General Assembly and the Conference on Disarmament in Geneva.

This Committee has played a notable role in advancing space cooperation and provides a unique forum for the exchange of information among developed and developing countries on the latest developments in the use and exploration of space. In our view, there are tangible opportunities to enhance international cooperation in keeping with the Committee's mandate. Our consideration of the ways and means of maintaining outer space for peaceful purposes has produced measurable results in the revitalization of COPUOS. Under this item, member States concluded that reinforcing international cooperation in space implies the need for the Committee to improve the form of its work. This has been reflected in the restructured agendas of the Scientific and Technical and Legal Subcommittees, the unique organizational aspects of UNISPACE III, the addition of new items to the agenda of COPUOS concerning, for example, spin-off benefits of space and space and society, and the consideration of developments in the international satellite-aided search and rescue programme, known as Cospas-Sarsat.

An indication of the success of our efforts to revitalize COPUOS is the growing relevance of our Committee's work to the international community more generally as shown in part by the steady increase in the number of other intergovernmental organizations as well as NGOs and private firms that seek participation in the Committee's work. This is an extremely positive development, the presence of non-governmental entities and the willingness of experts to make special presentations have enriched the Committee and its subcommittees and the ultimate success in implementing the recommendations of UNISPACE III will depend heavily on their continued involvement.

Finally, Mr. Chairman, in this regard I am pleased to note that my delegation includes representatives not only from other agencies in the US Government but also from the Space Foundation and the George Washington University's Space Policy Institute. Thank you Mr. Chairman.

The CHAIRMAN I thank the distinguished representative of the United States for his statement.

Distinguished delegates we have concluded our consideration of agenda item 5, ways and means of maintaining outer space for peaceful purposes.

Greece has a comment.

Mr. V. CASSAPOGLOU (Greece) I ask for the floor on this agenda item as we have enough time because I am leaving tomorrow very early in the morning, so I do not have the possibility to take the floor next week on this specific matter.

I avoided to speak on the other items of the agenda but this one I think is important.

I have with due attention the interventions of our colleagues from the Russian Federation and the United States, _____(?) the colleague from Japan. I read the day before yesterday, the conclusions of the first round of the conference of disarmament _____(?) just at the end of the last month and unfortunately the deadlock continues. On the _____(?) materials, our problem is the missiles and the dilemma which is logical and not only political or legal or ethical is what is the difference between the peaceful uses and the other one is, the non-peaceful. The problem is why this fragmentation on the institutional level as well as on the legal level, that is why it is necessary to reconsider an idea age of 25 and more years to establish a world space organization empowered with all necessary abilities, even to go verification system .. that was the very first recommendation just some days after Sputnik-1 in the resolution of the General Assembly. This resolution was taken unanimously, first of all, secondly I do not know why to insist this kind of increase, we have an expression saying playing the _____(?) because we have once and for ever to decide to go farther. The existing regulatory framework is not enough but there is no possibility to use space for military purposes, so-called peaceful, there is no peaceful military uses. All of them are aggressive and the users of space is always military users. In ITU, 90 per cent of radio frequencies is used for military purposes, some of them are also used for space military purposes which is unacceptable. After 50 years of, to use the French expression _____(?), I think we have to reconsider the _____(?). Thank you very much.

The CHAIRMAN Thank you very much distinguished representative of Greece.

So we would now like to proceed with the technical presentations. I will ask if any of the presenters could make the presentation on Monday? At least one because we lose the interpretation, we still have 25 minutes of interpretation and we really do not have time. Every day I think we have to stay longer and we will have only the possibility to speak in English after 6 p.m. We have many, many, statements and if you really do not limit the statements and express only the essence, we will not have time to finish the session.

The first presentation on my list is Mr. Marcel Egli of Switzerland entitled 'Space Biology Group: Research and Space Support Centre'.

[Technical presentation]

The CHAIRMAN Thank you Mr. Egli for your presentation it was interesting.

The second presentation on my list is by Mr. Alexander Alferov of the Russian Federation entitled 'Space Medicine: from the flight of Yuri Gagarin up to interplanetary expedition'. We have 16 minutes of translation. If it is possible to be short just to be understandable by everybody.

[Technical presentation]

The CHAIRMAN (*interpretation from Russian*) I thank you for your presentation Mr. Alferov.

(*continued in English*) Distinguished delegates, I wish first to inform you about the schedule for Monday and then to listen, just in English, to the last presentation of Mr. Stone. I would now like to inform delegates of our schedule of work for Monday morning. We will reconvene promptly at 10 a.m. At that time we will begin our consideration of agenda item 6, implementation of the recommendations of UNISPACE III. Agenda item 7, report of the Scientific and Technical Subcommittee on its forty-eighth session and item 10, space and society. We will conclude our consideration of agenda item 8, report of the Legal Subcommittee.

By listening to the statements carried over from today, following the plenary there will be three technical presentations. The first by a representative of Italy, the second one by a representative of the United States and the third, by a representative of Japan.

In the evening there will be a reception hosted by the United States at 6 p.m. in the VIC Restaurant.

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

I give the floor to the Secretariat.

Mr. N. HEDMAN (Secretariat) Just a very brief announcement. On Monday morning between 9 and 10 a.m. there will be continued informal consultations on long term sustainability under the guidance of the Chair of the working group, Mr. Peter Martinez, in room M7. So, 9 a.m. on Monday morning in M7, it will be shown on the monitors. For your information, we have distributed, in all pigeon holes, a revised text of the non-paper distributed earlier on this particular topic, the terms of reference. A revised text taking into account informal consultations held today on 3 June. Thank you Mr. Chairman.

The CHAIRMAN Now we will listen to a presentation of Mr. Stone and Mr. Hutchinson on 'World Space Week Report and Recognition'.

[Technical presentation]

The CHAIRMAN Thank you Mr. Stone and Mr. Hutchinson for your presentation. I am a little bit astonished by the very technical approach of the World Space Week.

I recommend for next week a very concrete specific approach of the theme of the presentation.

I would now like to invite you to the reception by the Asia-Pacific Space Cooperation Organization in the VIC Restaurant to be followed by a reception by the Russian Federation at the Permanent Mission of the Russian Federation.

I would also like to wish you all a nice weekend.

This meeting is adjourned until Monday 10 a.m. Thank you for your cooperation.

The meeting closed at 6.24 p.m.