Committee on the Peaceful Uses of Outer Space Fifty-seventh session

681st Meeting Monday, 16 June 2014, 10.00 a.m. Vienna

Chairman: Mr. A. Oussedik (Algeria)

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

The CHAIRMAN: Good morning distinguished delegates. I now declare open the 681st meeting of the Committee on the Peaceful Uses of Outer Space.

Distinguished delegates, I would first like to inform you of our programme of work for this morning.

We will continue our consideration of agenda item 5, General Exchange of Views, and agenda item 8, Report of the Legal Subcommittee on its Fifty-Third Session. We will also begin our consideration of agenda item 9, Space and Sustainable Development.

There will be two technical presentations this morning by a representative of India entitled "Indian Experience in Use of Earth Observation Inputs for Resource Consideration and Development Planning", and by a representative of China entitled "China's Space Policy: Legislation and International Cooperation".

The Working Group on the Long-Term Sustainability of Outer Space Activities will then hold its first meeting. This meeting will be followed by informal consultations during lunchtime starting at 1.00 p.m. in Meeting Room C0739.

Are there any questions or comments on this proposed schedule?

I see none.

General exchange of views (agenda item 5)

Distinguished delegates, I would now like to continue our consideration of agenda item 5, General Exchange of Views.

The first speaker on my list is the distinguished delegate of Chile, His Excellency Ambassador Armin Andereya.

Mr. A. ANDEREYA (Chile) *(interpretation from Spanish)*: Thank you very much Mr. Chairman. Since this is the first time my delegation has taken the floor, let me convey my congratulations to you on chairing the fifty-seventh session of the United Nations Committee on the Peaceful Uses of Outer Space and let me assure you of every support and cooperation on the part of my delegation.

Chile associates itself with the statement made by GRULAC and I would like to also take this opportunity to welcome the new Director of the United Nations Office for Outer Space Affairs, Madam Simonetta Di Pippo, wishing her every success in her work.

Mr. Chairman, for my country it is of fundamental importance to maintain outer space for peaceful purposes. We are convinced of the benefits that it provides for humankind as a whole in its development, particularly to developing countries who recognize the common interest of all humankind and the right of all States to participate in the exploration and use of outer space for exclusively peaceful purposes. Chile reiterates its firm support and strict compliance with the principles and agreements that governs States' activities in outer space. We believe that technological breakthroughs in recent years have allowed us much greater access to outer space but they must go hand-in-hand with an equivalent development in the normative, legislative and ethical framework.

In this context, my delegation believes it is necessary to strengthen the existing treaties on outer space and to develop international norms that would be binding in nature.

I would like to emphasize the fact that preventing an arms race in outer space and banning the placement or use of weapons in outer space would help us avoid a great threat to world peace and international security. In this regard, we underscore the importance of observing existing agreements on arms limitation and disarmament as it applies to outer space as well as the existing legal regime governing the use of outer space.

Furthermore, with a view to filling the gaps that exist in the current legal framework, all countries have the responsibility and duty to develop new international instruments that would effectively confront these risks and threats.

I would like to take this opportunity to emphasize, once again, the importance of implementing the conclusions and recommendations of the United Nations Expert Group on Measures of Transparency and Trust in Outer Space Activities.

Mr. Chairman, I would like to briefly refer to Chile's satellite, FASAT-C, which is currently in orbit as part of the Earth observation project. The satellite was launched in December 2011. Chile notified the Secretary-General and submitted the necessary information required to register FASAT-C in accordance with the United Nations Agreement on the Registration of Space Objects, and, of course, Chile is a Party to that Convention.

I would like to add that this satellite is an important contribution to our governance, civilian decision-making, the work of public institutions in our country, providing an opportunity to register natural resources, carry out agricultural studies, disaster prevention and so forth. A technical presentation made by a member of my delegation, a representative of the Space Operations Group, on Thursday last week, provided more details as to that project.

Mr. Chairman, with regard to space debris, Chile believes it is a step in the right direction that the Space Debris Mitigation Guidelines were approved. Having said that, I would like to reiterate our concern in view of the frequent de-orbiting of space debris and the associated risks, particularly their falling into the Pacific Ocean. My country hopes that, on the basis of the Space Debris Mitigation Guidelines, developed by COPUOS, and the Guidelines of the Inter-Agency Coordination Committee in the area of space debris, countries that carry out activities in outer space will adopt safeguards to control and avoid the generation of space debris and will, in real time, provide trustworthy information that would make it possible to evaluate risks on a timely basis to make sure that we make all re-entry of debris safe.

In this regard, I would like to congratulate the Czech Republic on its initiative, launched jointly with Germany and Canada, to develop a Compendium of Norms, adopted by States and international organizations, to mitigate space debris. It was presented in the most recent session of the Legal Subcommittee in March of this year. Mr. Chairman, another matter of great importance to my country has to do with the geostationary orbit. We must be aware of the fact that this is a limited natural resource at the risk of saturation and thus there is a threat to the sustainability of space activities. We believe this is a special situation which requires the development of a legal regime that would rationalize and guarantee access to the geostationary orbit for all States, independently of their technical capabilities, particularly taking into account the needs of developing countries. Of special importance, therefore, is keeping this item on the agenda of COPUOS.

Mr. Chairman, for my country, the Legal Subcommittee of COPUOS is the most important multilateral forum for discussing and analysing legal instruments and principles which govern and regulate human activities in outer space, with a view to developing new instruments, improving the implementation of existing ones, and strengthening binding legal norms that have been established. Therefore, we believe that interaction between the Scientific and Technical Subcommittee on the one hand, and the Legal Subcommittee on the other hand, must be further strengthened with a view to synchronizing the progressive development of space law with the advancement of scientific and technical progress. In the last session of the Subcommittee, it was proposed that the debate be restructured with a view to reinvigorating and strengthening the Legal Subcommittee, introducing new methods of work, taking into account the difficulty of obtaining satisfactory results based on the current structure.

While that proposal did not get approved by the Subcommittee, it is important to highlight the fact that the debate should continue, that the Subcommittee be made more dynamic and reinvigorated in this way. We are interested in continuing this dialogue about the future vision of the Legal Subcommittee of COPUOS with a view to strengthening it and revitalizing it.

Finally, Mr. Chairman, let me express our thanks for the trust of GRULAC countries in us in endorsing the candidacy of Chile in the person of Mr. Hellmut Lagos to chair the fifty-fifth and fifty-sixth session of the Subcommittee.

Thank you very much.

The CHAIRMAN: I thank the distinguished delegate of Chile, His Excellency Ambassador Armin Andereya, for his statement.

The next speaker on my list is the distinguished delegate of Argentina, His Excellency Mr. Rafael Mariano Grossi.

Mr. R. M. GROSSI (Argentina) *(interpretation from Spanish)*: Thank you very much Mr. Chairman. Mr. Chairman, allow me to convey to you, as well as to the Vice-Chairmen Mr. Diego Stacey Moreno and Mr. Samir Mohammed Raouf, warm congratulations upon your appointment. We wish you every success in guiding the debates that this Committee shall be undertaken throughout these days.

Furthermore, my delegation echoes the words and congratulations and gratitude expressed for the accomplished and dedicated work of your predecessors.

We would also like to thank the Secretariat for the preparation of these meetings, ensuring the availability of documents on the webpage and the constant endeavour to make progress in this work.

Mr. Chairman, my delegation already had an opportunity at our last encounter during the fifty-third session of the Legal Subcommittee to convey well-deserved congratulations to the recently elected new Director of the Office for Outer Space Affairs, Dr. Simonetta Di Pippo.

Here today, we would like to reiterate our delegation's firm resolve to contribute to this plenary meeting, both effectively and efficiently.

Mr. Chairman, we note with great satisfaction that new States have joined the membership of this Committee and we believe that the growth in the membership of this Committee reflects the great conviction within the international community to work in unison in order to meet the aims and objectives established in the sources of law that govern outer space. And in this regard, we extend our full support to the Grand Duchy of Luxembourg, should this Committee decide that it may participate in this forum as a new member.

We would also like to convey our full support for the statement delivered by the distinguished Ambassador of Guatemala, speaking on behalf of GRULAC.

Mr. Chairman, we re-state our respect for the treaties and principles adopted by the United Nations governing outer space which underscore the following in particular: equal and non-discriminator access to outer space for all States, irrespective of their level of

scientific, technical or economic development, as well as the equitable and rational use of outer space; non-appropriation of outer space, including the Moon and other celestial bodies; non-militarization of outer space; and its exploitation solely for peaceful purposes, as well as international cooperation to promote space activities.

We understand that the challenges that emerge from progress made in the exploration and use of outer space must be matched by regulatory corollary in order to guarantee the sustainability of space activities, and here, we recall the commitment to enhance international cooperation in order to tackle the persistent difficulties related to sustainable development for all and in particular for developing countries, as was reflected in the Rio+20 Declaration, and we call for a more fluid interaction between both Subcommittees in order to update existing norms, create necessary norms and to provide appropriate legal and technical assistance in order to implement these norms and ensure they remain valid.

Mr. Chairman, the agenda for our debates at this session includes matters of great relevance and in particular those related to the long-term sustainability of space activities, such as the regulation of space debris, the observation of near-Earth objects, and the responsible use of nuclear energy. Our concern regarding these matters can only be allayed should we adopt a comprehensive perspective that will include the regulation of these areas through an appropriate binding legal framework and with the assistance of non-binding instruments that ensure the effective implementation of these legal parameters. In turn, there are also procedural matters related to the optimization of the functioning and working of this Committee and of its two Subcommittees which is essential in order to fully meet the mandate that has been granted to these organs, consolidating joint efforts that have been made in this area. Therefore, my delegation strongly hopes that the contributions to be made during these meetings will imply progress made towards the objectives that we have set.

As cooperation is one of the fundamental pillars of the peaceful use of outer space, Argentina, in compliance with our National Space Plan, is pleased to convey to you the following milestones that have been undertaken in cooperation with other countries and space agencies.

The SAC-D-Aquarius Project. The SAC-D-Aquarius satellite mission is part of a cooperation programme between CONAE, the National Space Programme, and the Goddard Centre and the Jet

Propulsion Laboratory, JPL, both of which come under NASA.

The Oceanographic and Climate Observation Satellite, SAC-D-Aquarius, which was built by the Argentinian company, INVAP, and which was launched into space on 10 June 2011, is already providing temperature and humidity measurements for a better study of the Gourdon Glacier in the Antarctic Peninsula. This is the first data transmitter located in the Antarctic, in addition to the data collection system which is already established in our country.

The SAOCOM Project. Here the Argentinian Space Agency and the Italian Space Agency, ASI, are currently developing their two L-Band Radar Satellite Missions, in addition to the four COSMO-SKYMed X-Band Radar Satellites of ASI which are already in orbit. These comprise the SIASGE, which is the Italian-Argentinian satellite system for emergency management. The two SAOCOM satellites are to be launched in 2015 and 2016.

SABIA-MAR. The Argentinian Space Agency, together with the Brazilian Space Agency and the INPE, are continuing their efforts to develop the joint satellite mission SABIA-MAR which shall serve the purpose of ocean observation, observation of ecosystems and monitoring of the Argentinian and Brazilian coasts, in particular oil platforms and fisheries.

Cooperation with the People's Republic of China. On 23 April 2014 in Buenos Aires, the Minister for Federal Planning, Public Investment and Services of Argentina, Architect Julio De Vido, and the Minister of Foreign Affairs of China, Mr. Wang Yi, signed an Agreement between both Governments for Cooperation in the context of the Chinese Moon and Mars Exploration Programme for the building, establishment and operation of land-based following sites for the command and acquisition of data, including an antenna to be used for the investigation of distant space located in the territory of the Neuquén Province in Argentina. This station, which is to begin operations in 2016 is the third in the Chinese network of stations for inter-planetary exploration missions. This cooperation provides our National Space Agency with an opportunity to have access to using time of the antenna in order to develop national projects as well as regional and international projects. It is also an opportunity to participate in inter-planetary exploration programmes and thus, by providing support to the Chinese Moon and Mars Programme, we will also be engaging in exploration activities of the Universe.

Mr. Chairman, as regards my country's progress in the field of space development, I would also like to refer to the Tronador-II Satellite Launcher with which Argentina hopes to complete its cycle of space technological development and thus join the group of countries that have their own space vehicles. Tronador-II is a multi-phase, single use rocket, designed by the National Space Agency, and which serves to place satellites in polar orbit and in order to send payload masses to low orbits. On 26 February 2014, the first test took place in the area near Buenos Aires, called Pipinas. This is the first test using the test vehicle VEX-1A, the first of a total of six experimental vehicles. The second planned test of VEX-1B is to take place towards the end of this month.

Mr. Chairman, my delegation understands that building capacity among the various protagonists involved in space matters, both on technical as well as legal matters, is of key importance, and in this regard, I would like to single out a number of training activities that my country is engaged in.

The first Workshop on Data Management Onboard the SAC-D-Aquarius, which was held at the National Space Agency Headquarters in April this year.

In the context of an Agreement with the Bolivarian Space Agency of Venezuela, ABAE, on 13 May, in Buenos Aires, a Training Course was held for Space Management, addressing, *inter alia*, the following aspects, basic aspects on ensuring certainty and security of satellite platforms, management of space programmes, and various scenarios for international cooperation in order to ensure the peaceful use of outer space.

At the close of that week, technical discussions were held as well as an opportunity for exchange of experience on the ABAE and our National Space Agency projects.

In turn, we have also developed a training course entitled "Application of Synthetic Aperture Radar Hydrology Image Application for and for the Environment in the Plata River Basin", between 13-17 May. This course enjoyed a broad regional participation as well as the participation of more than 20 experts from Argentina, Bolivia, Brazil, Paraguay and Uruguay. The focus of this training was based on synthetic aperture radar technology as well as its eco-hydrological applications in the context of pilot projects that have been launched in the aforementioned countries.

With the support of the United Nations Office for Outer Space Affairs, the Fourth International Training School for Advanced Training in Panoramic Epidemiology was held between 19-30 May this year in Córdoba, a province of Argentina, which brought together experts from 11 countries of the region, and here we would like to thank the Office for Outer Space Affairs for its constant support in order to ensure the greatest possible participation at this activity for the benefit of countries of the Latin American and Caribbean region in order to meet real and practical needs in our region.

I would also like to underscore that between March and November 2014, CONAE fulfilled its role as a lead agency in the context of the International Charter Space and Major Disasters which culminated with the convening of the twenty-ninth meeting of the Directorate and the Executive Secretary of the Charter at the Space Centre of the CONAE.

Finally, a Training Course on Image Processing Software is to be held, SoP-I, as it is known in English, which is a free instrument, a free tool used for the processing analysis of satellite information which has been developed in Argentina. This has been designed in particular in order to work on satellite images in a SIG environment, that is a geographic information system environment. The course is geared towards users making use of satellite images, not for experts, that is, it is intended for public entities, national, provincial and municipal entities, as well as educational centres, such as universities or tertiary education centres. Through the development of these tools, we are seeking to facilitate and promote the broadest possible access to satellite information among the population in the general terms.

Furthermore, we are also proud to announce that the Argentinian company, ARSAT, under the aegis of the Ministry for Federal Planning, will be launching into orbit in September this year, the first geostationary communication national satellite, known as ARSAT-1, which was also built, as were others, in the Argentinian satellite chain, by the Argentinian company, INVAP. This satellite, ARSAT-1, will be providing a broad range of services in the fields of telecommunications, such as television, telephone, Internet, *inter alia*, providing full coverage for Argentina, Chile, Uruguay and Paraguay, and with the following satellites launched in this series, ARSAT and ARSAT-3, it will be providing full coverage for the entire continent.

Mr. Chairman, with these comments made, I once again wish you the best for this meeting and can assure you, as of now, of my delegation's full support.

Thank you very much.

The CHAIRMAN: I thank the distinguished delegate of Argentina, His Excellency Mr. Rafael Mariano Grossi, for his statement.

The next speaker on my list is the distinguished delegate of Brazil, Mrs. Vivian Loss Sanmartin.

Ms. V. LOSS SANMARTIN (Brazil): Mr. Chairman, distinguished delegates, since this is the first time my delegation addresses the floor, allow me to congratulate you, Mr. Chairman, on your election. Brazil is confident that under your chairmanship, this Committee will make great strides in its task of promoting international cooperation in the peaceful uses of outer space. Let me assure you that you will have the full support of my delegation.

I would also like to extend our warmest congratulations to Ambassador Diego Stacey of Ecuador on his election to the office of First Vice-Chair this Committee. GRULAC has played a very active role in COPUOS and having a representative of our region on the Board is a moment of particular significance to us.

My delegation would also like to reiterate its welcome to the election of Dr. Simonetta Di Pippo to the position of Director of the United Nation Office for Outer Space Affairs. Dr. Di Pippo's qualifications provide us with the reassurance that the work of this Committee will maintain the same high standards set by her predecessors.

Mr. Chairman, as we address the plenary session of COPUOS once again, we cannot help but think of all the momentous tasks before us. Since this Committee was set up by the General Assembly in 1959, much has been accomplished. Let us recall the five outer space treaties. the Space Debris Mitigation Guidelines, and the Guidelines on the Use of Nuclear Power Sources in Outer Space.

Special mention should be made to the work achieved and the work in progress in our Working Groups. In this session, for instance, we will be looking at some of the findings of the Working Group on Long-Term Sustainability of Outer Space, chaired with great competence by Professor Peter Martinez, of South Africa.

Still, as we recall all these achievements, we must think of how much still needs to be done. We have plenty of work in progress. There are countless tasks that we have not yet been able to tackle. Let us,

for instance, think of the question of the definition and delimitation of outer space. The need to revise and update the outer space treaties. The need for new legally binding instruments that can address developments in outer space activities since the Moon Treaty was finalized in the late 1970s.

Last April, in the fifty-third session of the Legal Subcommittee, my delegation recalled that the International Civil Aviation Authority had started to address issues related to the definition and delimitation of outer space. Brazil also expressed a number of concerns related to the fact that consultations on the European proposal for an International Code of Conduct for Outer Space Activities were underway outside of COPUOS. These two examples provide us with a warning, a warning that if we fail to act, someone else who lacks the proper mandate will do. In the end, the result may be a treaty, agreement or accord that is not a true reflection of multilateral needs and interests. However, these two examples also provide us with an opportunity in the sense that they indicate clearly some of the key issues we are being tasked with. I believe we are up to this task. I believe we have the resolve to reach compromises and make progress as we have so many times showed. I believe we are willing to make progress. By making headway, we can counter criticism that progress at COPUOS is painstakingly slow and difficult.

One of the aims of COPUOS is to study legal problems arising from the exploration of outer space. The complexity of outer space activities and the diversity of interests involved in them require multilaterally-negotiated solutions. It is Brazil's view that COPUOS is the key forum where such solutions can be found and thus ensure that the benefits of space exploration can be shared by all humanity.

Mr. Chairman, distinguished delegates, Brazil fully endorses international principles guiding the peaceful use and exploration of outer space enshrined in the five main treaties on the peaceful uses of outer space.

Brazil also recognizes that space technology can make essential contributions to our development agenda. The final document of the Rio+20 Conference, "The Future We Want", clearly recognizes the importance of space technology-based data, *in situ* monitoring and reliable geospatial information for sustainable development, policy-making, programming and project operations. It also recognizes the efforts to develop global environmental observation systems and the need to support developing countries in their efforts to collect environmental data. There can be no sustainable development without space science and technology, and space applications make fundamental contributions to economic, social and cultural development and welfare.

My delegation attaches great importance to the work of the Working Group on the Long-Term Sustainability of Outer Space. Brazil holds the view that space should be used in a sustainable manner to benefit the whole of mankind and that all countries are entitled to explore outer space in conditions of equality. We are, therefore, eager to contribute with the Working Group to ensure that its final report reflect the needs of the developing world.

Space-related technologies have become a key element in the promotion of economic and social development. Is essential to develop and expand cooperation mechanisms that can help ensure that the benefits of space exploration can be shared by all of mankind, not only as spin-offs, but also in areas such as telecommunications, disaster management, weather forecast, agriculture and crop management. Brazil advocates and has implemented an open and free data policy so that satellite data can be put to use in those areas which need them most. For this reason, Brazil also supports programmes aimed at training and educating users in developing nations to receive, interpret, use and make this data available to end-users in a meaningful way.

At the end of 2014, Brazil and China expect to launch a new CBERS satellite, which will allow us to resume our CBERS for Africa Initiative. Brazil is willing to expand this initiative and also work with other countries that wish to develop joint projects to improve and expand the use of space applications.

Mr. Chairman, my delegation would like to express its concern over initiatives that affect the preservation of outer space as an arms free environment. Brazil believes that no efforts should be spared to prevent an arms race and the placement of weapons in outer space. We are, therefore, pleased to learn that China and Russia have recently presented a revised draft of the Prevention of Placement of Weapons in Outer Space Treaty in the Conference for Disarmament. The Prevention of Placement of Weapons in Outer Space Treaty represents a very important contribution to the preservation of outer space for peaceful purposes and negotiations on Conference for Disarmament should receive the full support of COPUOS.

Brazil attaches great importance to the management of space debris. It is very clear that

despite all our efforts, we are faced with formidable challenges in the issue of space debris in light of its potential dangerous effects on the safety and sustainability of space activities. New launches and existing orbiting space objects face growing risks from the large amount of man-made debris orbiting the Earth. It is clear that despite all our mitigation efforts, debris continues to pose a problem that affects the long-term sustainability of space activities. Although some progress has been made on the mitigation of space debris, mitigation solutions should not impose undue costs on the emerging space programmes of developing countries. It is clear to us that the legal implications of this issue remain undeveloped. It is Brazil's position that the time is ripe for the development of legal mechanisms that can deal with the problem of space debris and its consequences.

Mr. Chairman, I would also like to make a reference to the work of the Group on Earth Observations, GEO. As all of you are aware, earlier this year, at the Ministerial Summit in Geneva, a decision was made to extend GEO's mandate beyond 2015. This is an important recognition of the work that has been achieved by GEO, work that is far from complete, GEO challenges related to, for instance, food, water and energy security, natural disaster management and environmental sustainability. I, therefore, urge all delegations to support and contribute with the work of GEO and promote the implementation of GEOSS.

Finally, Mr. Chairman, I would like to end my statement by reaffirming that Brazil is fully committed to the work of COPUOS and its Subcommittees and my delegation is very keen to contribute with the extremely important tasks that this Committee has to address. Our work may be difficult, but it is also rewarding, and it is to the rewards that will be reaped by the whole of mankind that my delegation looks forward to.

Thank you all for your attention.

The CHAIRMAN: I thank the distinguished delegate of Brazil, Mrs. Vivian Los Sanmartin, for her statement.

The next speaker on my list is the distinguished delegate of Italy. His Excellency Ambassador Filippo Formica.

Mr. F. FORMICA (Italy): Thank you Mr. Chairman. Mr. Chairman, at the outset, allow me to congratulate you, Dr. Oussedik, for chairing the fifty-seventh session of the Committee on the Peaceful

Uses of Outer Space. I am confident that under your able guidance the Committee will be led to valuable results.

Let me also express my gratitude to Dr. Horikawa for the achievements made last year as Chairman of the previous session of COPUOS. Please consider the full support of the Italian delegation during this Committee and for further needs.

I would like to take the opportunity to express, once again, our congratulations to the new Director of the Office for Outer Space Affairs, as this is the first session of the Committee after her designation. I am certain that under her leadership, the United Nations Office for Outer Space Affairs will further strengthen its role as a promoter of international cooperation in the peaceful uses of outer space activities. In wishing her every success in her endeavours, let me assure of our full support in her new assignment.

Mr. Chairman, the Italian delegation fully endorses the statement delivered by the European Union. Nevertheless, I would like to add some more remarks at national level and I would also draw your attention on some of the latest Italian achievements in the field of peaceful uses of outer space. More detailed comments are being made on specific issues under items 5, 7, 8 and 10 of the agenda.

Let me start by quoting an inspiring aphorism of one of the greatest geniuses of all times, Leonardo Da Vinci, who used to say that "for once you have tasted flight, you will forever walk the Earth with your eyes turned skyward, for there you have been, and there you will always long to return". I could not find any more evocative words to grasp the spirit of space exploration and its revolutionary value in the history of human progress. We are entering a new era where advances in the peaceful uses of outer space will contribute to a sustainable development on Earth.

We share the view that space activities should be considered as an effective driver of economic growth and spin-off innovations for the benefit of all mankind. We are convinced that in the very next future the contribution of space technology to job creation, sustainable patterns of production, human health, environmental protection and widespread socioeconomic well-being will rapidly and steadily increase. This connection between space and Earth will be further enhanced.

Since the adoption four years ago of the Italian Document of Strategic Vision for the current decade, the Government of Italy has strongly reaffirmed its

confidence in the progress of outer space activities as a major asset in our national research system and a relevant interest of our foreign policy. We believe that a peaceful and sustainable conduct of these activities require more and more cooperation among nations. Thus, Italy attaches a great importance to the United Nations General Assembly resolution 68/75 on the International Cooperation in the Peaceful Uses of Outer Space and our commitment towards the Committee and its Subcommittees will stay clear and stable.

We are glad that a growing number of countries are showing their interest in the activities of COPUOS. In this regard, I would like to express our support to the request for membership submitted by Luxembourg. We fully acknowledge the role of COPUOS in strengthening the international dialogue on space issues, facilitating the exchange of information on technologies and best practices, and campaigning for the universal adoption and full adherence to the international treaties and principles on the Peaceful Uses of Outer Space.

Nonetheless, we share the view that further efforts should be made to streamline and improve the agenda and the organization of the Legal Subcommittee. For this very reason, we have supported the proposal for renewal submitted by Germany since the last session of the Legal Subcommittee. In this regard, we are confident that further steps forward could be made during this Committee with a view to find a consensus during the fifty-fourth session of the Legal Subcommittee in 2015.

Mr. Chairman, I would also like to stress once again our appreciation for the efforts carried out by COPUOS and the Office for Outer Space Affairs in improving their contribution to the achievement of the Millennium Development Goals. We are confident that they will be able to sharpen their role in the Post-2015 Agenda, promoting a common understanding of the importance of space technology as a catalyst of balanced and equitable development. Indeed, we believe that particular attention should be given to the promotion of patterns and practices enabling a longterm, stable and sustainable development of outer space activities in all its aspects. We are facing new and challenging threats, such as the menace of NEOs and the steady growth of orbital debris. Effective responses require a sustained effort of international cooperation and new commitments based on the principles of prevention, due diligence and no harmful interference. Therefore, Italy welcomes and strongly encourages the current ongoing initiatives at international level aiming at ensuring the long-term sustainability of outer space activities. We will continue to support the Ad Hoc Working Group set up by the Committee in 2011 under the valuable chairmanship of Dr. Martinez.

Thanks also to the commendable dedication of national experts in the sub-groups. We are confident that substantial progress will be achieved at the end of the current session of COPUOS in order to finalize a consistent and comprehensive set of guidelines. In this regard, we agree with the proposed extension of this Working Group for another year with a view to adopting its final report.

Italy also supports current international efforts aimed at establishing a broad consensus on initiatives, whose purpose is to improve the safety and predictability of space operations, to promote stability and security in outer space and boost the responsible use of space for the benefit of all nations. Along these lines, we would like to commend, once again, the Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space activities for the successful outcome of its work. Its consensual conclusions and recommendations, as contained in its report, endorse efforts to pursue political commitments, such as in the form of a multilateral Code of Conduct, to encourage responsible actions in, and the peaceful use of, outer space. We supported the adoption of United Nation General Assembly resolution 68/50 on Transparency and Confidence-Building Measures in Outer Space Activities, referring those recommendations to the Committee and other United Nations bodies for their consideration.

We deem all these initiatives, within and outside COPUOS, as complementary and aimed at supporting States in better abiding by their international obligations.

Before turning to an overview of the latest activities carried out by my country, let me also recall the Italian contribution in surveying, detecting and tracking NEOs, as well as in the activities of the recently established fora of international cooperation, the International Asteroid Warning Network, and the Space Mission Planning Advisory Group, which is currently holding its second meeting here in Vienna.

Mr. Chairman, distinguished delegates, over the past year, Italy has been delivering successful initiatives and missions and I will try to report on the main achievements and events.

Allow me to start by mentioning the success of the International Space Station long-duration mission, Volare. It saw the Italian astronaut of the ESA, Luca Parmitano, engaged in several hard and demanding experimental activities, including two space walks and three spacecraft docking manoeuvres. Parmitano was the sixth Italian astronaut to go into outer space and the fifth to stay on the International Space Station. The next Italian astronaut onboard the International Space Station will be Samantha Cristoforetti, the first Italian woman in space, participating in the mission called FUTURA. Both astronauts will take part as special guests in a side event organized by Italy in collaboration with the Office for Outer Space Affairs. It will be dedicated to prospects, opportunities and benefits of human space flight activities for sustainable development on our planet Earth. This event will be held tomorrow at 1.00 p.m. All the delegations are invited.

Turning to the most important contributions of Italy to satellite technology and activities in the last year, let me start by touching upon the successful launch, in July 2013, of ALPHASAT, the largest and most powerful European satellite for telecommunications. Italy has participated in this programme through the Italian Space Agency, providing a payload devoted to the study of hyper-frequencies. It will also interact with two NASA satellite receivers, operating in the Ka and O Bands, installed on the roof of the University Politecnico in Milan. They will allow a better understanding of the propagation of electromagnetic waves at high frequency. It could contribute to the development of effective solutions against those reception problems generated by poor weather conditions, paving the way for a next generation of telecommunication systems.

Italy also fully shares the satisfaction expressed by the European Union with the successful launch of the first Copernicus observation satellite, SENTINEL-1A, on 3 April last. The cutting-edge satellite was devised and built up by a European consortium of companies led by Thales Alenia Space. It is equipped with a sophisticated C-Band Synthetic Aperture Radar, whose data will also be received, treated and distributed by the Copernicus Core Ground Segment Stations, included the ASI Space Geodesy Centre in Matera. Italy, celebrating its thirtieth year of activity.

A few weeks later, on 28 April, Italy celebrated with other European countries the third lift-off of the Vega Launcher from the European base of Kourou, in French Guyana. This time it carried to orbit the first Earth observation Kazak satellite, KazEOSat-1. We are very proud about the success of this European mediumlaunching vehicle, bearing in mind that the Italian participation in this programme covers more than 65 per cent of its cost.

Our contribution to progress in the field of cosmology is also noteworthy, thanks to our continuous involvement in several international missions. I will not go through all of them, of course. However, let me say a few words about ROSETTA. After more than three years of hibernation, the probe completed its commissioning phase. All its devices, included the lander Philae and the spectrometer VIRTIS, are now fully operational and ready to disclose the secrets of Comet P67/Chueyumov-Gerasimenko, marking another good example of intra-European cooperation.

Mr. Chairman, before turning to the conclusion, allow me to highlight a couple of events held in Italy in the last months that we deem relevant for the international cooperation in the peaceful use of outer space.

The second session of the Preparatory Commission for the establishment of the International Registry for Space Assets took place at the Headquarters of UNIDROIT in Rome last January. The third session of this Preparatory Commission will be held in September 2014 with the aim of approving the Regulations as finalized.

The Sixth International AgroSpace Workshop successfully occurred in Sperlonga, Italy, last May. The Conference gathered together both the private sector and the representatives of the major space agencies such as ASI, ESA, DLR, NASA to discuss agro-technologies and life support systems for space missions, whereas significant technological, social and market synergies may arise. Participants debated over the best practices to apply the most advanced systems for the production of food on Earth, such as hydroponic cultivation techniques, and to the production of food in space for life support. In this regard, they also outlined those potential scientific advances achieved in space that may positively affect human daily life. It may well be considered as another brilliant example of that golden thread binding together space and Earth that inspired Leonardo's insights five centuries ago.

Thank you, Mr. Chairman.

The CHAIRMAN: I thank the distinguished delegate of Italy, His Excellence Ambassador Filippo Formica, for his statement.

The next speaker on my list is the distinguished delegate of Cuba, Mrs. Isaura Cabañas Vera.

Ms. I. CABAÑAS VERA (Cuba) *(interpretation from Spanish)*: Thank you very much Mr. Chairman. Mr. Chairman, we would like to congratulate you on chairing our session and we wish you every success and we will support you in your work.

The Cuban delegation associates itself with the statement made by the distinguished Ambassador of Nicaragua on behalf of GRULAC.

Mr. Chairman, Cuba reiterates its support of the principle of access to outer space under conditions of equality for the benefit of all States regardless of their level of development, without any type of discrimination. We are convinced of the benefits that can be derived from outer space for humankind. We support the exclusive peaceful use of outer space as a guarantee of the sustainability of world peace. To achieve that objective, especially in the light of the current situation in the area of space activities. I would like to refer specifically to the commercialization. privatization and space security issues. We need to strengthen the legal regime governing outer space activities to guarantee its harmlessness, safety and the transparency of all activities that take place there. We reaffirm the need to move forward in negotiations on a multilateral legal instrument that would prevent the militarization of outer space, the placement of nuclear weapons in outer space. Only in this way can we prevent an arms race in space, the placement of arms, nuclear or others, and their use in that environment.

Mr. Chairman, space sciences and their applications, specifically with regard to disaster mitigation and prevention are of great relevance to my country. Establishing the risks and vulnerabilities are part of the analysis we carry out in Cuban research institutions, such as Institute of Geo-Physics and Astronomy, the Institute of Meteorology and the Environmental Agency, carry out research, organize training courses and applied space techniques.

In the same way, I would like to highlight the development of cartography through satellite imagery to use for soil analysis and agricultural development. In 2013, we have tried to take specific measures to promote sustainable agriculture, as well as a multi-layer analysis of cartographic information for that purpose.

Mr. Chairman, the Cuban delegation believes that the definition of the geostationary orbit as a limited resource is of particular importance and in that regard, we believe that this issue should remain on the agenda of this Committee and its Subcommittees, both the Scientific and Technical Subcommittee and the Legal Subcommittee. There is no doubt that the geostationary orbit is at the risk of saturation so we need legally regulated use of it based on international conventions guaranteeing access for all countries regardless of their level of development.

Mr. Chairman, it is regrettable that outer space is being used by those who control technology and its resources to obtain information that damages other nations. This was strongly denounced in the system of the United Nations, both in the General Assembly and within the framework of special agencies, including this very Committee. We reiterate our rejection of the dense network of spy satellites which does not benefit humanity. On the contrary, it threatens its development and is in contravention of the United Nations Charter on International Law. It is alarming also that the large number of satellites generate space debris which pose the threat of collision with other space objects and limits space activities.

In this regard, the Cuban delegation would like to refer to the communiqué adopted by the Community of Latin American and Caribbean States, CELAC, on 29 April this year, which expresses the countries' deep concern and energetic condemnation of the illicit use of new information and communication technologies against member States, such as is the case of the ZunZuneo Network used by the United States Administration to promote subversive activities in Cuba. That communiqué underscores the negative impact of the licit use of new information technologies against nations and their citizens, emphasizing the need to guaranteeing that the use of these technologies be fully compatible with the United Nations Charter on International Law, in particular such principles as sovereignty, non-interference in internal affairs and norms of co-existence among States recognized internationally.

Finally, the Latin American and Caribbean Community of States reiterates its commitment to stepping up international efforts with a view to safeguarding cyberspace and promoting its exclusive use for peaceful purposes, as a vehicle to contribute towards the economic and social development of countries, guaranteeing that the development of science and technology be directed towards the preservation of peace, promoting the well-being and development of our nations.

Mr. Chairman, our delegation would like to emphasize the importance of international cooperation

for developing countries and the need to intensify such cooperation through programmes and activities of capacity-building in scientific and technological areas which would put space technology within the reach of all.

I would like to conclude by emphasizing the need to make sure that the duration and structure of the work of the Legal Subcommittee be focused on theoretical issues that contribute towards bridging gaps that exist in the current international space legislation. Great interaction between the Scientific and Technical Subcommittee and the Legal Subcommittee are needed to establish multilateral norms and standards to regulate activities in outer space, responding to current challenges, the new scientific and technological breakthroughs, and this would have a very positive effect on this Committee.

Thank you very much.

The CHAIRMAN: I thank the distinguished delegate of Cuba, Mrs. Isaura Cabañas Vera, for her statement.

Are there any other delegations wishing to make a statement under this agenda item at this time?

I see none.

We will, therefore, continue and hopefully conclude our consideration of agenda item 5, General Exchange of Views, this afternoon.

Report of the Legal Subcommittee on its fifty-third session (agenda item 8)

Distinguished delegates, I would now like to continue our consideration of agenda item 8, Report of the Legal Subcommittee on its Fifty-Third Session.

The first speaker on my list is the distinguished delegate of GRULAC, Chile, Mrs. Teresita Alvarez.

Ms. T. ALVAREZ (Chile) *(interpretation from Spanish)*: Thank you Mr. Chairman. This is Chile on behalf of GRULAC. GRULAC would like to thank the Secretariat for preparing the report of the Subcommittee and would like to reaffirm our conviction that the treaties and principles of the United Nations on outer space are the appropriate legal framework for developing space activities. However, we believe that the rapid growth of scientific knowledge and space activities create the need for a broader legal framework that would guarantee adequate use of outer space strictly for peaceful

purposes. In this regard, GRULAC believes it is necessary to revise, update and amend the existing United Nations treaties on outer space with a view to strengthening the guiding principles regarding the responsibility of governmental and non-governmental organizations in this field, in strengthening the safety and security of outer space.

We also believe that to reserve outer space for peaceful purposes, it is indispensable that we should update existing international legal norms to make it very clear that all use of all types of weapons in outer space is prohibited. The Legal Subcommittee must be the principle multilateral forum to discuss and analyse legal instruments and principles that guide and regulate human activity in outer space with a view to developing new instruments, improving the implementation of the existing ones, and strengthening binding legal norms as well as other initiatives designed to ensure international regulation and respect for international norms. GRULAC is convinced that the treaties and principles of the United Nations that regulate outer space activities form a fundamental basis to establish the duties and rights of States which exercise primary responsibility for these activities in space. At present, it is necessary to update such treaties and principles and this is a theme of paramount importance and GRULAC has worked on it and convinced that it should be brought into conformity with the new global reality. GRULAC supports a legal regime that would specially regulate activities in outer space, ensuring the benefits of space exploration and research, improving the quality of human life, guaranteeing conditions of equality, prosperity and well-being for the current and future generations.

In this context, we would like to reiterate that interaction between the Scientific and Technical Subcommittee, on the one hand, and the Legal Subcommittee of COPUOS on the other hand, should be strengthened with a view to synchronizing the progressive development of outer space law and the progress made in science and technology in this regard. The results obtained in the Working Groups established by the Scientific and Technical Subcommittee should be officially presented to the Legal Subcommittee for its respective analysis.

In this regard, the Safety Framework for the Use of Nuclear Power Sources in Outer Space, and Space Debris Mitigation Guidelines, are documents that could enrich the work of the Legal Subcommittee.

In the last session of the Subcommittee, delegations heard a proposal to restructure its work. GRULAC underscores this necessity to reinvigorate and strengthen the Subcommittee. We need to continue a formal and open debate on this issue with a view to enriching the work and making it more dynamic. The Subcommittee is in need of that at the present time.

In this regard, GRULAC asks the Presidency to create the necessary time and space to continue this debate during this and future sessions and invites all delegations to commit themselves to continuing this dialogue leading to the strengthening and reinvigoration of the Legal Subcommittee.

Mr. Chairman, with regard to the issue of the character and the use of the geostationary orbit, with a view to ensuring its sustainability, GRULAC believes it is necessary to retain that issue on the agenda of the Committee and the Legal Subcommittee as an intergovernmental discussion through the creation of intergovernmental working groups or panels that are necessary for that purpose.

With regard to the Working Group on the Definition and Delimitation of Outer Space, GRULAC welcomes the progress achieved during the last session of the Subcommittee and reiterates its expectation that the discussion should continue, particularly with regard to the definition of the concept space activities in the current and next sessions.

With regard to the review and possible revision of the appropriate principles governing the use of nuclear power sources in outer space, GRULAC, in profound respect for international norms, believes that regulatory activity associated with the use of nuclear power sources in outer space is exclusively the prerogative of States regardless of their level of social, economic, scientific and technical development and is incumbent upon all humankind.

We reiterate the international responsibility of governments for national space activities involving the use of nuclear power sources in outer space regardless of whether they are pursued by government bodies or non-governmental entities and the importance of making sure that they should be carried out for the benefit of nations and not to their detriment.

On this basis, as part of the Safety Framework for the Use of Nuclear Power Sources in Outer Space, GRULAC calls on this Subcommittee to carry out a legal revision and to promote binding legal norms for the responsible use of such power sources.

On the issue of the Space Debris Mitigation Guidelines, approved by the General Assembly in resolution 62/217 on 22 December 2007, GRULAC is of the opinion that a legal analysis of these Guidelines is needed to evaluate the various aspects and their appropriateness in terms of living up to the principles of the United Nations with regard to the peaceful uses of outer space.

Of special interest to GRULAC is to continue developing as part of the work of the Legal Subcommittee, a legal framework that would provide transparency, predictability and certainty to space activities, with a view to promoting progressive development of international law of outer space and its codification.

Thank you very much Mr. Chairman.

The CHAIRMAN: I thank the distinguished delegate of Chile, on behalf of GRULAC, Mrs. Teresita Alvarez, for her statement.

The next speaker on my list is the distinguished delegate of Brazil, Mrs. Vivian Loss Sanmartin.

Mrs. V. LOSS SANMARTIN (Brazil): Thank you Mr. Chairman. Mr. Chairman, distinguished delegates, in this agenda item, I would like to congratulate the Chair of the Legal Subcommittee, Professor Kai-Uwe Schrogl, for the excellent work conducting its fifty-third session this year. Our delegation wishes all success in the continuity of his work at this position in the forthcoming period.

Let me fully support the statement made by the distinguished delegate of Chile, on behalf of GRULAC.

Let me also expresses our support for COPUOS and the Legal Subcommittee. We consider that, in order to keep its primacy as the international forum on space law, the Legal Subcommittee should seek to revitalize its functioning. Thus, we fully support the discussions initiated by the German proposal to renew the Subcommittee's agenda and we are willing to continue looking at this important matter during this session and the intersectional period.

Mr. Chairman, my delegation would like to congratulate the Working Groups under this Subcommittee for their work and results in the previous session. In particular, we appreciate the labour of the Working Group on the Definition and Delimitation of Outer Space, chaired by Professor José Monserrat Filho, for their outstanding and persistent, work. We hope that the discussions held during the meetings on the last session will represent a progress after years of a stalemate between two apparently irreconcilable positions. We look forward to an advance in the definition of space activities.

Mr. Chairman, Brazil welcomes the possibility of adoption of transparency and confidence-building measures, in order to foster the cooperation among States in outer space activities and generate favourable conditions for the discussion of new binding commitments. We reiterate our support for the consideration of new legally binding instruments within the scope of COPUOS and the need to re-examine, revise, amend and change the five United Nations Treaties on outer space in the light on the present and future complexities of space activities.

In this context, we want to reaffirm our interest in bringing the discussions of an International Code of Conduct on Activities in Outer Space to a multilateral framework. We believe that COPUOS is the appropriate forum with the appropriate mandate to conduct this discussion on the peaceful uses of outer space allowing for the full participation of its members, which would greatly contribute to the attainment of a truly balanced and consensual agreement on the matter.

Mr. Chairman, let me conclude by reaffirming Brazil's commitment to COPUOS. We will continue to work and contribute to strengthening the Legal Subcommittee. It is by working together here that all member States can develop legal solutions that contribute to ensure that the benefits of space activities are shared by all of mankind.

Thank you.

The CHAIRMAN: I thank the distinguished delegate of Brazil, Mrs. Vivian Loss Sanmartin, for her statement.

The next speaker on my list is the distinguished delegate of Germany, Mrs. Christiane Lechtenboerger.

Ms. C. LECHTENBOERGER (Germany): Mr. Chairman, distinguished delegates, we appreciate the progress that has been made on various topics during the fifty-third session of the Legal Subcommittee under the chairmanship of Kai-Uwe Schrogl. We also thank the Secretariat for the report on the session.

The Legal Subcommittee session was characterized by intensive discussions on the reform of the agenda structure as proposed by Germany. While there was considerable support for the proposed revision and a wide recognition of the necessity to discuss the organization and method of work of the Legal Subcommittee, some delegations raised some concerns.

With our proposal, we intend to launch a discussion process on the structure and working methods of the Legal Subcommittee which might not lead to quick results since the scope and substance are rather large and ambitious. This discussion will have its effects regardless of the further concrete deliberations of the proposal. This very lively exchange we had during the discussions showed that there is need for an in-depth exchange of the expectations of member States, vis-à-vis, the Legal Subcommittee.

The German delegation is glad that its proposal led to this important exchange. We look further to further constructively support the process of providing the LSC with means of meeting the expectations of its member States.

Under item 11 of the Legal Subcommittee, Canada, the Czech Republic and Germany presented to the Subcommittee the Compendium on Space Debris Mitigation Standards, adopted by States and international organizations. We thank again the contributing member States and international organizations.

The submission of additional or adapted profiles allows the Compendium to evolve into a living and constantly updated reference document.

Mr. Chairman, distinguished delegates, the issue of space debris demonstrates that certain topics require the consideration of scientific and technical as well as legal aspects in order to arrive at adequate treatment of the topic. The topic, at the same time, highlights the inter-connection of the agendas of the Legal Subcommittee and the Scientific and Technical Subcommittee. The Working Group on the Long-Term Sustainability of Outer space Activities is in the process of building consensus on a set of guidelines. Germany believes that the topic of long-term sustainability, or individual elements of it, should also be considered in the Legal Subcommittee, for example, in respect to the further development of mitigation norms and the active removal of space debris.

Mr. Chairman, distinguished delegates, thank you for your attention.

The CHAIRMAN: I thank the distinguished delegate of Germany, Mrs. Lechtenboerger, for her statement.

Are there any other delegations wishing to make a statement under this agenda item at this time?

I see none.

We will, therefore, continue and hopefully conclude our consideration of agenda item 8, Report of the Legal Subcommittee on its Fifty-Third Session, this afternoon.

Space and sustainable development (agenda item 9)

Distinguished delegates, I would now like to begin our consideration of agenda item 9, Space and Sustainable Development.

Delegations have before them in Conference Room Paper 15 an update provided by the Secretariat on the recent developments in the context of the Rio+20 Conference and the Post-2015 Development Agenda.

I would now turn to the list of speakers.

The first speaker on my list is the distinguished delegate of India, Mr. Kumar.

Mr. S. KUMAR (India): Thank vou Mr. Chairman. Mr. Chairman, the Indian delegation is happy to participate in the deliberations under this agenda item, Space and Sustainable Development. Since the 1992 Earth Summit, considerable progress has been made in last the two decades in integrating environmental and social considerations into the economic development policy. There have been extensive efforts to implement sustainable development by the government, non-government organizations, citizen groups and individuals. The Rio+20 Summit provided a unique opportunity to reflect country-level achievements of sustainable developments and the associated challenges. India has taken several initiatives in terms of policies, programmes and an institutional framework towards implementation of the Millennium Development Goals and the Multilateral Environment Agreements.

Globalization, technological progress, growth of knowledge industry and active participation of civil society offers a unique opportunity for us to meet the sustainability goal. Nevertheless, the Agenda 21 blue print of a sustainable future still remains a powerful vision in balancing economic and social needs with the capacity of our planet Earth.

With rapidly increasing population pressure, the natural resources are being exploited beyond the

threshold limit of degradation. The pressure on land is rising consistently with vertical expansion of agriculture as there is little scope for enhancing it horizontally with limited availability of arable lands.

Efforts to grow more per unit of land, without adopting suitable management practices are damaging the basic framework of the ecological set-up. Development of degraded lands and management of wastelands is of strategic importance for enhancing agricultural productivity, environmental protection as well as to restore the fragile ecosystem. Technological interventions, along with the policy frameworks need to be adapted in coping with vulnerability and ensuring environmental security.

In this regard, space technology plays an important role in mitigating the unsustainable exploitation and degradation of land including a host of other natural resources. Earth observation systems provide the user community with inputs to conserve biodiversity, preserve water resources, promote sustainable agriculture, manage energy resources, mitigate natural and anthropogenic disasters, respond to climate change and its impacts, improve weather forecasts and to manage ecosystems.

Mr. Chairman, the Indian Earth Observation Programme, since its inception, has consistently focused on inventory and monitoring of natural resources. Thus, systematic national inventory of land use. land cover, forest cover, land degradation, wastelands, wetlands, glaciers, coastal and urban land use is prepared at regular intervals and disseminated widely. With improved data from current sensors and analysis methodology, a number of projects have been taken up which clearly demonstrated the usefulness in planning at local scales, bringing participation of stakeholders and evaluating the impacts of various projects.

Mr. Chairman, space-based observations have provided critical inputs in planning, execution and monitoring of major national initiatives for sustainable development, such as the Drought Prone Area Programme to minimize adverse effects of drought, the Desert Development Programme, and the Integrated Wasteland Development Programme which are now being pursued as a consolidated Integrated Watershed Management Programme.

The Watershed Development Programme is one of the major initiatives in India towards conservation of soil and water resources in the rain-fed area for enhancing agricultural production, ensuring livelihood security to rural people besides halting the depletion of natural resources. Specific projects have been carried out in this direction, namely the Integrated Mission for Sustainable Development, followed by a communitydriven Sujala Watershed Development Programme. with the participation of stake holders. The outcome of the project demonstrated reduced soil erosion, moisture conservation, increased crop yield and enhanced overall income of households.

Mr. Chairman, the Indian Forest Cover Change Alert System, using high temporal resolution Resourcesat Advanced Wide-Field Sensor data, has been initiated at the behest of the Ministry of Environment and Forests, to establish a sub-annual forest cover change alert.

At the behest of the Planning Commission, the Government of India, a unique project, named Space-Based Information Support for Decentralized Planning, or S1SDP, is being implemented. It aims to provide access of space observation derived thematic maps at 1:10,000 scale and GIS tools for planning and monitoring of various interventions at field scale. SISDP also lays emphasis on local capacity-building in the use of space-derived information, thus empowering the local bodies in decision-making for development planning.

Mr. Chairman, millions of people living along the 7,500 kilometre coastline, are dependent on fishing for their livelihood. The satellite-based potential fishing zone advisories, generated using the chlorophyll distribution derived from the Ocean Colour Monitor Sensor onboard the OCEANSAT-2 and the Sea-Surface Temperature, are operationally disseminated in the local language to the fishing community. The feedback received from various fishermen associations and other agencies indicate doubling of fish catch per unit effort, besides reducing the search time and fuel cost.

Mr. Chairman, as a part of the Regional Action Plan towards combating desertification, under the United Nations Convention on Combating Desertification, the second cycle of Desertification Status Mapping of India using satellite remote sensing and GIS has been taken up to map the land degradation, the desertification status at 1:500,000 scale at the behest of the Ministry of Environment and Forests.

Satellite Remote Sensing-based mapping and monitoring of cultivable and non-cultivable wastelands have significantly helped the Ministry of Rural Development in implementing wasteland development activities for enhancing agricultural productivity, poverty alleviation and environmental protection. These efforts have also helped in diversification and intensification of agricultural activities especially in the rain-fed areas.

Towards sustainable development of urban areas, the National Urban Information System is being carried out with the aim to create a comprehensive Urban Spatial Information System, or USIS. The project envisages preparation of development plans, transportation plans, urban site suitability analysis and urban environmental planning for 152 cities and towns across the country. A web-based Bhuvan-NUIS application has been developed for the formulation of Master Plans for the Urban Local Bodies.

Mr. Chairman, in conclusion, while underlining the usefulness of space technology in sustainable development, the Indian delegation reiterates its willingness to share the Indian experience in this important area.

Thank you Mr. Chairman.

The CHAIRMAN: I thank the distinguished delegate of India, Mr. Kumar, for his statement.

The next speaker on my list is the distinguished delegate of Japan, Mr. Kazushi Kobata.

Mr. K. KOBATA (Japan): Thank you Mr. Chairman. Mr. Chairman, distinguished delegates, on behalf of the Japanese delegation, I am pleased to address this agenda item.

At the outset, we would like to express our sincere gratitude to Mr. Yuri Fedotov, Director-General, United Nations Office in Vienna, for his excellent statement last Thursday. His address was quite impressive to encourage our community to be more actively involved in the Sustainable Development Goals and the Post-2015 Development Agenda. As he pointed out, the space-based technology can provide a number of valuable socio-economic benefits to enhance the quality of human lives, and, therefore, space-based technology should be considered as an indispensable element in the context of the Sustainable Development Goals and the Post-2015 Development Agenda process.

In this regard, Japan attaches great importance to this agenda item as well as the agenda item, Space Technology for Socio-Economic Development in the Context of the United Nations Conference on Sustainable Development and the Post-2015 Development Agenda. under the Scientific and Technical Subcommittee. We would like to encourage

all members to participate in discussing effective ways to substantially bridge the discussions between the Committee and the Scientific and Technical Subcommittee on this matter on the basis of Conference Room Paper A/AC.105/C.1/2014/CRP.22, which includes the possible three-step work plan towards 2019 to realize the goal of the Post-2015 Development Agenda. It is our great pleasure that the overall objective of CRP.22 was agreed in the Working Group of the Whole in the last session of the Scientific and Technical Subcommittee in February. We are pleased to further elaborate this paper with all interested delegations, considering the latest progress of the process of the Open Working Group of the General Assembly to develop a set of Sustainable Development Goals. We would also like to encourage all members to consider and take possible actions to incorporate the importance of space-based technology into this process.

Mr. Chairman, Japan is of the view that the raising awareness in the Committee about how space-based technology could achieve the goal of sustainable development is quite significant. With this in mind, Japan has held several seminars at the margin of the Scientific and Technical Subcommittee on this matter in recent years.

Firstly, in February 2013, the Ministry of Foreign Affairs of Japan, the Japan International Cooperation Agency, JICA, and the Japan Aerospace Exploration Agency. JAXA, hosted the Seminar titled "Space and Sustainable Development: Japanese Development Assistance Using Satellite Data for Sustainable Development".

Secondly, in February 2014, the Ministry of Foreign Affairs of Japan and the World Health Organization. WHO, hosted the Seminar titled "Space and Sustainable Development: Space Technology and Research for Global Health".

We believe that these seminars could provide opportunities for delegations to learn more a number of successful examples that the space-based technology made significant contributions to sustainable development, in consistent with the Work Plan One specified in CRP.22.

Mr. Chairman, in April of this year, JAXA and JICA, which is the Official Development Assistance, ODA, implementation agency, signed a Partnership Agreement. Based on this Agreement, JAXA and JICA's combined efforts will not only apply to JAXA's aerospace technology and to research results on socioeconomic developments in developing countries, but also expand their collaborative areas further to activities, such as the Japan Disaster Relief Team and to the agricultural sector and so on.

JAXA and JICA have been working to establish a cooperative relationship through the utilization of satellite data for protecting forests and preventing illegal deforestation in the Amazon, as well as topographic mapping with satellite data in South-East Asia and Africa in collaboration with the Japan Overseas Cooperation Volunteers.

Mr. Chairman, before concluding my statement, I would like to reiterate that the Committee should be the unique forum to elaborate ideas to apply space-based technology to the sustainable development agenda and consider appropriate contributions of our community to the Post-2015 Development Agenda, as Dr. Horikawa, the former Chair of the Committee, indicated in his discussion paper. Japan will further pursue the completion of the Committee's goals in this regard.

Thank you very much for your kind attention.

The CHAIRMAN: I thank the distinguished delegate of Japan, Mr. Kobata, for his statement.

The next speaker on my list is the distinguished delegate of Egypt, Mr. Alaaeldin Hassan Mohamed El Nahry.

Mr. A.H.M. EL NAHRY (Egypt) *(interpretation from Arabic)*: In the Name of God, the Merciful, the Compassionate.

The international community on the occasion of the Earth Summit, adopted the Declaration on Sustainable Development which requires meeting the needs of present and current generations without jeopardizing the needs of future generations.

The international community has defined the key aspects of sustainable development as economic development, ensuring social progress, as well as environmental protection and the protection of natural resources, which implies adopting a global vision through the development of lasting sustainable strategies that would take these three dimensions in to account.

Remote sensing, which is used by aircraft or by spatial vessels, play a key role in guaranteeing the sustainability of natural resources. Accordingly, two months ago, on 16 April, to be more specific, Egypt launched EGYPTSAT-2 satellite in order to thus contribute to sustainable development and by preserving natural resources in Egypt including our water resources and specifically the Nile. In Egypt, sustainable development is an integrated undertaking which encompasses all areas of life, that means, as I said previously, meeting the needs of current generations while preserving and upholding the rights of future generations and also ensuring the preservation of the environment, all of which is couched in an equitable approach.

Chairman, ladies and gentlemen, I would now like to touch upon the key components of sustainable development, as we see it in Egypt. As I said previously, this is a tri-dimensional undertaken, the first of which is the social component and this takes a number of elements into account, such as social prediction in terms of services, providing health services, etc. The second component is the economic aspect and that includes development, innovation, as well as industrial development, *inter alia*. The third component is the ecological or environmental component, that means preservation of the environment, preserving biological diversity, amongst other considerations.

Chairman, ladies and gentlemen, sustainable development in Egypt is part of a decision-taking process which duly takes into account the aforementioned components and, moreover, which requires a well-balanced approach. In turn, this is based on alternative options or solutions. We also seek to strengthen the participation of the public and consultation with the public in order to better evaluate the impact of these policies.

We have established a number of guidelines to support sustainable development in Egypt. Here the aim is to develop an integrated system that will address economic, social and technological aspects as part of a comprehensive framework in order to make proper use of both human and natural resources and thus ensure real economic growth that will enhance the level of well-being of our citizens while preserving natural resources and the environment.

Amongst the key principles that have been identified by our ministers for the implementation of our Sustainable Development Plan, are the following.

Strategic planning. Here, the aim is to gauge economic and political change as part of a well-planned process. This is part of a strategic vision to gauge environmental impact of each and every one of the policy decisions that are taken. This strategic process requires broad participation amongst all stakeholders so as to ensure that the benefits are generated and shared amongst the population. We are also carrying out detailed technical analyses which feed into an evaluation of the current situation, provide predictions, perspectives and harness efforts made to tackle challenges both nationally and internationally, thus addressing the pressure that is exerted by globalization and by various processes such as climate change.

By taking all of these parameters into account, that is, the economic, environmental and social, when developing our strategic plan, in order to meet the objectives that we have set ourselves, we plan to make the best possible use of our own resources. The strategic planning also addresses the viewpoints of the various stakeholders. The aim is to adopt an approach that is flexible when defining the goals for our strategy, as well as the policy goals for the strategy. Also this develops a series of initiatives that will underpin the policy decisions taken and ensure their success. Furthermore, we ensure that the strategic objectives are met while remaining within budgetary constraints in order to ensure the necessary financial resources are in place for the implementation of the strategy. The policy that we have adopted is an integrated policy that is developed by the National Sustainable Development Committee in Egypt which works together with the various ministries concerned in a Joint Committee.

Furthermore, the central authorities, as well as local authorities, that is, at the province level, are responsible for the implementation of these strategic choices as part of local policy decisions.

The National Sustainable Committee is responsible for coordinating the various strategies and sectoral plans while taking into account the environmental and social impact that they may have, and when I refer to sectoral plans or programmes, this refers chiefly to agriculture, industry, energy, transport, etc. In turn, we have opted for a macro-social and macro-economic approach, that is, an approach that comprises national strategies to support biological diversity and environmental protection and to combat desertification, to combat poverty and to ensure structural readjustment programmes as well as programmes for land management. All these programmes are undertaken in order to harness efforts to coordinate efforts to the best extent possible. The integration is based on negotiation and on consensusbased policies.

A further significant principle is that of good governance, a principle which is reflected both at the central as well as on the local levels by binding together public organizations, civil society and ensuring that they participate in decision-taking, and also upholding the principle of accountability. In turn, we seek to ensure budgetary rigour.

All of these policies that are part of our new approach mean that the hopes and aspirations of the Egyptian people are great. They look forward to the future.

Yet another aspect is that of decentralization, yet the Government still remains the main protagonist when it comes to the development and implementation of such strategic policies.

A further theme is that of sensitization or dissemination of information which focuses on education, learning and ensuring that all sectors of society are involved in the undertaking of sustainable development, which can only be undertaken successfully with the assistance of all.

Moving on to equity, and chiefly, equity between the various generations, both present and future generations. Those generations who must benefit from the same opportunities to the same degree.

A further important aspect concerns horizontal equity. That means equity or fairness within the same generation. Here we seek to meet the needs of the various social groups in order to avoid any marginalization or over-exploitation of our natural resources and this implies the following principle, that of preserving our natural resources by rationalizing the use thereof so as to preserve biological diversity, as well as our national landscapes.

A further aspect concerns the 'polluter pays' principle. All activities or any protagonist who, through various actions or activities, may harm the environment, is held responsible and must pay compensation or reparation and bears fully the costs incurred.

A further principle is the principle whereby the user must pay for the benefits derived from the use of natural resources and this principle applies to the provision of services, such as the provision of drinking water or sewage services.

We also focus on the community in terms of the prevention of pollution. Preventing pollution is far more useful than providing repair once pollution has already occurred. We also focus on good planning. Good territorial planning and proper land use and management are a prerequisite for sustainability and here we focus on economic efficiency in order to ensure social progress. This can be ensured, *inter alia*, by using high-definition satellite imagery, Egypt has been using this technology for several years now, using EGYPSAT-1 and EGYPTSAT-2 satellites. EGYPTSAT-1 satellite is currently under construction and is to be launched by 2017. The level of national involvement in the satellite production is at some 70 per cent.

Thank you very much.

The CHAIRMAN: I thank the distinguished delegate of Egypt, Mr. Alaaeldin Hassan Mohamed El Nahry, for his statement.

The next speaker on my list is the distinguished delegate of Germany, Mrs. Lechtenboerger.

Ms. C. LECHTENBOERGER (Germany): Mr. Chairman, distinguished delegates, the United Nations undertakes enormous efforts the while being in the flux to prepare for changing and upcoming challenges after the Rio+20 Conference in Rio de Janeiro 2012. We hold in so high esteem that the United Nations proceeds towards a sustainable development and a set of Sustainable Development Goals, the SDGs.

The synchronicity of the Post-2015 Development Agenda process parallel to the Post-2015 framework for disaster risk reduction, respectively the adaptation of the Hyogo Framework for Action to the so-called HFA-2 and the development and planned adoption of the Climate Change Agreement in Paris next year opens up valuable possibilities of harmonization, rigour and simplification.

Once more we underline the extreme importance of space technology-based data for these issues, especially for environmental monitoring.

This year's UNSPIDER Expert Meeting, conducted by the UNSPIDER Office Bonn at the beginning of June at the United Nations Campus in Bonn, took into account the upcoming developments. The event was titled "United Nations/Germany Expert Meeting on the Use of Space-Based Information for Flood and Drought Risk Reduction" and provided input with its outcomes for the preparation of the Third World Disaster Conference in Sendai/Japan in March 2015. The Expert Meeting as well supported by the German Federal Ministry for Economic Affairs and Energy. The German Aerospace Centre was co-organiser. Both hold up their financial and staff-related support for the UNSPIDER office in Bonn.

Also in a very practical sense, the global community could experience how space assets and new technologies help to warn people and mitigate the impact of catastrophic events.

During 2013 and 2014, the DLR Centre for Satellite-Based Crisis Information, the ZKI. has completed its first one and a half years of operational satellite mapping service for the Federal Government of Germany and its respective civil protection and humanitarian relief actors. In doing so, they continuously provided 24/7 satellite analysis and humanitarian mapping services. This included also a number of trainings for civil protection workers and decision-makers on how to request and use satellite mapping for disaster management and mitigation purposes.

Also in the research domain, German scientists continue their strong efforts to develop space-based hazard monitoring capabilities. A special focus is put on SAR-based automated flood monitoring to advance its beneficial use for early detection and flood monitoring. Furthermore, special efforts are made in R&D activities for disaster prevention, for example, in early warning efforts and exposure modelling for risk assessment based on global urban footprint mapping.

Experience showed once again, that space-based emergency mapping can only be achieved effectively in close cooperation with international mechanisms like UNSPIDER, the International Charter Space and Major Disasters or the International Working Group on Satellite-Based Emergency Mapping.

Delighted by the international support from the space and emergency mapping community, for example, in the aftermath of the typhoon Haiyan and encouraged by the usefulness of such collaborations, the German Aerospace Centre continues its support for the Disaster Charter and the International Working Group on Satellite-Based Emergency Mapping.

The huge number of Charter activations last year, namely 49, documents the increasing visibility and significance of this international cooperation. Germany delivered 173 scenes of TerraSAR-X and TanDEM-X data for 41 activations. RapidEye data has been delivered 11 times. Germany continues to support strongly the development and use space technology for disaster management during all phases of the disaster cycle, from risk assessment and preparedness to early warning, disaster response and recovery. Space technology, such as Earth observation, navigation and communication techniques as well as adjacent technology fields are highly relevant means to continuously help preventing and mitigating the devastating impact of natural and man-made disasters and thus fostering global sustainable development activities.

Mr. Chairman, distinguished delegates, we thank you for your kind attention.

The CHAIRMAN: I thank the distinguished delegate of Germany, Mrs. Lechtenboerger, for her statement.

Distinguished delegates, we will continue our consideration of agenda item 9, Space and Sustainable Development, this afternoon.

Technical presentations

I would now like to proceed with the technical presentations.

Presenters are kindly reminded that technical presentations should be limited to 15 minutes in length.

The first presentation on my list is by Mr. Dadhwal of India entitled "Indian Experience in Use of Earth Observation Inputs for Resource Consideration and Development Planning".

Mr. V. K. DADHWAL (India): Thank you Mr. Chairman. The Indian delegation would like to share its experience in the use of the Indian Earth observation data for resource conservation and sustainable development planning.

I would like to cover some statistics of India. The Indian Earth observation satellites and applications. There is a National e-Governance Programme and an EO Programme supports the sustainable development through monitoring and information systems for natural resource management, achieving sustainable resource use through decentralized planning, environment protection, disaster risk reduction and urban and infrastructure planning.

Because of the limitation of time, I will just one example of each. I would not be able to cover a large number of examples which currently the Indian Space Programme is involved in these major activities.

The challenge in India is basically the diversity of people, their economic status and climate. The scale

of India, in the geographic area it ranked seventeenth in the world and the population second. Urbanization is very large, food production also it ranked second in the world.

There are 70 million hectares of forests and of that around 16 million hectares is actually identified as natural parks and sanctuaries which is high biodiversity-rich.

Regularly, we are doing a natural resource census every five years for various features from satellite data. Most of these are at 1:50,000 scale. Scale 1:50,000 is good enough for the national statistics but it is not good enough for local working. There it has some additional challenges.

Currently, the satellite data worked for use are invite basically RESOURCESAT-2, which is our basic data. Then what we have is OCEANSAT, ocean colour scatrometer worked until March. This is a microwave C-Band SAR which is used for disaster and flood applications. Megatropics is in the equatorial platform with CNES. What currently the satellites which are being built is a repeat of RESOURCESAT, RESOURCESAT-2A, a repeat of OCEANSAT, OCEANSAT-3 with advances, and a CARTOSAT-2E which will replace the CARTOSAT-1. Also we want to move to the geostationary platform so that INSAT-3D and 3-D repeat will be supplemented by a 15-metre daily imaging from the geostationary.

The first example what I would like to talk of the National e-Governance is how does one count 1.2 billion people? Basically, the Census of India 2011, which was the fifteenth census since 1872, it adopted ICT on a very large scale and also adopted satellite data in geomatics. It actually deployed. Twenty million enumerators. So it is done in two phases. First, you have a house and a household enumeration. Then you have a census enumeration. Within one month you count everybody including the houseless.

So the geomatics are very extensively used in pre-census phase to ensure pre-labelling without any overlap or underlap all the houses of the country. I will just show you the type of maps used.

At the lowest level, you have a numeration block which each enumerator, 20 million of them, will visit each house and fill the questionnaire. Each enumerator block is looked at by a supervisor which is a supervisory circle which has six enumerator blocks. And, of course, there is a census charge in an area which is like a vard(?), although this is a vard(?) come census map. In the first year, each house is labelled by the census charge and the supervisory circle and the enumeration block. And next year, all the new houses are labelled. That is how you end up with one year of effort and a huge exercise to count 1.2 billion people.

I would like to move on to the next application. Because for sustainability, the adage is you think globally but act locally. So soil and water conservation at local scale is the most critical component for building sustainability and a large portion of India, which is semi-arid, is actually resource poor. So a large number of major programmes have been integrated, the Integrated Watershed Development Programme, the National Watershed Development and Reconstruction The National Rural Employment Programme. Guarantee Scheme, what it does is locally the local landless labour are given fixed days off work. They can do any natural resource work. So EO data has been used for planning, implementing and monitoring these programmes. I would like to show you some example. And then the current stage we have moved on to a new programme called Space Information Support for Decentralized Planning.

This is what you do. You overlay with Cadastral. You talk to people, work out like this a part which is being worked. This is a contour for water. So you sit with the villagers and see in the area so that what soil conservation and water is protected.

This is done with the help of agencies and non-governmental organizations.

The World Bank also funded a programme of about half a million hectares where all the wastelands like this, they were planted and they were regularly monitored by satellite data with very great success.

In the case of the watersheds, there were basically a large number of indicators for ecological natural resource and technical improvement including multiple cropping have been identified and this picture will clearly show you how the cropping and the overall, this line of agro-forestry has helped the total number of crops as well as the water table rise and the income of the farmers.

Now, in India, there are two constitutional amendments which are called the 73rd and the 75 Amendments which says that the planning should not be imposed from the top. The Panchayat Raj, which is a group of villages, and the local urban body should develop a plan and give it to the district and other authorities for approval. So in order to do it in a country which has 600,000 villages and no technical support, the Earth observation data is being planned to

support them through a programme Space Information Support for Decentralized Planning. For the first time, for the entire country, we are making 1:10,000 maps and satellite data for field applications including a 10-metre stereo to give the slope maps for soil conservation.

This is one example which is in the undulating area showing how the soil erosion and various agriculture practices. This is another area where very clearly one can see the terrace cultivation and the way water is available in various features. This is another example in western India where the sand dunes are actually coming and depositing over the crop fields and which of the fields are required various categories of protection.

So basically, each farmer is provided, each _____(?), with this local information through the web, also through a visit to the local centre and then ask them to suggest what they would like to do.

So the SIS-DP concept basically involves Earth observation data to be put in a very big database and this enabling environment so it starts with a set mapping and activity planning, implementation monitoring, geo-visualization made available through our web portal. Parallel, we are partnering with the State Rural Development Organizations to trim these Punjab(?) ____(?) institution personnel on how they should plan. One of the meetings what is happening in Rajahstan, one can see willow tree(?) with a lot of pictures is shown here.

This is one example. The PRI's were trying to tell the farmers how to increase the agriculture plantations and which fields would be more useful for that purpose.

This is another example where on a field a recharge tank, based on a slope, where a percolation tank based on the soil type and where a farm pond because that it is the local slope of that field itself. Where it will be most suitable will be discussed with the farmer who then can carry out this application.

As far as environment production is concerned, we do a large number of things like landscape biodiversity maps, monitoring national parks and sanctuaries, eco-sensitive area zonation, coastal off-set and environmental clearances for all major projects. I will not be giving examples due to the shortage of time.

But I would like to also highlight for sustainable development disaster risk reduction is very important

and satellite data are used for the preparatory phase, the early warning phase and also early response and relief. I have a couple of examples.

What we have like 2013 using SAR data, every major flood was mapped in the country. So almost 144 maps in 166 districts, 1.9 million hectares was the inundated area. We had been doing this from 1998 so we combined a long series of maps and created a flood hazard atlas which says how many times each particular 30 metre by 30 metre pixel has been flooded. And this has been publicly hosted for various administrative organizations that before they attempt any asset creation. They should actually check this, which part has been inundated.

Now to revise the flood-prone area map, we are using this historical satellite observation, RDM(?), based on the CARTOSAT-1 data and hydrological modelling to recreate a map of flood-prone areas as well. India has the largest number of losses due to flood, 40 million hectares out of 328 are flood-prone areas.

One example which I would like to show where science has been very beneficial to the citizens is the Phailin Cyclone of 2013. Basically, it was a very serious cyclone. A similar cyclone in 1999 caused 10,000 deaths. Actually Phailin only caused 21 deaths and 1.2 million people were actually evacuated. I will just show you the satellite data. OSCAT data was used to detect this on 8 October. It struck on twelfth night, thirteenth, so five days before that, the track prediction and with new satellite data, you can actually get the eye and also the asymmetry which helps you to improve the prediction. This you can see the difference between the earlier (?) and the last year, INSAT-3D, how well the eye and the asymmetry is captured and how it helps in predicting the track prediction.

Not only that, with our RISAT-1, we prepared an actual flood inundation map every time at 6.00 a.m. in the morning and 6.00 p.m. in the evening because that is the time of the overpass of RISAT. So for three days, we continuously did 12 hourly mapping of the inundation area.

I would like to close by just saying that with 31 per cent of twelve hundred million people, India in urban areas, there are 8,000 urban areas and greater than 75 per cent do not have any master plan. So how to help all these urban local bodies to create a master plan? That is our major challenge. Of course, there are traditional urban sprawl, green covered and mapping squatter habitations. So what we have done is we have created a 1:10,000 National Urban Information System

hosting it on our public portal where citizens can visualize and give feedback. Urban planning bodies at national-and State-level can query any layer and approve a plan and a local planning body can add a layer, upload, add it and earmark specific areas for zoning, regulation, layout and then ask at State-level for approval. And this is all done with the open-source plug-in, with this basically Internet and no learning is actually needed for most of these applications.

Thank you Mr. Chairman for giving me this opportunity to share some of our recent experiences.

The CHAIRMAN: Thank you Mr. Dadhwal for your presentation.

Is there any delegate who has questions for the presenter?

I see none.

The second presentation on my list is by Mr. Xinmin Ma of China entitled "China's Space Policy: Legislation and International Cooperation.

Mr. X. MA (China): Thank you Mr. Chairman, distinguished delegates, this morning I have the honour to have this opportunity to give a brief introduction of China's Space Policy, legislation and international cooperation. My presentation will be divided into four parts.

I would like to start with China's Space Policy.

China's Space Policy, China's Space Programme trace back to 1956 when China's Regulation Industry Committee was established to manage the country's space activities concurrently. Over the last 58 years, China's space industry has undergone rapid development with great achievements in the fields of satellite application, human space flight, lunar exploration and the Space Station.

In 2006 and 2011, the Chinese Government successively published three White Papers on China's Space Activities which set out China's Space Policy. Generally speaking, China's Space Policy consists of two dimensions.

The first dimension is the purposes of China's space industry which covers as follows. First, to explore outer space and to enhance understanding of the Earth and the Cosmos. Second, to utilize outer space for peaceful purposes, promote human civilization and social progress and to benefit the whole of mankind. Third, to meet the demands of

economic development, scientific and technological development, national security and social progress. Fourth, to improve the scientific and cultural knowledge of people.

The second dimension is China's fundamental position on space activity.

They are the four main points needed to be noted. First, China upholds that the exploration and the use of outer space should be carried out for both the interest of States and the benefit of all peoples. In the exploration and the use of outer space, a State, should, apart from serving its economic development, scientific and technological development, national security and the social progress, take account of the interest of other States and to maintain the common interest of the international community.

Second, the exploration and use of outer space should be carried out for peaceful purposes. The Chinese Government consistently upholds the security and the peaceful exploration and use of outer space and opposes the weaponization of, or arms race in, outer space. On the one hand, China upholds that appropriate and feasible transparency and confidence-building measures are contributed to the promotion of neutral trust, the avoidance of misjudgement and maintenance of space security. On the other hand, China calls for the negotiation of the international treaty preventing weaponization of outer space. As we are all aware of, China and Russia have proposed to the draft treaty on prevention of the placement of weapons in outer space and of the threat of the use of force against outer space objects at the Conference of Disarmament.

Third, China upholds the principle that outer space is not subject to the national appropriation by claim of sovereignty by means of use or occupation or by any other means and that States have a right to explore and use outer space equally and freely.

Fourth, China supports the principle of international cooperation in the exploration and use of outer space. Based on independence and self-reliance, China carries out international cooperation for the purposes of mutual benefit, peaceful utilization and the common development.

Now let us move on to the second part, namely, China's space legislation.

China became a State Party to the Outer Space Treaty in 1983, to the Rescue Convention, the Liability Convention and the Registration Convention in 1988. The above treaties have been transformed into China's domestic law. In addition, China has promulgated laws and regulations which set out procedures for the implementation of the international obligations. Currently, China's space legislation mainly consists of the following four respects.

Firstly, measures for administration of registration of objects launched into outer space. The registration measures were formulated in 2001 for the purposes of strengthening the administration of outer space activities and effective fulfilling the obligations of the Contracting State of the Registration Convention. The registration measures consist of 15 articles carrying subject, object, scope, contents and time limit of the registration.

Secondly, interim measures on the administration of licensing the project of launching single space objects. The licensing measures for formulated into 2002 with a view to regulating the administration of the project of launching single space objects, promoting the sound development of the single space industry and the maintaining national security and the public interest. The licensing measures consist of 28 articles covering subject and object of licensing, application, evolution, evaluation and authorization procedures, supervisions and administrations and legal liability.

Thirdly, space debris mitigation measures. In recent years, the mitigation of and response to space debris have become an issue of international concern. In this regard, the efforts of the Chinese Government was two-fold. On the one hand, to establish and improve relevant rules and regulations by reference to two guidelines on space debris mitigation by IADC and the United Nations respectively, China issued requirements on space debris mitigation in August 2005 and interim measures on the administration of space debris mitigation and protection in December 2009. On the other hand, China has actively pushed forward its research, monitoring, mitigation, and prevention of space debris. It has established a project on the monitoring and early warning of space debris, fully inactivated long-march rockets and move a fuel-aging GEO satellites out of orbit.

Fourthly, outer space ordinance of Hong Kong Special Administration Region. In accordance with the principle of one country, two systems, under the Basic Law of Hong Kong Special Administration of China, the Hong Kong SAR has formulated its regulation on space activities, namely the Outer Space Ordinance. According to the Ordinance, the Chief Executive may, under the condition of giving notice to the Central People's Government, grant a licence in respect to relevant activities to both the cooperator incorporated under the Law of Hong Kong. The Ordinance also lays down the procedure of registration of space objects and their obligation to indemnify against the claims.

In addition, it is worth mentioning that an initiative of a comprehensive space has been tabled at the National People's Congress and they are included in the Legislative Plan of the National People's Congress.

Now I would like to turn to China's Judicial Practice concerning outer space.

In September 2005, a Chinese citizen registered a Beijing Lunar Village Space Technology Corporation and called it the Moon Embassy. In October, it began to sell land on the Moon. The selling was called off urgently three days later. During the days, a total of 49 acres of land on the Moon were purchased from the company by 34 individuals at the total price of RMB 14,000. In December, the Beijing Administration for Industry and Commerce rendered an administrative section on the company including the location of business licence and refunding all (?) costs. The Moon Embassy initiated legal proceeding at the Beijing Intermediate People's Court claiming that our space treaty only provides that outer space is not subject to national appropriation but does not regulate acts by corporates and individuals. In March 2007, the Beijing Intermediate People's Court dismissed the claim of the Moon Embassy. The Court stated that China is a State Party to the Outer Space Treaty. According to the Treaty, outer space, including the Moon, is not subject to the national appropriation, including the claim of ownership of the Moon by citizens and non-State entities. The judgement showed that the Chinese Government strictly comply with international treaties on outer space and it is firmly against the appropriation of outer space by any State or other entity or individuals.

Now, let us move on to the last part, namely international cooperation.

China holds that international cooperation is one of the principles of exploration and the use of outer space. Based on the principle the Chinese Government actively participate in and carries out bilateral and multilateral space cooperations.

As regards multilateral cooperation, under the framework of the United Nations, the UNSPIDER Beijing Office has been established in 2010 and the Regional Centre for Space Science and Technology Education in East Asia and the Pacific is setting up at

Beihang University. China also actively participated in activities of other organizations in the framework of the United Nations, such as ITU and WMO. China also participated in other multilateral mechanisms, outside of the framework of the United Nations, such as ICG, IADC, IAF, GEO, the International Charter on Space and Major Disasters, the International Space Exploration Cooperation Group and so on.

At the regional level, in 2008, the Asia-Pacific Space Cooperation Organization was established with the joint efforts of the Asia-Pacific initiatives(?). Its Headquarters is in Beijing.

With regard to bilateral cooperation, China has concluded over 80 bilateral space cooperation agreements with 29 States and international organizations, such as Russia, ESA, Pakistan, Brazil, France, Italy, Indonesia, Venezuela and Argentina.

Overall speaking, the bilateral agreements could be divided into two categories, namely general cooperation agreement and a cooperation agreement for specific programmes. The former was concluded by two central governments to provide the legal framework for cooperation, setting out the scope and areas of cooperation. The latter was to duly conclude by governmental departments of two States, concerning specific programmes of cooperation.

In conclusion, Mr. Chairman, distinguished delegates, looking forward, China will continue strengthening its independent innovation, expanding the openness and cooperation and promote international space exchanges and cooperation at various levels and in various forms. We are willing to, along with the international community, maintain the security, safety, the rule of law and the sustainable development of outer space and to make new contributions to the peace and the development of mankind.

Mr. Chairman, distinguished delegates, thank you very much for your attention.

The CHAIRMAN: Thank you Mr. Ma for your presentation.

Is there any delegate who has questions for the presenter?

I see none.

Distinguished delegates, I will shortly adjourn this meeting so that the Working Group on the Long-Term Sustainability of Outer Space Activities can hold its first meeting. Before doing so, I would like to inform delegates of our schedule of work for this afternoon.

We will meet promptly at 3.00 p.m. At that time, we will re-open agenda item 7, Report of the Scientific and Technical Subcommittee at its Fifty-First Session, to hear a statement by the Czech Republic and a report by the Chair of the Action Team on Near-Earth Objects on the work of the Space Missions Planning Advisory Group.

We will then continue and hopefully conclude our consideration of agenda item 5, General Exchange of Views, and agenda item, Report of the Legal Subcommittee on its Fifty-Third Session. We will also continue our consideration of agenda item 9, Space and Sustainable Development.

There will be two technical presentations this afternoon by a representative of Japan entitled "Asia-Pacific Regional Space Agency Forum: Activity in the Asia-Pacific Region for the Next Decade, and by a representative of China entitled "Research on Space Law in China".

I give the floor to the Secretary for an announcement.

Mr. N. HEDMAN (Secretary, Office for Outer Space Affairs): Thank you Mr. Chairman. Distinguished delegates, the provisional list of participants was distributed this morning through the pigeonholes as Conference Room Paper 2. Delegations are kindly requested to provide the Secretariat with written amendments to the list by close of business tomorrow, Tuesday, 17 June, so that the Secretariat can finalize it.

Thank you.

The CHAIRMAN: Thank you Mr. Hedman.

Are there any questions to this proposed schedule?

I see none.

This meeting is adjourned until 3.00 p.m. this afternoon. Thank you.

The meeting adjourned at 12.31 p.m.