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Committee on the Peaceful Uses of Outer Space

Legal Subcommittee

Unedited transcript

806th Meeting
Tuesday, 23 March 2010, 3 p.m.
Vienna

Chairman: Mr. A. Talebzadeh (Islamic Republic of Iran)

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

The CHAIRMAN: Good morning distinguished delegates, I now declare open the 806th meeting of the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space.

I would first like to inform you of the programme of work for this afternoon.

We will continue our consideration of agenda item 4, General Exchange of Views, and agenda item 5, Status and Application of the Five United Nations Treaties on Outer Space, and agenda item 6, Information on the Activities of International Intergovernmental and Non-governmental Organizations Relating to Space Law.

At the end of the Plenary, there will be one technical presentation by the representative of Tunisia on "Space Activities of the Tunisian Centre for Cartography and Remote Sensing".

Are there any questions or comments on this proposed schedule?

I see none.

General exchange of views (agenda item 4)

Distinguished delegates, I would now suggest that we continue our consideration of item 4 on our agenda, General Exchange of Views.

The first speaker on my list is the distinguished delegate of the Republic of Korea. I will give the floor to the distinguished delegate of the Republic of Korea.

Mr. J. H. CHO (Republic of Korea): Thank you Mr. Chairman. The Korean delegation would like to convey its warm congratulations on your election as the Chair of the forty-ninth session of this Subcommittee. My delegation has every confidence that this will be a productive session under your able leadership.

My delegation also appreciates the dedicated efforts by the Office for Outer Space Affairs in preparing the documentation and making the necessary arrangements for this meeting.

Mr. Chairman, we continue to witness tremendous technological and scientific progress in the field of outer space. This progress has filled a rapid increase in space application activities in various sectors, such as communications, disaster monitoring, remote sensing and weather forecasting. These remarkable developments have proven to be a boon to mankind in many ways, not least by facilitating the sharing of vital information and the coordination of relief efforts in the wake of recent natural disasters. For instance, Korea actively provided satellite images of the areas stricken by earthquakes and flooding in Haiti and Peru to the International Charter on Space and Major Disasters and the Peruvian Government as part of international efforts to restore and rebuild the damaged regions.

At the same time, the international community should remain vigilant of the unintended adverse effects of our space activities such as the collision of

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space debris with space assets, as we have witnessed in recent years.

My delegation believes that we can reduce the risk of such problems through well-coordinated efforts regarding national and international mechanisms, guidelines and norms.

Mr. Chairman, my delegation is of the view that space law should serve as the foundation for space activities and related international cooperation. As space activities evolve and national space-related legislations proliferate, the Legal Subcommittee has a unique role to play in improving the legal framework of international cooperation on space activities. We anticipate that this work will make a meaningful contribution in addressing legal issues arising from the changing space environment. Throughout the session, the participants will share necessary information and promote capacity building, training and education thus enhancing national, regional and international efforts to further develop space science and technology.

Korea, as a party to the four space treaties, actively promotes understanding, acceptance and implementation of the international space law agreements. My delegation remains hopeful that as a number of States ratifying or acceding to space treaties grows, worldwide implementation of the principles governing the peaceful activities of States in outer space enshrined in the 1967 Outer Space Treaty, will not be long in coming.

Bilateral and regional agreements also have an essential role to play in the development of international cooperation in the exploration and use of space and should receive due consideration as we strive for consensus on the direction of the development of the international space law regime. For its part, Korea has maintained its efforts to develop its own national regulatory framework consisting with international agreements and has made relevant documentation available in English and online.

Mr. Chairman, taking this opportunity, my delegation would like to briefly share with you the recent progress that Korea has achieved as well as its future plans in the field of space activities.

First of all, my delegation is delighted to inform you that Korea has completed the construction of the Naro Space Centre located on the southern tip of the Grand Peninsula. The Space Centre was built to serve as the ground infrastructure for launch activities and play a pivotal role in the launch of the first Korean launch vehicle in August of last year. Although the first launch was a partial success, it marked a historic event for the Republic of Korea. The second flight attempt for the KSLV-1, which is being developed in close cooperation with the Russian Federation is scheduled for this summer.

There have also been some satisfactory achievements in the area of satellite development. Korea is ready to launch next month its first communication, ocean and meteorological satellite in Kourou, French Guyana, geostationary orbit, assembly and testing of remote sensing satellites and the Korean Multi-Purpose Satellites 3 and 5 are also well on schedule.

Building on these national achievements, Korea expanded its participation in space cooperation by actively taking part in the activities in the international space community. As announced at last year's Subcommittee meeting, Korea hosted the sixtieth International Astronautical Congress, last October, under the theme "Space for Sustainable Peace and Progress". The Congress, which attracted more than 4,000 participants from 72 countries, was the largest event ever in terms of scale and was deemed one of the most successful IAC Congresses.

Following the successful hosting of the IAC 2009, Korea placed greater emphasis on space education for students in the hopes of nurturing future space experts and strengthening international competitiveness. For example, through the sponsorship of the Korea Aerospace Research Institute, about 10 Korean students will take part in the sixty-first International Astronautical Congress, to be held in Prague between 27 September and 1 October 2010.

Korea is also interested in sharing its experience in space activities with the international community, particularly developing countries. Korea will offer a free educational programme for experts on space from the Seychelles this summer, in addition to satellite networks, space science and remote sensing, the programme will also cover space law. Korea is also planning to offer free educational programmes to experts in Kazakhstan and Algeria.

Mr. Chairman, I would like to conclude my remarks by reiterating my Government's full commitment to the collective efforts of the international community to establish a legal regime for outer space that benefits all mankind.

Thank you Mr. Chairman.

The CHAIRMAN: I thank the distinguished representative of the Republic of Korea for a very good statement.

The next speaker on my list is the distinguished representative of Russia. I give the floor to the distinguished representative of Russia.

Mr. V. Y. TITUSHKIN (Russian Federation) *(interpretation from Russian)*: Thank you very much Mr. Chairman. The delegation of the Russian Federation would like to welcome you, Mr. Talebzadeh, in your position as Chairman of the Legal Subcommittee of COPUOS. We wish you every success in this important mission. We are certain that under your leadership, the Legal Subcommittee will continue to play a leading role in developing an international space law regime.

Our sincere thanks also go to the representative of the Czech Republic, Professor Kopal, for his work of many years as the previous Chairman of the Legal Subcommittee. Professor Kopal, your vast knowledge and uncontested authority in the area of international space law, your experience and your leadership skills in steering a discussion to a constructive pass. All of this made it possible for the Subcommittee to effectively live up to its mission and ensure the fruitfulness and the high professionalism of the exchange of views that took place here. We hope that, as a member of your national delegation, you will continue to take an active part in the work of the Subcommittee and will continue sharing your experience and your valuable ideas.

Mr. Chairman, distinguished delegates, colleagues, the Russian Federation attaches great importance to the development of multilateral cooperation in space exploration and use. It is no secret that interaction in this domain and global interests in it are increasing all the time.

At present, the activities in outer space are increasingly dynamic, take many forms and an ever-broadening range of actors are participating. We see ever more clearly the inconsistencies and there are some areas the under-development of the legal framework for this part of human endeavour.

This situation requires serious effort towards a balanced development of the international outer space law system. In order that we could use the results of space activities with the maximum efficiency for the benefit of all States and promote sustainable, social and economic development as well as maintain international peace and security.

The Russian Federation has consistently advocated an all-round dialogue on all issues pertaining to the outer space law regime and the legal regulation of space activities. We would like to make sure that this dialogue should become more productive that COPUOS might consistently sustain its reputation as one of the most active subsidiary bodies of the United Nations General Assembly in developing international law and its codification in accordance with Article 13 of the United Nations Charter.

It is in this spirit that Russia promotes the development of a comprehensive United Nations convention on international space law. We hope that sooner or later this Subcommittee will reach consensus in that regard.

It is clear to us that it is only within the framework of such a convention that we might look for and find generally acceptable solutions for all the issues that have so far failed to meet with consensus. We would be able to refine a number of provisions of the existing outer space treaties, work out new definitions and principles, the lack of which is felt by all even now as a factor that impedes the development of new forms and methods of space activities. During this work, certain principles enshrined in advisory documents of the United Nations could gain the status of legally binding norms.

We believe that the Legal Subcommittee should continue playing a leading part in improving and progressively developing international space law in order that in the course of open and competent discussions delegations might identify existing problems and develop effective solutions.

To cite one good example of such an approach, we could refer to the discussion held by the Legal Subcommittee in its forty-eighth session on the prospects for States joining the Agreement on the Moon and Other Celestial Bodies. Among other things, we were able to discuss the concept of adapting that treaty to the requirements of the present time and the present day level of development of international space law. We support continued consideration of issues pertaining to the definition and delimitation of outer space, the development of international legal criteria for separating air space from outer space.

In this connection, I would like to once again draw the attention of delegations to the statement made by the Russian delegation in the forty-eighth session of the Legal Subcommittee regarding initiatives that were first launched by the Soviet Union way back, regarding

the delimitation of air space and outer space at the altitude of 110 kilometres, given the guaranteed right of fly-through air space for all States with the purpose of reaching outer space orbits or leaving them. The fact that an increasing number of States in developing their national legislation are trying to find an acceptable definition of outer space and even establish the border line between air space and outer space demonstrates that the time has come to tackle this issue in the most serious manner within the framework of the Legal Subcommittee.

We would like to note the positive experience accumulated by the Scientific and Technical Subcommittee in defining technically substantiated frameworks for the safe use of nuclear power sources in outer space. We would like to underscore in particular the fact that agree principles underlining the use of nuclear power sources in outer space have proved their effectiveness. They remain topical and important and we see no reason for revising them, even less developing a new legally binding document on that issue.

Now briefly, I would like to talk about the initiative that a Code of Conduct for space activities be developed. We believe that this idea calls for in-depth analysis. It is necessary to consider the subject matter, the scope of application of such a Code, the linkages that exist between its fundamental elements and existing international outer space law provisions. We believe that no one is interested in having a Code that would be seen as an alternative to the existing comprehensive provisions of outer space law. If that were the case, we would run the risk of defragmentation of outer space law and the risk of destabilizing the existing legal regime governing the use of outer space.

Mr. Chairman, distinguished delegates, the Russian Federation is continuing ongoing work to improve its national legislation regulating various aspects of space activities. In particular, at present, we have completed inter-ministerial approval of a regulatory instrument defining the order and rules for the functioning of Russia's National Registry of Space Objects Launched from Russian Territory. This would be a single Registry. It will supersede the previously existing system of accounting for space objects which had been overseen by several governmental bodies. This Registry has been developed in full conformity with the provisions of the Registration Convention and is called upon to ensure clear, unambiguous and systematic identification of space objects. This, of course, will provide great information to the international community as to the Russian Federation's space activities and will promote enhanced trust amongst States and better cooperation in outer space.

Thank you very much distinguished delegates. I wish the Subcommittee a productive session.

The CHAIRMAN: I thank the distinguished representative of Russia for a very good statement. Thank you.

The next speaker on my list is the distinguished representative of Algeria. I give the floor to the distinguished representative of Algeria.

Mr. A. LOUNI (Algeria) *(interpretation from French)*: Thank you very much Chairman. To start off, I would like to express our sincere condolences to the families of the earthquake victims which have struck Haiti and Chile as well and to assure them as well as the authorities of these countries of our compassion and solidarity.

The Algerian delegation would like to warmly congratulate you upon your election to the Chair of the COPUOS Legal Subcommittee for 2010-2011 and to assure you of our cooperation.

We would like to thank Mr. Vladimir Kopal for his very wise presidency of the Subcommittee during the last biennium.

And we would also like to take this opportunity to thank Dr. Mazlan Othman, the Director of the Office Outer Space Affairs, as well as the Secretariat, for the very good preparation of the present session.

Under the general debate, I would like to stress the interests attached by Algeria to the issues debated within COPUOS and its two Subcommittees, as is demonstrated by a very regular participation and work of these two bodies and to confirm our attachment to the promotion of space activity and the service of development and of the sustainable wellbeing of all.

As a developing country, Algeria has set for itself the goal of mastering and ensuring the peaceful use of technologies in space applications in order to expedite and accelerate towards its socio-economic development and this goal is demonstrated in various activities of the Algerian Space Programme that ASAL is seeking to implement on the basis of international cooperation together with the help of most the Art(?) countries in this field. And here our Space Agency has concluded cooperative instruments which sometimes

take the shape of Memoranda, sometimes Conventions, sometimes Framework Agreements and these are concluded with various partners in particular for the training of human resources in the fields of technologies and space applications.

As concerns Earth observation, we will note that satellite data at a high resolution presently are made available or sold to the public at large without any restriction nor regulation. However, we really must note that this free access to satellite data is exploited to the ends of destabilizing systems by organizations which are note controlled and which sometimes plan violent actions and activities against the sovereign States and their institutions. This is a very sensitive issue which maybe does have an impact on regional security. In this regard, Algeria feels that this issue should indeed by put on the COPUOS agenda in order to start up a debate on the regulation of the sale and distribution of satellite high-resolution data.

As regards the definition and delimitation of outer space and the use of the geostationary orbit, here our delegation would like to flag its interest for the evolution of the characteristics and the utilization of this orbit which is regulated by ITU and COPUOS. In this regard, we believe that the principle of the first-come, first-served for the allocation and attribution of orbital positions penalizes those countries which would draw benefit from the advantages of space technologies and who do not yet have the capacities to do that. So we believe that we should, within COPUOS and the Legal Subcommittee, envisage the start-up of a reform of the present regulations in order to guarantee equitable access to this orbit. This sort of reform seems possible given the progress of satellite technology which enables us to get more high and low positions within the geostationary obit.

As regards the item on the application of the five space treaties, it is useful to recall that national space activity is within the international legal framework which is in force and thus my country has ratified the 1967 Space Treaty, the International Convention on International Liability for Damage, the Registration Convention, and for the latter, indeed national registration of satellites is going through and in the process of approval. And the adherence of Algeria to the Rescue Agreement and the Rescue and Return Agreement is presently under study.

Algeria, furthermore, is encouraging any action on the initiative on the part of the Legal Subcommittee and COPUOS to step up international cooperation in the field of outer space law and its education and teaching in developing countries. Nationally, efforts are made by our Space Agency to step up national capabilities within the field of space law, in particular the introduction and teaching of space law at post-graduate level within our Algerian universities. And, thus, for example, we are mobilizing the five Algerian universities and this resulted in April 2007 in the operational establishment of the Doctoral School for Outer Space Technologies and Applications, the EDTAS. This new university institution, which is dispensing courses in space instrumentations, space informatics, telecommunications, imagery processing, information systems and space telecommunications, has already processed 108 post-graduate students and has the first MITES(?) defences which have been registered in 2009.

At the regional level, I would like to share with you the recommendations coming out of the Workshop on Space Law and the Means of its Development in the African Countries, organized during the Third African Countries on Space Technologies in the Service of Sustainable Development, which was held in Algiers in December 2009. This focused on the following: establishing a common platform at regional and sub-regional level to ensure dialogue and exchange of information at the space policy level and on space law and to encourage the establishment of space policies and the development thereof; two, the evaluation of the capability of teaching space law throughout the African continent and to dispensing courses on space law within educational institutions and universities; thirdly, giving priority to space policy and space law in ensuring a plenary session to this at the upcoming ALC Conference; encouraging African States members of COPUOS to participate in the work of the Legal Subcommittee; encouraging African countries to adhere to international outer space treaties and to promote the national legislation field; calling upon the Office for Outer Space Affairs to finalize a programme of study on outer space law for the Regional Centres and to flush out its database for national legislation, and this in very close cooperation with member States; to tap the mechanisms for cooperation which already exist such as the African Constellation for Earth Observation in order to sensitize the community which can make use of space policy and legal issue policy in a practical fashion.

And on the point of information exchange on national legislation, Algeria is doing its best to popularize the space tool and its regulatory aspects to involve all national players concerned.

In concluding, I would like to refer to the draft Protocol and the questions which are specific to space assets within the Convention on International Guarantees for Mobile Equipment. We are actively participating in the work of UNIDROIT on this draft text in Rome, December 2009. We would like to take this opportunity to reiterate our hope that this Protocol will indeed be marking the public service interest of all developing countries in satellite assets.

Thank you very much for your attention.

The CHAIRMAN: I thank the distinguished representative of Algeria for a very good statement. Thank you again.

The next speaker on my list is the distinguished representative of Indonesia. I give the floor to the distinguished representative of Indonesia.

Mr. I.G.A.W. PUJA (Indonesia): Thank you Mr. Chairman. Mr. Chairman, first of all, on behalf of the Indonesian delegation, I would like to take this opportunity to express my congratulations on your election as the Chairman of this Legal Subcommittee.

My delegation also congratulates all the members of the Bureau elected for the same period and we pledge our full cooperation to support the successful role of your chairmanship. Under your able leadership, my delegation believes that the deliberations under this Subcommittee will bring fruitful results.

My delegation also would like to extend our appreciation and gratitude to Mr. Vladimir Kopal who has successfully presided over this Subcommittee during the last three years.

Mr. Chairman, Indonesia is party to four space treaties, the Outer Space Treaty, the Rescue and Return Agreement, the Liability Convention, and the Registration Convention. Indonesia consistently undertakes it space activities in compliance with these treaties. These treaties, which form the legal framework for our current space activities, are of high importance to provide the basis for the expanding scope of space activities as well as international space cooperation for the benefit of development in Indonesia. In that regard, the Government of Indonesia has ratified an Agreement with the government of the Russian Federation on cooperation in the field of the exploration and use of outer space for peaceful purposes.

Indonesia puts particular attention on international space cooperation in disaster management and emergency response. Indonesia has benefited from the space-based disaster management, support under the framework of UNSPIDER centred on ICS(?) as well as ASEAN-COSA(?) in mitigating the effects of earthquakes in the Tasik Malayan Peran(?) in 2009. My delegation believes that this kind of cooperation would contribute greatly to the mitigation of such calamities as well as help post-disaster relief programmes. My delegation is of the view that the strengthening of capabilities in space law through the organizations of various programmes and workshops, training courses, seminars and meeting with the framework of COPUOS are of paramount importance in increasing the capability and building the capacities of the developing countries and assisting them in developing and using space technology, particular to help to sustain their development at the national level.

In that connection, Indonesia co-hosted the fourth GEOS/Asia-Pacific Symposium held in Bali from 10 to 12 March 2010 recently, attended by participants from 26 countries in the region.

Mr. Chairman, with regard to the issue of definition and delimitation of outer space, Indonesia stresses the need for the Legal Subcommittee to further discuss this issue in concrete terms. The absence of a clear definition and delimitation would bring legal uncertainty in the application of outer space law and air space law. The matter concerning State sovereignty over air and space and the scope of the two different legal regimes need to be clarified so as to reduce the possibility of disputes among States. Furthermore, the kind of development in which the emergence and increasing number of non-State actors in space activities has made it more urgent to have legal certainty in the field of outer space activities in order to guarantee the peaceful uses of outer space.

Taking into account the paramount importance of this matter, the time has come to try to achieve a minimum consensus or minimum compromise in a more realistic manner. This can be achieved by establishing an open-ended expert group which will focus on these specific issues on defining the legal terms collectively considered by member States as being the most basic and fundamental in relation with the space activities. The geostationary orbit is a limited natural resource with *sui generis* characteristics that with saturation.

We would also like to reiterate that assurances should be given that the utilization of the geostationary orbit is extended to and for the benefit of all countries

by upholding the principles of equitable access for States, taking into particular account the needs and interests of developing countries as well as the geographical position of certain countries. The GSO should be used on an equitable basis to meet the needs and interests of developing countries whose geographic situation particularly makes them relevant in this implementation.

Mr. Chairman, concerning the review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, my delegation welcomes the adoption of the Safety Framework for Nuclear Power in Outer Space. The Indonesia delegation would like to stress the importance of strictly applying safety standards in the use of nuclear power sources in outer space and fully support the use of nuclear power sources in outer space for peaceful purposes. In this regard, my delegation looks forward to the fruitful discussion of the agenda item "The Revision of the Principles Relevant to Nuclear Power Sources in Outer Space to Guarantee the Safety and the Peaceful Uses of Outer Space".

My delegation has followed with great attention all the progress achieved by various countries in implementing the Space Debris Mitigation Guidelines. Space debris poses a serious threat to countries such as Indonesia which are located along the equatorial line. At the same time, my country kindly lets the expertise and capabilities to fully implement the Guidelines. Therefore, we encourage best practice sharing and training from States who helps us with expertise and capability to be extended to the developing countries in order to transfer the knowledge and capacity, especially in the field of space debris monitoring. By providing such training, developing countries would gain the necessary ability to safeguard our environment from any damage caused by space debris.

Mr. Chairman, Indonesia also continues to actively participate in the strengthening of international cooperation. We hope that cooperation with other countries will continue to increase in the coming years, in particular in the form of cooperative activities to support sustainable development.

To conclude, Mr. Chairman, I would like to reiterate Indonesia's firm commitment and support the efforts of this Subcommittee for the benefit of mankind.

I thank you Mr. Chairman.

The CHAIRMAN: I thank the distinguished representative of Indonesia for a very good statement.

The next speaker on my list is the distinguished representative of Ukraine. I give the floor to the distinguished representative of Ukraine.

Mr. S. KUCHERENKO *(interpretation from Russian)* (Ukraine): Thank you Mr. Chairman. On behalf of the Ukrainian delegation, let me congratulate you Sir on your election as Chairman of the Legal Subcommittee. We are sure that the forty-ninth session of the Subcommittee will be fruitful and successful.

Mr. Chairman, distinguished delegates, under this agenda item, we would like to address some of the most recent developments in Ukraine's space activities.

In 2009, Ukraine's space activities were focused on implementing priority projects of the Four-State Scientific and Technical Space Programme for 2008-2012. Within the framework of international cooperation in outer space, in 2009, our Government signed Agreements on Cooperation in the Exploration and Use of Outer Space for Peaceful Purposes with the Republic of Belarus and Azerbaijan, as well as an Agreement between the Government of Ukraine and the Government of the Russian Federation on measures to protect technologies as part of cooperation in the exploration and use of outer space for peaceful purposes and the designing and use of launch vehicles.

On 26 October 2009, at the time of the official visit to Ukraine of a governmental delegation of the People's Republic of China, headed by the Vice-Chairman of the Government, an Agreement was signed between Ukraine and China on expanding cooperation in the area of optical and electronic infrared systems.

We continued work on the joint projects with Brazil to set up a launch complex Cyclone-4 at the Alcantara Launch Facility.

In 2009, the Cabinet of Ministers of Ukraine endorsed the Rules for Conducting a Registry of Scientific Research and Design Projects under funding guaranteed by the Cabinet of Ministers of Ukraine as part of the implementation of the treaty between Ukraine and Brazil on the long-term cooperation and the use of Cyclone-4 at the Alcantara Launch Facility.

In January of this year, the Cabinet of Ministers of Ukraine adopted a resolution entitled "The Transfer of Scientific and Technical Production to the Ukraine-Brazilian Joint Venture – Alcantara Cyclone

Space". The purpose of that resolution was to create priority conditions for the implementation by Ukraine of its international commitments with regard to the Cyclone-4 project.

In 2009, the National Space Agency of Ukraine reached agreement with investors on funding a national system of satellite communications with Ukraine's national communications satellite. Canada's Export Development Corporation will provide Opal-Cosmos, our Space Agency, with a long-term loan for that purpose.

On 15 March 2010, the European Union's Twinning Space Project held its Steering Committee's Meeting. The Twinning Space Project was launched in April 2008 with a view to deepening cooperation between Ukraine and the European Union in outer space in improving the regulatory and legal basis for that work and developing scientific and technological and potential of the two countries. This Project was the first in the Twinning Space Programme to be carried out with regard to outer space activities. It involved the French-German Consortium, including CNES of France, DLR of Germany, and the Federal Ministry of the Economy and Technology of Germany.

This Project was carried out along six lines. First, international and national space legislation, Seventh Framework Programme of the European Union on Technological Development, industrial policies, human resources and personnel management, participation and the use and commercial applications of the Galileo Programme of the European Union, participation of the Global Monitoring Programme with a view to maintaining the safety of the environment, GMES.

The funding of that Project was carried out by the European Commission. A highly professional team of 42 experts representing space agencies of France and Germany, maintained ongoing dialogue for two years with Ukrainian experts. In Ukraine, France and Germany, 60 events took place, meetings, seminars and so forth, involving more than 1,600 individuals who were familiarized with the state-of-the-art Ukrainian and European space industry.

Mr. Chairman, the delegation of Ukraine considers all items on the agenda of this forty-ninth session of the Legal Subcommittee to be important and requiring a discussion. Ukraine, as a member of the United Nations and a leading space-faring country has always welcomed United Nations efforts in ensuring global dialogue on the most important issues pertaining to space activities, first and foremost, expanding international cooperation in the area of science and technology, legal issues and challenges existing in space activities.

In the context of the agenda item on the status of the five United Nations outer space treaties, our delegation consistently favours respect for the existing international legal regime. That said, we would like to emphasize the fact that many of the provisions of the existing treaties need to be modified, updated and further developed due to the turbulent development of commercial space activities first and foremost.

The Ukraine delegation believes that the lack of a definition or delimitation of outer space creates a legal lacunae in international outer space and air space law. To address the possibility of arguments among States, we need to address and resolve the issues pertaining to State sovereignty and the delimitation of the two legal regimes. We believe that the use of the geostationary orbit, which is a limited natural resource, must be not only rational but also open to all countries regardless of their existing technical potential in order that they might have access to the orbit on an equitable basis, taking into account the needs and interests of the developing countries in the first place as well as the specific geographic situation of some countries. Coordination of countries' activities and their use of the geostationary orbit must be based on equity, fairness and the Radiocommunications Rules established by the ITU.

Under agenda item 8, we would like to inform the delegates that Ukraine has never used, and is not planning to use in the foreseeable future, any nuclear power sources in its space vehicles. That said, we do not rule out the need to use such sources in some cases and in certain contexts for space missions, particularly for long distance or remote space missions. Therefore, we believe it is important for the Legal Subcommittee to consider the issue of reviewing and possibly revising the Principles for the Use of Nuclear Power Sources in Outer Space. The objective of such a review, in our opinion, should be the further development and updating of international law in this area.

At present, in view of the fact that the development of space activities is ahead of the development of international space law which creates legal relationships in the area of space activities that are not yet addressed or regulated by international instruments, States are trying to fill these gaps through national legislation and that leads to legal collisions at times. Therefore, our delegation would like to emphasize the fact that international space law must go

hand-in-hand with the advancement of space technology and space activities.

Thank you very much for your attention and I wish the Subcommittee every success.

The CHAIRMAN: I thank the distinguished representative of Ukraine for a very good statement.

The next speaker on my list is the distinguished representative of Poland. I give the floor to the distinguished representative of Poland.

Mr. L. KULAGA (Poland): Mr. Chairman, thank you for the possibility to present some general views of the Government of the Republic of Poland.

At the outset, I would like to congratulate you on your election as Chairman of the Legal Subcommittee.

We would like to also express our gratitude to the former Chairman, Professor Vladimir Kopal.

The Polish delegation expressed great interest in the holding during this Legal Subcommittee's session the Symposium related to national space legislation. We consider the topic as very useful and practical, particularly for such countries as Poland which are in the process of drafting its Space Policy Act.

As regards international cooperation, in 2009, the main aim from Poland was to increase participation in ESA in the framework of the European Cooperating State Agreement with the goal of becoming a full ESA member in five years. Poland actively cooperated with the ESA countries.

In addition, we also had a good record of cooperation with the Russian Federation in space sciences which was evident in experiments performed by scientists of both countries.

Poland is a member, or cooperating member or user of the following international intergovernmental space organizations: EUTELSAT, INTELSAT, INMARSAT, COSPAR-SARSAT and INTERSPUTNIK.

Mr. Chairman, Poland welcomes the initiative of the Government of Austria to organize a seminar on the Moon Agreement. Hearing arguments of experts regarding this treaty, we _____(?) *(not clear)* did not find great support of the international support seems to be very desirable. Poland is a party to four space treaties: Outer Space Treaty, Rescue Agreement, Liability Convention and Registration Convention. Poland is not a party to the Moon Treaty. Nevertheless, we are of the opinion in that the discussion of different aspects of the Moon Treaty should be continued.

Thank you Mr. Chairman.

The CHAIRMAN: I thank the distinguished representative of Poland for a very good statement.

Are there any other speakers on the general exchange of views at this time?

I see none.

We will, therefore, continue and hopefully conclude our consideration of agenda item 4, General Exchange of Views, tomorrow morning.

Status and application of the five United Nations treaties on outer space (agenda item 5)

Distinguished delegates, ladies and gentlemen, I would now like to continue our consideration of agenda item 5, the Status and Application of the Five United Nations Treaties on Outer Space.

The first speaker on my list is the distinguished delegate of China. I give the floor to the distinguished delegate of China.

Mr. K. PAN (China) *(interpretation from Chinese)*: Thank you Mr. Chairman. Mr. Chairman, first of all, the Chinese delegation would like to congratulate Mr. Mayence for his election as the Chairman of this session of the Working Group. Maintaining and strengthening law and order in outer space is a very important task for the Legal Subcommittee and a consistent pursuit of the Chinese Government.

China has become a party to the four space treaties and has always strictly abided by the basic principles and relevant provisions as set out in these treaties and has carried out its space activities in accordance with the United Nations Charter and within the framework of space law.

We support the Legal Subcommittee to continue its discussions on this agenda item, actively conduct information-sharing and bring more countries to join the five space treaties.

At the same time, we believe that with the rapid advancement of human activities in space, the five space treaties are no longer sufficient in coping with the various new issues and new challenges. In order to cover the loopholes left by the five space treaties and respond to the requirements of the new developments, the Chinese Government is in favour of exploring the possibility to improve and consolidate the current space laws while, at the same time, maintaining the stability of the framework of these laws.

With a view to facilitating the formulation of a comprehensive space law, Mr. Chairman, China is not yet a party to the Moon Agreement but is now in the process of studying the Agreement and related issues in a serious manner. We are of the view that the Agreement embodies the basic principles contained in the internationally well-established space laws such as the principles of peaceful use, free exploration, international cooperation and a common interest which could provide guidance for the peaceful exploration and use of the Moon.

China appreciates the joint statement issued by Belgium and some other countries and highly commends the International Institute of Space Law and the European Centre for Space Law for the Symposium they organized last year.

We are also prepared to actively participate in a Multi-Disciplinary Workshop to be organized by Austria during this session. We believe that these events will be instrumental in raising the awareness and knowledge of many countries about the Moon Agreement and will help convince more countries to join the Agreement.

Now I would like to present a brief overview of the progress achieved by China in its Moon exploration projects.

China plans to carry out a series of Moon exploration projects before 2020 in order to conduct a comprehensive exploration of the Moon as well as a careful survey on the Moon's surface through soft landings, automatic inspections and sample returns.

China's first Moon probe, Chiang-1, was successfully launched on 24 October 2007 and after orbiting the Moon for more than one year, it collected vast volumes of scientific data and it impacted the Moon on 1 March 2009 thereby successfully completing the first stage of the Moon exploration project.

At present, the second stage of the project has also achieved positive results. In its Moon exploration activities, China strictly abides by the basic principles of the various space treaties and has consistently advocated for maintaining law and order in space.

We sincerely hope that China's moon exploration projects will contribute to a more scientific and insightful knowledge by mankind of the Moon.

Thank you Mr. Chairman.

The CHAIRMAN: I thank the distinguished representative of China for a very good statement.

The next speaker on my list is the distinguished representative of Germany. I give the floor to the distinguished representative of Germany.

Mr. H. WASSERMANN (Germany): Thank you very much. Mr. Chairman, distinguished delegates, Germany would like to affirm its continuing support for the legal regime established by the United Nations treaties on outer space and the efforts made by the Legal Subcommittee with regard to enhance the practice of its application. In this respect, the adoption of the resolution concerning the application of the concept of the launching State on 10 December 2004 and the resolution concerning recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects of 17 December 2007 was a major step forward.

Germany thanks the United Nations Office for Outer Space Affairs for the endeavour to transfer the recommendations of the registration practice resolution in an authoritative template. This registration form (forum?) will lead to a real harmonization of registration practice. It demonstrates the detailed analytical work performed and intent engagement in favour of an operational instrument for the Registrar. The homogenous(?) and efficient registration of space objects is a prerequisite for the implementation of Article 6 of the Outer Space Treaty: International Responsibility for National Activities in Outer Space, and Transparency Regarding Jurisdiction and Control on Space Objects.

Thank you very much Mr. Chairman.

The CHAIRMAN: I thank the distinguished representative of Germany for a very good statement.

The next speaker on my list is the distinguished representative of the United States of

America. I give the floor to the distinguished representative of the United States of America.

Mr. S. McDONALD (United States of America): Thank you Mr. Chairman for this opportunity to provide the views of the United States on this agenda item.

The four core treaties governing the use of outer space, the Outer Space Treaty, the Agreement on the Rescue and Return of Astronauts, the Liability Convention, and the Registration Convention have served States Parties well over many decades. The United States is honoured to serve as one of the depositaries for three of these treaties, the Outer Space Treaty, the Rescue and Return Agreement, and the Liability Convention.

I have consulted with the State Department's Treaty Office regarding actions taken in Washington with respect to these treaties and can report that since the Legal Subcommittee's last meeting in March 2009, Libya(?) deposited instruments of accession to the Rescue and Return Agreement, and the Liability Convention on 3 November 2009. We would welcome any further information from other depositaries on any relevant treaty action since this Subcommittee's last meeting.

We would also welcome further adherence to these treaties and hope that those States and international organizations, including some members of COPUOS and some organizations that participated as observers to this Subcommittee that have not yet become party to these treaties will carefully consider their status with respect to them in the coming year.

Thank you for this opportunity to comment on this agenda item.

The CHAIRMAN: I thank the distinguished representative of the United States for a very good statement.

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

Yes, the distinguished delegate from Colombia.

Mr. J. OJEDA BUENO (Colombia) *(interpretation from Spanish)*: Thank you Mr. Chairman, good afternoon. Since this is the first time that Colombia has taken the floor, we would like to congratulate you Sir on your election.

We would also like to thank Professor Vladimir Kopal for his excellent work in the previous session.

Again, since this is the first time that my delegation has taken the floor in the way of exchange of views and opinions on the agenda item before us, we would like to express the concern of some countries and the concern of those who see that countries have not at times ratified some of the international instruments governing outer space activities. And we have listened to academicians, professors who talked to us about evolving outer space law, and it is evolving, but it is not as if it is now evolving and was perfect before. It has always been evolving and it is important to understand the motivation of those countries that have not ratified this or that agreement.

As always, this delegation values COPUOS and throughout the history of COPUOS, we have taken an active part in its work and in particular in its work to develop and perfect international space law. We have, for our part, joined three of the most important treaties and signed them and our Government is in the process of preparing the ratification.

Thank you.

The CHAIRMAN: I thank the distinguished representative of Colombia for a very good statement.

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

Yes, the next speaker is the distinguished representative of the Republic of Korea. I give the floor to the distinguished representative of Korea.

Mr. J. H. CHO (Republic of Korea): Thank you for giving me the floor Chair. First of all, I want to congratulate my distinguished colleague of China for their successful exploration and the 2020 about the Moon exploration activities and therefore I want to appreciate their efforts for making complaints(?) *(not clear)* in space laws.

The Republic of Korea also is of the same view that we need a kind of _____(?) *(not clear)* space law. But, at the same time, I think we have to have some realistic goal because we still have many countries who have not ratified even four treaties. The Republic of Korea also have ratified four treaties while we authorized at the same time putting much energy in to establishing an effective national implementing system to table the university of outer space treaty. So I think in our debate here we have to discuss a lot about

more progress here because like building a more comprehensive space law but, at the same time, as our distinguished delegate of China said to cover the loopholes, we think we have to concentrate our efforts to promote our national implementing system.

Thank you Sir.

The CHAIRMAN: I thank the distinguished representative of the Republic of Korea for a very good statement.

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

I see none.

We will, therefore, continue our consideration of agenda item 4, Status and Application of the Five United Nations Treaties on Outer Space, tomorrow morning.

Information on the activities of international intergovernmental and non-governmental organizations relating to space law (agenda item 6)

Distinguished delegates, I would now like to continue our consideration of agenda item 6, Information on the Activities of International Intergovernmental and Non-governmental Organizations Relating to Space Law, agenda item 6.

The first speaker on my list is the distinguished delegate of Ukraine. I give the floor to the distinguished delegate of Ukraine.

Mr. S. KUCHERENKO *(interpretation from Russian)* (Ukraine): Thank you Mr. Chairman, for giving us a chance to address this agenda item.

Mr. Chairman, distinguished delegates, as in previous years, we are happy to inform the Subcommittee on the work of the International Outer Space Law Centre in Kiev. It has existed for 11 years and it is the only post-Soviet international organization that specifically focuses on research, education and applications pertaining to outer space law. It consistently focuses on comparative legal studies of the national space law systems of various countries of the world, training professionals through post-doctorate and master degree programmes, consulting, publishing information and analysis and international cooperation in the area of outer space law.

The work of the Centre is based on six sectors: research and education, legislation, legal expertise, publication, information and analysis, and international cooperation.

On research and education, throughout the years that the Centre has been in existence, it has trained a number of individuals and a number of doctorate theses were prepared and defended in various areas such as international law including international regulation of international commercial space projects, market regulation of space services, the theory of States and law including the Ukrainian outer space legislation, environmental law focusing on the protection of the environment in space activities, and civil law addressing legal aspects of insurance with regard to outer space activities.

Educational programmes are carried out on the basis of the Kiev University Law Centre under the auspices of Ukraine's National Academy of Sciences.

In the area of developing legislation, the Centre focuses on the development of regulatory acts, in particular it developed a new draft of Ukraine's law on space activities. It carries out expert review of regulatory and legislative documents prepared by other organizations and prepares draft legislation and rules governing space activities.

The legal expertise sector provides legal reviews of documents prepared by others. This is an important area in the work of the Centre, in a way a benchmark of the expertise of the professional staff of the Centre. It carries out legal analysis and review at the request of the National Space Agency of Ukraine. In the period under review, we analyzed various situations that emerged in the course of the implementation of international projects such as Global Star, Cyclone-4, Sea Launch, VEGA, NEPA and others. Over 60 projects were reviewed.

Now in the area of publications. In the years of its existence, the Centre has issued five volumes, five compendiums of Ukrainian outer space law including international legal instruments in the Ukrainian language and national legislation. This has become a widely used handbook for all of the various units of Ukraine's space industry and also the government agencies overseeing this work. The Centre also prepared a set of extensive commentaries to Ukraine's law on space activities.

Back in 2000, the year's(?) (US?) launched an important publication project which will see the publication of many volumes of space legislation of the countries of the world in Russian and English. To date, five volumes have been published. It also continuously

published monographs, scientific papers by not only Ukrainian researchers, but Russian, German, Italian, Brazilian, US and Canadian scholars as well.

In the area of international cooperation, the Centre maintains close scientific ties with organizations and institutions around the world that work in the area of space law.

In 2009, the Centre signed an Agreement on Cooperation with the Institute of Space and Telecommunications Law of Paris Sud University, one of the leading science institutions in Europe. This Agreement contained a special session on joint post-graduate studies and on the basis of that agreement, one post-graduate student of the Ukrainian Space Centre has also been enrolled in Paris Sud University at the same time.

Representatives of Germany's Aerospace Centre, DLR, also expressed a wish to take part in this cooperation and in particular they have made a major contribution to the project entitled "The Köln Commentary on Space Law".

Talking about other activities of the Outer Space Law Centre, in Kiev, in 2009, I have to mention the six symposium under the auspices of the United Nations on the development and strengthening of international and national space law held in Tehran, Iran, in November 2009. At that time, the Deputy Director of the Ukrainian Centre made two presentations on the development of space law in post-Soviet countries, and on strengthening the role of education in space law as a guarantee of States involvement in international cooperation in the exploration and use of outer space for peaceful purposes.

Furthermore, the representative of the Kiev Centre took part in a meeting of United Nations Experts on Educational Curricula in the Sphere of Outer Space Law, Science and Technology.

At the time of the Ukrainian-French-German Seminar on Outer Space Law, held in June of 2009 in Kiev, as part of the Twinning Space International Project, and this particular Seminar was entitled "Accelerating Cooperation Between Ukraine and the European Union in the Space Sphere". In the course of that event, a representative of the Kiev Centre made a presentation on the legal basis for remote sensing of the Earth and participants from Ukraine took a very active part in this Twinning Space Project throughout its lifetime.

In conclusion, I would like to emphasize the fact that the Kiev International Space Law Centre is open to all forms of international cooperation.

Thank you very much.

The CHAIRMAN: I thank the distinguished representative of Ukraine for a very good statement.

The next speaker on my list is the distinguished representative of the International Mobile Satellite Organization. I give the floor to the distinguished representative of the International Mobile Satellite Organization.

Mr. E. PACHA (International Mobile Satellite Organization) *(interpretation from Spanish)*: Good afternoon to one and all. I would like to congratulate you upon your election to the post of Chairman.

I would also like to pay tribute to Professor Kopal for all his good services to this Legal Subcommittee in the past.

I would like to present to you now document 78/1 which will give you information on developments in space law in particular activities conducted in IMSO, the Mobile Satellite Telecommunications Organization, that I am speaking on behalf of. You are going to be indeed finding all of the work on IMSO and the work that IMSO has sought to promote. It has worked also with INMARSAT. It was established, IMSO, on the basis of the Convention of INMARSAT under the auspices of IMO, the International Maritime Organization. And the purpose of this Convention was indeed to make provision for the space segment necessary for improved maritime communications, specially improved safety of life at sea communications, Global Maritime Distress and Safety System, that is the GMDSS.

The name of the Organization was changed in 1994 to the International Mobile Satellite Organization to reflect the amended purpose of the work of this Organization. And in 1998, amendments to the Convention were adopted to transform the Organization into a privatized corporate structure while retaining certain intergovernmental oversight of certain public service obligations, in particular the GMDSS.

Today, this intergovernmental organization has 94 member States, operates through the Assembly of Parties. There are more and more numbers of organizations interested in participating in the work under IMSO especially work having to do with the

safety of life at sea communications and the Global Maritime Distress and Safety System, GMDSS. Recently this was tapped into during the Haiti and Chile earthquake events to see how one could be ensure system use of the International Convention for the Safety of Life and indeed this system was opened to all and any services provider interested in participating. Of course, as the document says, the system has to meet the criteria of the Organization, public sector criteria have to be observed and all of this has to be done under the auspices of IMSO.

There was a new system implemented for remote monitoring, LRIT. This has been tested and implemented worldwide now as part of the functions of IMSO. There are more and more LRIT data centres working both individually as well as collectively. This enables the monitoring of the data from the vessels involved in these merchant fleets and these centres, in addition to the six prototype LRIT data centres which were entered into in 2008, have been providing services to a total of 71 governments. There are more data centres currently being tested. And, as I have already said, amendments have been adopted in 2008. The IMSO Organization decided to amend in 2008 and indeed this was done beginning October 2008 and this pending the official entry into force of the IMSO Constitution.

The activities of IMSO in this regard, especially with regard to this identification and long-distance satellite monitoring of merchant vessels, is very crucial because of the piracy events which have unfortunately surfaced very recently. In 2009, 42 centres were indeed ensured for operational purposes and in 2010, this number has gone up to 67. This goes to show the interest that this system represents for governments, for States.

IMSO, along with other intergovernmental organizations, international organizations who are members of the Subcommittee with IMO, is doing work with the International Maritime Organization as well as the Air and Space Control Convention and other entities of the United Nations such as INTELSTAT, IPSO as well, which is also present here in this Committee. We are working on all sorts of new cooperative initiatives for satellite monitoring and identification which can be used for various disciplines and we are seeking to ensure that this will be accessible to all users.

I am ready to answer any questions that you may wish to address to me as to the thrust of our activities. There is complete information on the activities of IPSO on our IPSO.org website.

Thank you very much for your attention.

The CHAIRMAN: I thank the distinguished representative of the International Mobile Satellite Organization for a very good statement.

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

The distinguished delegate of Colombia. I give the floor to the distinguished delegate of Colombia.

Mr. J. OJEDA BUENO (Colombia) *(interpretation from Spanish)*: Thank you very much Mr. Chairman. For the second time I take the floor but for the first time under this agenda item. I am grateful to the IMSO delegate for this excellent exposé regarding the importance of the exchange of information. All of these issues have to do with safety, security, disaster mitigation and other related issues. This exchange of information is vital. The delegation of Colombia would like to express its satisfaction at the excellent inter-agency cooperation pursued and facilitated by IMSO. This is truly a systemic type of work.

This is something that IMSO does with regard to all the various agencies and bodies working within this system and in the vein of the proposal made by this delegation to the Committee and its Subcommittees, we would like to once again mention the need to provide information on these systemic or system-wide initiatives within the United Nations in the area of outer space activities.

IMSO is doing excellent work in this regard so what I said and what we have said before is totally in line with what was put on the table by the distinguished delegate of IMSO.

Thank you very much again.

The CHAIRMAN: I thank the distinguished representative of Colombia for a good statement.

The next speaker is the distinguished representative of the Republic of Korea. I give the floor to the distinguished representative of the Republic of Korea.

Mr. J. H. CHO (Republic of Korea): Thank you for giving me the floor Chair. First, I would like to express appreciation for the contribution by the distinguished delegation of Ukraine for their efforts for

publication and research and international cooperation efforts and everything and the national registration act _____(?). Actually my delegation is impressed by the post-Soviet international cooperation efforts with other countries.

I also want to express my appreciation for IMSO activities and their kind briefing about their activities. My delegation thinks that about these issues, the information of the activities _____ *(not clear)* intergovernmental and non-governmental organizations. I think the most important thing is the concrete actions because otherwise we are not going to get _____ *(not clear).*

In this view, Korea hosted the sixtieth International Astronautical Congress last October under the theme of "Space for Sustainable Peace and Progress". The Congress was quite successful because of the other nations cooperation and coordination with us. And for follow-up measures, Korea placed a greater emphasis on space education for students in the hopes of nurturing future space experts and strengthening international competitiveness.

And on the coming International Astronautical Congress, we are planning to send more participants to attend the meeting to be held in Prague between 27 September and 1 October 2010.

Thank you very much Chair.

The CHAIRMAN: I thank the distinguished representative of the Republic of Korea for a very good statement.

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

I see none.

We will, therefore, continue our consideration of agenda item 6, Information on the Activities of International Intergovernmental and Non-governmental Organizations Relating to Space Law, tomorrow morning.

Technical presentation

Distinguished delegates, I would now like to proceed with a technical presentation. The presenter is kindly reminded that technical presentations should be limited to 20 minutes and less.

I give the floor to Mrs. Thouraya Sahli of Tunisia who will make a presentation on the space activities of the Tunisia Centre of Cartography and Remote Sensing.

Ms. T. SAHLI (Tunisia) *(interpretation from French)*: Thank you very much Chairman. I would now like to present to you the activities of the National Centre for Mapping and Remote Sensing of Tunisia and this will give you an idea of the approach that Tunisia is implementing in this field. I will give you an idea of the structure of my statement. First the introduction, then the outer space mission, then the National Centre on Mapping, international cooperation followed by the International Astronautical Federation and future prospects for our work and to illustrate the interest that we have in acceding to COPUOS membership.

As my colleague has already said, Tunisia has become interested in outer space since it launched its first satellite in 1957. It has joined the various treaties on space of the United Nations. There was an instrument of public authority which was set up to, in fact, implement outer space policy as follows: the implementation of our country's space policy, promoting the use of space technology for the development of a national, economic and social etc. Our missions and tasks were to propose national policy for the peaceful use of outer space, coordination of inter-disciplinary activities of the various ministerial departments and bodies involved in such efforts, promotion of the possibilities afforded by outer space technologies and the enhancement of the awareness of the importance of this sort of work.

The National Centre for Mapping and Remote Sensing was set up in 1988 as per recommendation of the Commission for Outer Space Activities of our country. Its main mission was to promote the use of space technologies, especially of remote sensing technologies.

In May 1998, the CNCT was entrusted with missions concerning the National Centre, which was the Technical Secretariat as well as the coordination of our National Space Programme. It is on the basis of the role that it was given that the CNCT started performing its awareness enhancing activities. It indeed wanted to attribute even more importance to space remote sensing for purposes which could prove useful for industrial and research sectors.

Various players and users of such products were contacted and became involved in the technical assistance work and in promotional efforts.

This Centre also worked as a consultant in an advisory capacity. It allowed various projects to be properly set up in application of remote sensing technologies, they designed various information centres and they also managed various projects with proper methodology and proper systemic requirements.

This is the way this National Mapping and Remote Sensing Centre looks. Here we welcome you to this Centre.

Video

(Continued in English) Since the early ages there has been a growing awareness in Tunisia with respect to the utility of space technology applications to society. In terms of economic growth, social development and protection of national resources and environment. The National Centre for Remote Sensing, a Government body, entered the oversight of the Ministry of Defence, was thus created in July 1998 with a view to meeting the urgent needs of the country in terms of abated basic and thematic maps.

It is also responsible for providing directions on national policy regulations and a remote sensing and geographic information system.

The technique employs electromagnetic energy which includes light, heat and radio waves as a means of detecting and measuring target characteristics.

Remotely-sensed data is therefore the raw material processed by the National Centre for Remote Sensing, for the provision of studies and other services to various users and the conduct of priority projects are stipulated by a Slav(?) creation of July 1988.

The development of the activities of the Centre has known three stages.

The first phase from 1989 to 1993 during which the Centre put in place the material and personnel and acquired first experience through the performance of pilot projects using remote sensing aimed at the main potential users.

The second phase from 1994 to 2003 which was marked by an intense activity in scientific research with national and Euro-Mediterranean partners thus enabling the execution of various studies aimed at decision-makers in the field of natural resources, management of agriculture, land planning and environment and coastline protection.

The third phase was started in 2004 is marked by the extension of the initial missions of the Centre to topography, geodesy, photogrammetry and with amendments of international boundary marks.

Following the expansion of its activities in 2004, the National Centre for Remote Sensing entered into restructuring and a new organization chart was adopted. The Director-General, who is responsible for the management of the Centre, is assisted by an Advisory Committee, chaired by the Minister of Defence and attended by representatives of Ministries concerned with the activities of the Centre, and the scientific community discusses the scientific orientation and research projects. The results of these projects are reviewed on a regular basis by the Committee.

In terms of means for the execution of the various tasks entrusted to the National Centre for Remote Sensing, the Centre has at its disposal a specialized staff in the various domains of geomatics with proven competencies at national and international level, as well as up-to-date equipment and software.

Since remotely-sensed data played an increasingly important role as the source of information needed for sustainable development, the National Centre for Remote Sensing, in addition to providing updated basic and thematic maps, carried out studies and projects on remote sensing applications for agriculture, urban planning, natural resources and environment.

Within the national partnership, the Centre carried out the Food Security Project in the framework of strategic studies aimed at early crop estimation and the determination of wheat-cultivated areas based on remote sensing data for the classification of agricultural land.

Given the importance of coastline and its relation with the economy and the potential threats posed by pollution and over-exploitation, the Centre, always within the national partnership, undertook the study with the objective of setting up a methodology based on multi-temporal imagery which enabled an accurate detection of environmental changes and to identify their degree of sensitivity.

Within the projects started in 1997, in collaboration with the General Directorate of Forestry, the National Centre for Remote Sensing produced maps of forests and range land resources as K25,000 and set up a digital database of the resources.

To this end, and for the execution of filled work, the National Centre for Remote Sensing has relied on diversified competences and employed around 20 higher education graduates. This work, which bore on three governorates in the north-west region, is being extend to the rest of the country.

Given the type of weather in Tunisia, national resources are under constant threat from such hazards as forest fire, land degradation, desertification and flooding. In this connection, remote sensing applications using imagery data and proper methodologies, could either introduce effective preventive measures or alleviate the problems in the aftermath of the disaster. The National Centre for Remote Sensing is currently developing an application on forest fires based on the physical aspects of imagery for the generation of indices(?).

The National Centre for Remote Sensing was entrusted with the carrying out of several studies utilizing remote sensing, among which the study for the selection of a model way corridor between the second and _____(?) (not clear) which consisted in the production of land use maps and maps of natural and economic constraints derived from satellite imagery and geographic information systems through data crossing.

Remote sensing techniques were also used to achieve a study for the selection of the optimum location of an airport in the central eastern part of Tunisia. The study led to the selection of the Region of Enfida as the best site for the setting up of a new airport with a 30 million passenger capacity.

On the other hand, in the field of urban planning, and on request of the Directorate of Urban Planning, the National Centre of Remote Sensing produced maps and development plans of densely populated cities of Glentunis(?), Sfax, Sousse, Monastir and Sidi Bou Zid, which highlighted the engrowthment(?) on agricultural lands.

Other works achieved by the National Centre for Remote Sensing include the study for the selection of sights favourable for agricultural, permission by the General Directorate of Fisheries and Agriculture. With the production of maps of sights for intensive and semi-intensive breeding of fish and specific databases.

It is noteworthy to highlight the national projects aiming at the setting up of integrated databases and supported by GIS that have proven useful to decision-makers. In this connection, we cite, for example, the provision to the General Directorate of Land Planning with digital databases and including several digitized layers such as roads, railroads, energy transportation, bridges, weds(?), streams, administrative limits, geodetic points and digital elevation models.

At present, major projects being carried out by the Centre include the setting up of a database, health facilities in Tunisia on behalf of the Ministry of Public Health. The production of an urban database covering the municipality of Tunis, Bardo, Sousse and Sfax.

The National Centre for Remote Sensing has, ever since its inception, given particular attention to strengthening its channels of communication, the objective of ensuring the exchange of … (missing) … funded by the European Union.

At the same time, the Centre has endeavoured to improve the various disciplines nationwide in collaboration with all the parties concerned through meetings and workshops or open-day sessions, the dissemination of remote sensing concepts, namely among higher education students.

The National Centre for Remote Sensing stands as a pioneer in the field of remote sensing and GIS in Tunisia. Being fully aware of the continued growth of information-based society and the challenges at stake, the Centre has embarked on a strategic plan implying the streamlining of its processes and whose aim is ultimately to make the institution more effect in the services it renders banking(?) on the expertise it has accumulated during almost three decades and the large network of partnerships it has built.

End of Video

(Continued in French) This presents the previous activities and functions of the Centre. Now we have the cartographic, the mapping aspect which has been added on to the other functions which have been referred to.

As for international cooperation, we are linking up various international cooperative relations. We are setting up international research projects. We are ensuring various kinds of financing of international joint cooperative mechanisms.

For Earth observation, we are working with international support and we have become members of

the International Astronautical Federation since 2009 and we are also the focal point for the Regional Centre of Activities for Remote Sensing for the Mediterranean Action Plan for COPUOS. We are present as an observing State for several years and at present we are also the focal point for the UNSPIDER Programme which we are starting to develop.

As concerns the IAF, we are studying a cooperative programme between the CNCT and the IAF which could prove possible to enhance public awareness of the importance of space activities, to develop staff competence and qualifications in the field of outer space, to promote recognition of the keys of space activities, etc.

Here, this is our membership certificate which I have just screened.

Now for future orientation and activities. We are going to be engaging in professional training in outer space. The development of a national programme which is even more ambitious and more strategic coverage. We are going to be more active in various events and activities. We are going to be stepping up partnership and cooperation and we will be working to establish a high-level space for our country's activities.

So we are going to be requesting our accession to COPUOS for 2010. Why COPUOS? Well, we are certainly expecting to have very many positive spin-off benefits. This will facilitate international cooperation to enable us to better explore and make use of outer space and space technologies and we believe this could certainly be of benefit to our country. This will allow us to participate in international cooperation mechanisms allowing us to gain access more easily to scientific data, met data as well as other space-related information and data and we will thus be able to better benefit from the protection of the United Nations COPUOS activities. We are going to be seeking to contribute to international cooperation in outer space because it is necessary to fill in the lacuna in the legal context of outer space to step up this cooperation. It is also necessary to get involved for us in the proper management of disaster control and emergency activities which indeed require better access to space services. We are going to be working within the United Nations Programme on Space Rescue and Emergency Activities. This would also enable us to better tap the coordination between member States in the United Nations system as ensured by COPUOS in developing science and space technology and furthering development we will be able to be involved in the space debris and development of the peaceful uses of outer space nexus of issues.

Thank you very much for your attention.

The CHAIRMAN: Thank you Mrs. Sahli for your presentation.

Is there any delegate who has a question for the presenter?

The distinguished representative of Korea. I give the floor to you.

Mr. J. H. CHO (Republic of Korea): Thank you Chair. First I would like to thank for the very excellent presentation given by the distinguished delegation of Tunisia on their National Centre for Remote Sensing. I think they have shown good examples of how we can benefit from a space technology like remote sensing including forestry mitigation, natural disaster, urban planning and selection of _____ (?), that was very impressive.

The Republic of Korea also has a starting _____(?) *(not clear)* that is technology for every activities involving the international cooperation. And my question is actually, we have these various activities like remote sensing and usually the remote sensing does, I think it also needs to involve the development of the national legislation because these activities, progress of activities and penetrate a lot of fields in the various sectors of industries. So I want to ask to the Tunisian delegation how they proceed the development of national legislation related to their remote sensing activities.

Thank you.

The CHAIRMAN: Thank you distinguished representative of Korea for your question. I give the floor to the distinguished representative of Tunisia.

Ms. T. SAHLI (Tunisia) *(interpretation from French)*: Yes, at the beginning when the Remote Sensing Centre was first set up, we put in place pilot projects in partnerships. The various Ministries concerned working in the area in question were the major stakeholders. In 1988, this Centre exclusively represented everything to do with space data.

Obviously at present, the field is broader so at first all projects were focused on remote sensing which are the area and it expanded into such areas as agriculture, the management of natural disasters, equipment resources, little by little, that is how it

started, but then little by little, all the various institutions established their own units for image processing and became stakeholders as well.

The legislative issues that arise do not really concern the acquisition of data, data collection as such. Data available on the Internet everywhere, there is nothing we can do about that. Obviously there is now a well-developed private sector which in some ways represents service providers such as Equinos, for example, and that requires legislation.

I do not know if I have responded to your question in a satisfactory manner but I would be happy to ask my colleagues who are a little bit more aware of the way legislation has evolved.

Mr. R. EL-MAGIDI (Tunisia) *(interpretation from French)*: Thank you Mr. Chairman. With your permission, I am going to add a few comments.

The setting up of the National Remote Sensing Centre in 1988 was, of course, a pioneering project at the time and has evolved since. In 2009, we have added cartography as a major new area of competency and that is governed by another office, the Office of Topography and Gazetteers.

So in 2009, we added the competency in the area of cartography to the National Remote Sensing Centre's with a view to strengthening that Centre, extending its scope and covering the entire gamut of space applications as they develop.

In terms of the economic development of the country, legal or legislative development has largely kept pace with it as well as with the industrial and cultural and social development of the country. So we are talking about different levels then and now so all of the national authority in such areas as remote sensing and cartography have now been defined as part of a national programme for all State-directed activities but also there are other sectors where there are other actors which I encourage to cooperate with the National Centre for Cartography and Remote Sensing, whose mission, the Centre's mission in the final analysis is to harmonize all of these activities and work closely together with all stakeholders.

Thank you.

The CHAIRMAN: Thank you the distinguished representative of Tunisia for the presentation and answering the questions.

Is there any delegate who has a question at this present time?

Yes, the distinguished delegate from Bolivia.

Mr. P. MARCA (Plurinational State of Bolivia) *(interpretation from Spanish)*: Thank you Mr. Chairman. The delegation of Tunisia could perhaps kindly provide further clarification as to the way its National Space Committee or Agency ensures the conformity of these various agencies with existing rules and laws. And in particular my question has to do with the ways in which cartographic or topographic information obtained by the Centre is used in terms of the distinction that exists between civilian use and military use. Obviously, in the civilian area everything is clear, land management, cartography, natural resources management, so on and so forth, but what about the military sphere. How is this data used in the military sector and how is that regulated? In a number of presentations in this forum we have heard the fact that the national space agency in a number of countries is in charge of civilian activities and there is another authority that governs and regulates military activities pertaining to outer space. There are countries where one agency governs both and to me it is important to understand how the use of information is distinguished between the two areas.

Thank you.

The CHAIRMAN: I thank the distinguished representative of Bolivia.

I give the floor to the distinguished representative of Tunisia.

Ms. T. SAHLI (Tunisia) *(interpretation from French)*: The National Centre for Cartography and Remote Sensing is a centre that exists under the auspices of the Ministry of National Defence but this is just under the auspices. I emphasize that. It is not a body or a unit of the Defence Ministry. And the work that I have reported on is civilian work and the Centre works with all the various Ministries and all the various sectors.

As regards military uses or applications as such, it is a different area. We really have no access to that. The military have their own projects. What we are representing here and what we reported on is the various civilian applications involving a large array of stakeholders.

I do not know if I have answered the question. I am going to ask my colleague to speak.

Mr. R. EL-MAGIDI(?) (Tunisia) *(interpretation from French)*: If I can add a comment with your permission Mr. Chairman. Thank you.

And I thank the distinguished representative of Bolivia for his question and for this opportunity, in fact, to clarify two different things.

It is true that the National Centre for Cartography and Remote Sensing exists under the auspices of the National Ministry of Defence. However, this does not mean that it is part of the armed forces. These are two different things. The National Centre for Cartography and Remote Sensing has been placed under the aegis of the Ministry of Defence to make sure that the Ministry of Defence might live up to its obligations, to its mission and might also enable the Centre for Cartography and Remote Sensing to perform its mission and to pursue its activities. And in the presentation we made, we traced the way the Centre evolved after its inception in 1988 and all of the missions that we discussed in our presentation are part of the civilian activities governed by national legislation in their appropriate areas.

As for the military, that is a different area altogether. The data we reported on and the applications we reported on are entirely civilian in nature.

Something else. The National Centre for Cartography and Remote Sensing performs the function of a permanent Secretariat overseeing all space-related activities under the auspices of the Ministry of Education.

So once again, satellite data that we reported on that are collected through the missions of the National Centre for Cartography and Remote Sensing that were described are not military in nature.

Thank you.

The CHAIRMAN: Thank you distinguished representative of Tunisia for that explanation.

Is there any delegate who has any questions for the presenter?

I see none.

Distinguished delegates, I will shortly adjourn this meeting. Before doing so, I would like to remind delegates of our schedule of work for tomorrow morning.

We will meet promptly at 10.00 a.m. At that time, we will continue and hopefully conclude our consideration of agenda item 4, General Exchange of Views. We will also continue our consideration of agenda item 5, Status and Application of the Five United Nations Treaties on Outer Space, and item 6, Information on the Activities of International Intergovernmental and Non-governmental Organizations Relating to Space Law.

At the end of the Plenary, there will be two technical presentations by the representative of Tunisia on “Tunisia: Adherence to COPUOS”, and by the representative of France “French Registration of Space Objects”.

The Working Group on Agenda Item 5, Status and Application of the Five United Nations Treaties on Outer Space, will then hold its first meeting on the chairmanship of Mr. Jean-François Mayence of Belgium.

Are there any questions or comments on this proposed schedule?

I see none.

Therefore, the meeting is adjourned until 10.00 a.m. tomorrow morning.

Thank you very much for your attention. We will see you tomorrow morning at 10.00 a.m.

The meeting closed at 5.14 p.m.