

**Committee on the Peaceful  
Uses of Outer Space***Unedited transcript*543<sup>rd</sup> Meeting

Tuesday, 14 June 2005, 3 p.m.

Vienna

*Chairman: Mr. A. A. Abiodun (Nigeria)**The meeting was called to order at 3.16 p.m.*

**The CHAIRMAN:** Good afternoon distinguished delegates and representatives. I now declare open the 543<sup>rd</sup> meeting of the Committee on the Peaceful Uses of Outer Space.

This afternoon we will resume our consideration of agenda item 7, Report of the Scientific and Technical Subcommittee on its Forty-Second Session, to hear a progress report by the Chairman of the Working Group on the Use of Nuclear Power Sources in Outer Space of the Scientific and Technical Subcommittee, on its intersessional work.

We will continue our consideration of agenda item 9, Spin-off Benefits of Space Technology: Review of Current Status, and begin our consideration of agenda item 10, Space and Society.

We will also continue our consideration of agenda item 6, Implementation of the Recommendations of UNISPACE III.

At the end of this afternoon's meeting, there will be technical presentations, the first of which will be on the KEO Project, to be presented by Mr. Jean-Marc Philippe of the KEO Project itself. And the KEO Project involves the launching of a satellite in the year 2006. This satellite has been built and designed so that it will return to Earth in 50,000 years from now. Am I correct? Fifty thousand years from now. I can see them nodding to say that I am correct but you will not be here. The Project has been voted as project of the twenty-first century by UNESCO.

Now the second presentation will be by Ms. Takemi Chiku of Japan. Ms. Chiku is currently with JAXA and she will be making a presentation on "Activities of JAXA Space Education Centre".

Finally, Ms. Yolanda Berenguer of UNESCO will be making a presentation on "Space and the United Nations Decade on Education for Sustainable Development". That is for the period 2005 to 2014.

In addition, I would like to inform delegates that the Working Group on Space Debris of the Scientific and Technical Subcommittee is currently holding its intersessional meeting in Conference Room VII.

Similarly, the Working Group on the Use of Nuclear Power Sources in Outer Space of the Scientific and Technical Subcommittee is also holding its intersessional meeting in Room C-0713. I understand that these intersessional meetings began at 1.30 p.m. today.

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

Are there any comments on this schedule of work for this afternoon?

I see none.

Excuse me please.

Immediately after the conclusion of this afternoon's session, I would like to meet with all the members of the Bureaux, that is the G15, the past

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

Corrections should be submitted to original speeches only. They should be incorporated in a copy of the record and be sent under the signature of a member of the delegation concerned, within one week of the date of publication, to the Chief, Conference Management Service, Room D0708, United Nations Office at Vienna, P.O. Box 500, A-1400, Vienna, Austria. Corrections will be issued in a consolidated corrigendum.

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Bureaux, the current Bureaux and the future Bureaux, in the Chairman's office across the hall from this Conference Room. All the members of the G15, as we call them, that is your G15, the G15 of COPUOS is meeting immediately after the adjournment of our meeting here this afternoon.

Is this schedule of work agreed?

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

OK. That being the case, then, distinguished delegates and representatives, I would now like to resume our consideration of agenda item 7, Report of the Scientific and Technical Subcommittee. I understand Mr. Harbison is here with us now? OK. So Mr. Harbison, I can see you smiling, that is good. That means you have good news for us. So Mr. Harbison, you have the floor, the Chairman of the Working Group on the Use of Nuclear Power Sources in Outer Space. You have the floor Sir.

**Mr. S. HARBISON** (United Kingdom of Great Britain and Northern Ireland): Thank you Mr. Chairman for giving me the floor.

As agreed at the forty-second session of the Scientific and Technical Subcommittee, the Working Group on the Use of Nuclear Power Sources in Outer Space is currently meeting to conduct intersessional work. I am pleased to report to you this afternoon on the progress made this far.

The main objective of this intersessional meeting is to finalize the plans for the joint technical workshop on the objectives, scope and general attributes of a potential technical safety standard for nuclear power sources in outer space, in cooperation with the International Atomic Energy Agency, which is scheduled to take place during the forty-third session of the Scientific and Technical Subcommittee in February 2006.

The Working Group had before it a Conference Room Paper, A/AC.105/2005/CRP.10, attaching a preliminary list of potential objectives and topics with comments received. This Conference Room Paper has been circulated to all delegations and this list is being finalized now by the Working Group.

The Working Group is also finalizing a provisional agenda and relevant logistical aspects for the organization of the workshop, including

arrangements and instructions for possible papers and presentations during the workshop.

The results of the discussions of this intersessional meeting will be circulated to the Committee for consideration as soon as possible.

Finally, the Working Group will continue its intersessional work after the of the Committee. The work will be conducted by electronic means with a view to contact and identify potential speakers for the workshop. The Working Group will also work closely with the IAEA and the Secretariat in that respect. The intersessional meeting of the Working Group will continue tomorrow, Wednesday, 14 June, in Room C-0713. All delegations are invited to participate in these informal discussions.

As I have to depart this afternoon, I will request Ms. Alice Caponiti, who ably led the work of the Working Group in February in my absence, to chair the remaining consultations.

Thank you Mr. Chairman.

**The CHAIRMAN:** Mr. Harbison, thank you very much for your report on the Working Group on the Use of Nuclear Power Sources in Outer Space.

Distinguished delegates, are there any comments on Mr. Harbison's presentation?

Any comments or contributions?

I see none.

Mr. Harbison, on behalf of the Committee, we thank you very much for your work.

I understand from the Secretariat that the Chairman of the Working Group on Space Debris is expected to present a progress report on the ongoing intersessional meetings of that Working Group to us tomorrow morning. Accordingly, I take it that we are hereby suspending our consideration of agenda item 7, the Report of the Scientific and Technical Subcommittee on its Forty-Second Session, pending the presentation of that report tomorrow morning.

**Spin-off benefits of space technology: review of current status (agenda item 9)**

Distinguished delegates, I would now like to continue our consideration of agenda item 9, Spin-off Benefits of Space Technology: Review of Current Status.

Is there any delegation wishing to take the floor on this particular agenda item, Spin-off Benefits of Space Technology: Review of Current Status?

If there is none, can I take it, therefore, that we shall continue and conclude tomorrow morning our consideration of agenda item 9, Spin-off Benefits of Space Technology: Review of Current Status?

### **Space and society (agenda item 10)**

Distinguished delegates and representatives, I would now like to begin our consideration of our agenda item number 10, Space and Society.

Under this particular agenda item, I would like to remind delegates that in its resolution 59/116 in the year 2004, the General Assembly requested the Committee to consider at its current session its agenda item entitled "Space and Society", under the special theme for the focus of discussions for the period 2004 to 2006, entitled "Space and Education", in accordance with the work plan adopted by the Committee.

According to that Work Plan, the Committee will at this particular session, the forty-eighth session, (a) hear presentations by Member States and intergovernmental and non-governmental entities on the latest developments in space applications to enhance educational opportunities, in particular for women and girls; (b) the Committee shall examine the availability and affordability of space-based services and systems for providing educational opportunities in developing countries; (c) the Committee will identify ways in which space can benefit medicine or delivery of medical services in rural areas; (d) the Committee will identify possible impediments to expanding the use of such space-based services and systems in developing countries; (e) the Committee shall discuss possible solutions to eliminate those impediments, giving particular attention to programmes in developing countries; and finally the Committee shall develop a Plan of Action, including possible implementation of small projects.

I will now give the floor to speakers that have indicated their willingness to address the Committee on this particular agenda item.

And the first speaker on my list is the distinguished representative of China, Mr. Wang.

**Mr. C. WANG** (China) (*interpretation from Chinese*): Mr. Chairman, since the mid-1980s of the twentieth century, China has started to use satellite

communication technologies to meet the ever-growing need for the development of its communication broadcasting and education industries. In terms of its satellite TV broadcasting service, China has already set up a satellite TV broadcasting system covering the whole globe and a satellite TV education system covering the entire nation.

Over a decade since the start of the satellite TV education programme, more than 30 million Chinese have received education and training through this means. In recent years, China has established an experimental platform for satellite TV live transmission so that TV programmes can be transmitted in a digitally compressed format to wide areas of the Chinese countryside that are not covered by the wireless TV broadcast, thus significantly improving the coverage of TV broadcast in China.

China has also set up a satellite-wide band multimedia transmission network for education which provides comprehensive e-education and a communication technology service to the nation.

Mr. Chairman, unfortunately, we must see at the same time that, due to the imbalance in the development level of the developing countries in the Asia-Pacific region, e-education and the interaction of open studies are subject to limitations by various factors in these countries and still find themselves in an extremely unsatisfactory state, falling far behind in comparison with developed countries. As far as any one country is concerned, imbalance of the development among different regions in terms of economy, education and the communication infrastructure can also impede the development of e-education in that country. The imbalance, the economic development among the different regions can limit the condition and the level of the infrastructural development in the field of education, healthcare, communications, economy and the community information service and, therefore, must be addressed with effective means.

The measures taken in recent years by the Chinese Government to develop the western region of China is an important strategy aimed at reducing the gap between the eastern and western regions of China. Using satellite communication systems to conduct e-education and training improve the education level of inhabitants in the poor areas and provide relevant agricultural knowledge and expertise as well as market information through community information centres is undoubtedly one of the effective means in poverty reduction.

Mr. Chairman, as developing countries have a huge number of populations, these countries have faster potentials and aspirations for the development of e-education at the national level. In the course of its development, e-education in the world have never been able to avoid the issue as to how to address the linkage and interaction among the three elements of size, cost and quality. A perfect combination of these three elements is the key to the survival and development of e-education. At the same time, analysis and judgement by the Government on this issue will determine its policy leaning in this regard, thus producing an impact on the development of the entire e-education programme. Hence the Government's decision on education will play a decisive role in guiding the development of education.

Therefore, we believe the following measures will be very important for the development of space communication and the community e-centres in Asia-Pacific countries.

First, strengthen the exchange and cooperation between the developed and developing countries, conduct the e-education cooperation among developing countries and developed countries and establish the management and e-centres in the communities will be very conducive to the exchange of information and the sharing of resources.

Second, the strengthening of research and exchange in the e-communication and education policy. The national regulations and local laws and the policies concerning e-education and community e-centres, as well as their functioning will have a very important role in producing a great leap forward in e-education. Therefore, the exchange of policy experience will enable every country to learn from each other and the successful experience of other countries.

Thirdly, improve the quality of decision makers. The conducting of training of the decision makers and experts of the developing countries will improve the quality level of the education in the developing countries.

Thank you Mr. Chairman.

**The CHAIRMAN:** I thank the distinguished representative of China, Mr. Wang, for his contribution under our agenda item number 10, Space and Society.

I now invite the distinguished representative of Nigeria, Dr. Ayodeji Ajayi, to address the Committee under this agenda item.

**Mr. A. AJAYI (Nigeria):** Mr. Chairman, I thank you for the opportunity to share with you and distinguished delegates the Nigerian experience and contribution to space and society through the United Nations co-sponsored African Regional Centre for Space Science and Technology Education, in the English language at Ile-Ife, Nigeria.

I am delighted to report to you that the Centre continues to enjoy the support of the Government of Nigeria, both financially and in kind. To this end, the Centre is making progress in the discharge of its responsibilities. Graduate courses are offered in satellite meteorology, communication and remote sensing. The Centre has also organized a number of public awareness programmes on space technology and its impact on development with adequate paper and electronic media publicity.

Mr. Chairman, the people and Government of Nigeria appreciates the effort of the Office for Outer Space Affairs and UNESCO in organizing educational and awareness programme for the Nigerian youth, principally from Nigeria's secondary and tertiary institutions. I am pleased to inform you that the three-day programme was a success as it generated ample consciousness of space science and technology among our youth. The Nigerian Space Agency, in cooperation with UNESCO, will collaborate with the Federal Ministry of Education to develop appropriate follow-up programmes and curricula on space science education.

In demonstration of our commitment to regional and international cooperation in the process of the implementation of our space policy and programme, Nigeria will ensure that the Regional Centre continues to provide space science and technology education to participants in Nigeria and other countries in the region. We are determined to make certain that the Centre continues to provide qualitative and up-to-date space education for the people of the region.

Thank you Mr. Chairman.

**The CHAIRMAN:** I thank you Dr. Ajayi for that input on behalf of Nigeria on item number 10.

The next speaker on my list is Mr. Miyake, the distinguished representative of Japan.

**Mr. M. MIYAKE (Japan):** Thank you Mr. Chairman, distinguished delegates. On behalf of the Japanese delegation, I am honoured to have the opportunity to address the forty-eighth session of the

Committee on the Peaceful Uses of Outer Space under the agenda item "Space and Society".

In connection with the follow-up activities to implement the Vienna Declaration adopted by the UNISPACE III Conference in 1999, Japan served as the Chair of Action Team Number 17 to "Enhance Capacity-Building by Developing Human and Budgetary Resources".

As you may recall, the Third Earth Observation Summit, held in Brussels in February this year, endorsed the 10-year Implementation Plan to establish a Global Earth Observation System of Systems. The Implementation Plan recognizes capacity-building as an important means to achieve the objectives of Earth observation systems.

Space-related meetings outside COPUOS have begun to address human resource development as an important issue. As the role space science and technology plays in sustainable development around the world increases, so too does the importance of developing human resources in space-related fields.

Mr. Chairman, building upon what has been achieved in space education activities in the Asia and Pacific region and based on experience as the Chair of Action Team Number 17 on capacity-building, Japan intends to undertake various initiatives and activities this year.

We are pleased to announce the convening of the Twelfth Session of the Asian-Pacific Regional Space Agency Forum, known as APRSAF-12, in Kitakyushu in October of this year. The Space Education and Awareness Working Group of APRSAF will discuss the sharing of education materials among Asian countries. It will also consider ways and means to strengthen collaborations with entities engaged in education. Like last year, this Working Group will hold outreach activities for the general public. An example is the Asia-Pacific Water Boost Rocket Competition, where participants can learn about the theory of rocket science while having fun and becoming more familiar with space activities. Secondary school students from member countries of APRSAF are invited to participate in the Competition to be organized this year.

Immediately following APRSAF-12, the Fifteenth United Nations/IAF Workshop will also be held in Kitakyushu. The theme of the Workshop is "Space Education and Capacity-Building for Sustainable Development".

The results of the APRSAF-12 will be reported at the United Nations/IAF Workshop. It is hoped that this Workshop will discuss how we may establish a mechanism to promote space education that will contribute to the sustained growth of developing countries. We also hope that the Workshop will build the basis for space education in many countries around the world through collaboration and coordination with space agencies and various entities engaged in education.

Mr. Chairman, space activities interest all people, from children to adults. By widely sharing scientific and technical knowledge and achievements in the field of space activities, we can inspire people to dream and hope for the future. This, we believe, will have a positive impact on subsequent generations who will build our future.

As the agency responsible for space activities in Japan, JAXA established the Space Education Centre in May this year. Its core activity is to provide support for primary and secondary school teachers based on JAXA's knowledge and techniques accumulated through space exploration and space activities.

At the Space Education Centre, the provision of customized support to teachers is considered the most important activity. JAXA will collaborate with various research institutes within and outside Japan, international organizations and private industry in order to provide teachers with knowledge covering a wide range of subjects.

One of the typical activities for the Centre relates to creating and implementing programmes for classroom teaching that best meet the specific needs of primary and secondary school teachers. For example, the Centre adjusts its assistance and support to schools or individual teachers according to their skills in developing programmes for classroom teaching at "Super Science High Schools", where efforts are made to enhance science and math education, or through "Science Partnership Programmes", which aim to provide more opportunities, through collaboration with universities and research institutes, to intellectually stimulate children. The Ministry of Education, Culture, Sports, Science and Technology promotes these types of schools and programmes.

The Space Education Centre also organizes roughly 10 educational activities per year at various places in Japan for any primary and secondary schoolchildren who are interested in participating.

These activities will be based on education programmes developed by JAXA.

In addition, the Space Education Centre encourages communications among teachers through its home page, provides education materials and develops databases relating to education support. With these activities, the Centre aims to create an environment that will facilitate an exchange of information on various subjects and stimulate personal exchange, which is considered necessary to enhance classroom teaching.

The Space Education Centre aims to help young people gain knowledge and an understanding of the thinking process behind the knowledge. The Centre is making efforts to help young people realize the mysteries and exciting features of the nature and increase awareness of the importance of life.

Japan (JAXA?) has also engaged in discussions with NASA, ESA and the Canadian Space Agency to establish the International Space Education Board, or ISEB. During the International Astronautical Congress to be held in Fukuoka this October, we believe ISEB Charter will be signed and announced to the Public and we will begin to consider possible joint activities to be carried out. JAXA, through its Space Education Centre, intends to pursue collaborations with space agencies and various entities, such as ISEB, within and outside Japan that are engaged in education. The purpose of these collaborations is to vigorously promote interactions between students and teachers and to share information related to educational activities.

Mr. Chairman, as set forth in JAXA's Vision, which was announced in April this year, one of JAXA's important social responsibilities is to cultivate intellectual curiosity and the potential of young people and thereby help to build a prosperous society. We appreciate the opportunity to present JAXA's space education activities later this session in the afternoon.

Thank you for your attention.

**The CHAIRMAN:** I thank the distinguished representative of Japan, Mr. Miyake, for his contribution on agenda item number 10.

And the next speaker on my list is Mr. Mayence of Belgium.

**Mr. M. MAYENCE** (Belgium) (*interpretation from French*): Thank you Mr. Chairman. The Belgian delegation would like to thank you and the Committee and the Office for Outer Space

Affairs, under this item, Space and Society, for allowing the presentation of the KEO Project which you will be hearing shortly.

Yesterday, we had an excellent symposium on Space and Archaeology, asking how space can serve present day humanity looking back at the past. KEO turns the question around, and that is how can space be helpful for people in the present to let their lives be known to people in the future. We believe that the KEO Project has an enormous potential for education and awareness-raising of the public at large, young people, regarding space, the uses of space and also looking at social-cultural impact. The KEO Project, under this item, we believe, shows mutual interest for KEO, as well as all of us. So I would like to encourage delegations to listen to the presentation when it is made to learn about this project. It is not something that just came up. It has been going on for a couple of years and it is something with great motivation and great interest for all of the international community.

Thank you Mr. Chairman.

**The CHAIRMAN:** I thank the distinguished representative of Belgium for that statement on agenda item number 10.

We shall continue, distinguished delegates, that was the last request I had for this afternoon's intervention on agenda item number 10, Space and Society.

Accordingly, we shall continue our consideration of that item tomorrow morning.

Before proceeding, I would like to inform you, distinguished delegates, that I received a request for the floor under agenda item number 8, Report of the Legal Subcommittee, which we closed this morning. Although we concluded this item this morning, I propose that we briefly re-open the item to allow the requesting delegation to address the Committee under this item. We would, thereafter, conclude our consideration of item 8 after such intervention. Of course, that intervention is subject to no objections being received by the Chair from the Committee.

Do I take it that I can open the floor for intervention on agenda item number 8 for one intervention only?

OK. Thank you very much. I, therefore, invite the distinguished representative of the Republic

of Korea to make his contribution on agenda item number 8. You have the floor Sir.

**Report of the Legal Subcommittee on its forty-fourth session (agenda number 8)**

**Mr. J. LEE** (Republic of Korea): Thank you Mr. Chairman for giving my delegation to have a chance to inform all distinguished delegations of the enactment of national legislation in the Republic of Korea.

My delegation would like to appreciate Mr. Sergio Marchisio, Chairman of the forty-fourth Legal Subcommittee for his unsparing efforts and dedication to the work of the Subcommittee.

The Legal Subcommittee has played a pivotal role of ensuring universal application of space law and enhancing its effectiveness as well as providing assistance for Member States in developing and strengthening their national legislative norms. In this line, the Korean Government has made every effort of implementing the United Nations treaties on outer space to which it has become a party.

After a long study and preparation, a Bill on outer space was drafted by the Korean Government in June 2004. The draft bill was reviewed at the Cabinet and submitted to the National Assembly for its consideration and final approval last December. After thorough review, the National Assembly of the Republic of Korea passed the Bill called "The Space Development Promotion Law" last May, which will come into force in December this year.

Mr. Chairman, among others, the law provides for the establishment of the domestic registry and relevant procedures required for registration. So anyone who is to launch space objects in the territory of the Republic of Korea should register it in the registry. The law also contains my country's full support for the rescue and safe return of astronauts as well as space objects. We are making the English version of the law, which will be submitted to the Office for Outer Space Affairs for its reference in due course.

Mr. Chairman, I am sure that the enactment of the national legislative norm will not only promote the development of Korean space activities but also contribute to enhance the effectiveness of the international space law.

Thank you.

**The CHAIRMAN:** I thank you Sir for your contribution to agenda item 8.

So I repeat again that concludes our consideration of agenda item number 8.

**Implementation of the recommendations of UNISPACE III (agenda item 6)**

Distinguished delegates, I would now like to continue our consideration of agenda item number 6, Implementation of the Recommendations of UNISPACE III.

And the first speaker on my list is the distinguished representative of China, Ms. Tang Lingli. Madam, you have the floor.

**Ms. L. TANG** (China) (*interpretation from Chinese*): (*interpreter: Sorry, there was a technical problem*) ... In 2004, Mr. Chairman, at the forty-seventh session of COPUOS in 2004, the Action Teams all reported to the Conference on implementation of proposals made at UNISPACE III. And with these reports, we can see that under the leadership of the Conference and with support of Member States, fruitful efforts of the Action Teams and contributions from Member States and the Chairman and the Office for Outer Space Affairs, have made it possible for the proposals to be implemented successfully.

China, Canada and France jointly made up the seventh group, that in charge of management and mitigation of disasters with space-based techniques. As in the case of other Action Teams, our fulfilled its tasks and that over a three-year period, giving its report where the main point was to propose the most effective means for space-based techniques to mitigate, at worldwide level, any consequences of disasters and for disaster management as well, and to put forth proposals seeking ways and means to put into practice the proposals that came forth from groups of experts created by the Office for Outer Space Affairs. And also taking into account subjects with the participation of two experts in the group one, led by India in particular.

There was also participation at the Conference by, \_\_\_\_\_ (*not clear*) organized by the Office for Outer Space Affairs and the Ad Hoc Group that was held 17 and 18 May in Vienna where the questions were examined regarding services and recipients of these services, possible ways and means for organization, financial resources, possible funding and a draft feasibility report was also drawn up.

At the meeting, the Ad Hoc Group, following requests from the General Assembly, once again discussed the draft feasibility report regarding the implementation with a detailed summary of problems being put to the General Assembly.

And, therein, the function and provision of services and coordination was specified as well as actual functioning and running and emphasis was placed on the importance and need for a body, such as UNESCO, for effective mitigation of disasters at worldwide level.

Mr. Chairman, we believe that the proposal made by seventh Action Team, and that is the creation of \_\_\_\_\_ (*not clear*), is of considerable importance for the use of space techniques for disaster mitigation and management, to mitigate economic laws and human laws in that, at planetary level.

Today, with the tsunami not that long ago, and the healing process not being completed, we hope that the proposal will be considered seriously, with vigorous support being given to its implementation.

We believe that the measures put forth in the Ad Hoc Group's report on the implementation are feasible.

The Chinese delegation hopes that the General Assembly will give it due attention for implementation as soon as possible. The Chinese Government, as is customary and it does, will give all possible support to the project in its preparatory phase as well as its operational phase.

The Chinese Government would like to commend the joint efforts of the Office and Member States for the implementation of the results of UNISPACE III.

Thank you.

**The CHAIRMAN:** I thank the distinguished delegate of China for her contribution.

Distinguished delegates, is there any other delegation wishing to take the floor under this particular agenda item this afternoon?

I see none.

Distinguished delegates, I would like to remind you all that you have before you under this

agenda item the Conference Room Paper 12 which we started discussing this morning.

In accordance with paragraph 8 of resolution 59/2, that is the General Assembly resolution which accompanied our presentation to the General Assembly last October, the General Assembly itself requested this Committee to include in its agenda for the future a number of items starting from its forty-ninth session, that is the year 2005 (2006?). Such items will include contribution to the work of those entities that are responsible for convening United Nations conferences and/or for implementing their outcomes.

At the same time, I would also like to draw the attention of distinguished delegates to paragraph 289 of the Plan of Action of the Committee. The Committee agreed last year that it would consider at this session its contribution to the work to be conducted by the World Summit on the Information Society, that is WSIS, during its second phases. And this particular World Summit is scheduled to be held in Tunis this year in November.

Given the precious little time before the second phase of the WSIS, I would like to propose that the Committee, at this stage, not endeavour to contribute to the second phase but rather to broaden its objective and consider a contribution to the outcome of the Summit as a whole. In order for the Committee to address this in a focused manner, and taking into account the request by the General Assembly, I am hereby proposing that the Committee at this session to consider the inclusion of an agenda item that would consider the outcome of the World Summit on Information Society in its future work in the forty-ninth session 2006. At that time, the Committee should decide on whether it would be necessary to retain the item on its agenda at future sessions.

I hereby invite delegations to share any thoughts they may have on these proposals.

The United States of America, you have the floor Sir.

**Mr. K. HODGKINS** (United States of America): Thank you Mr. Chairman. My delegation has no objection to your proposal but only to suggest that perhaps as part of the agenda item we invite someone from the ITU or someone from the WSIS Secretariat to present a briefing to the Committee on those portions of the Tunis meeting that would be relevant to the Committee because otherwise next year we will simply be unfocused in terms of what we will be looking at.

Thank you.

**The CHAIRMAN:** Mr. Hodgkins, thank you very much for that constructive suggestion. I would like to assume that this is accepted to the house as a decision of this Committee at this session.

*It is so decided.*

Now, the floor is still open. Do you have anything else to suggest other than what we have already agreed upon?

I see none.

We are adopting Mr. Hodgkins proposal and will proceed accordingly.

Distinguished delegates, on that note, can I state that we shall continue our consideration of agenda item 6, Implementation of the Recommendations of UNISPACE III, tomorrow morning?

Is that agreed?

*It is so decided.*

### **Technical presentations**

At this time, and I hope we have all our technical experts here, I would now like to turn our attention for the rest of the afternoon to the presentations that are already scheduled. Presenters are kindly reminded that presentations should be no longer than 20 minutes in length.

The first speaker on my list is Mr. Jean-Marc Philippe of the KEO Project on "KEO Space Time Capsule: Project of the Twenty-First Century". And after that, s. Takemi Chiku of Japan on "Activities of JAXA Space Education Centre". And finally, Ms. Yolanda Berenguer of UNESCO on "Space and the United Nations Decade on Education for Sustainable Development".

Mr. Jean-Marc Philippe, you have the floor please.

**Mr. J.-M. PHILIPPE (KEO)** (*interpretation from French*): I am very happy and honoured to be here today. I would like to express heartfelt thanks to the Belgian delegation and the European Space Agency who have made it possible for me to introduce this project. It is a privilege to be here in front of this

august assembly to talk about matters important to humanity.

I was hoping to introduce the KEO Project to you because it represents all of us and all of you to the extent that you represent your cultures and your nations. I have come here to tell you that this is a collective project, a collective work which strives to create the framework of a new dialogue between the present and the future to try and work towards a just and fair world. Every man, woman and child living in the world today is invited to take part, completely free of charge in this collective project where space will play an extremely significant role.

With your permission, I am going to move on to the video film which will introduce the project.

### *Video*

"Born from the imagination of an artist, Jean-Marc Philippe, KEO is a satellite sent into time that will return to Earth to tell the world of tomorrow who were the people of today.

An archaeological gift to our faraway descendants, KEO is a present for today's humanity. By reading and sharing the messages that each one is invited to address to his faraway descendants. All of us will be able to accept our differences as a wealth, such that we can live together in harmony and we can contribute to creating a world that is more humane.

In the months to come, the satellite KEO shall be launched into space for a long journey around the planet Earth and shall return to its native land some 50,000 years later to deliver the messages to our descendants.

Today, each person on Earth, small, powerful, weak or rich has four pages to pen down his or her dreams, expectations and aspirations, his or her life.

With no censorship whatsoever, all messages received by KEO, sent either by post or through the Internet, shall be embarked aboard the satellite.

The messages will be engraved on glass discs that have scientifically been proven to be able to resist the test of time and cosmic radiation.

In addition to the assortment of our messages and our knowledge, KEO shall carry with it certain archaeological gifts that include a diamond, embedded

with samples of the vital elements present on our planet.

The payload of KEO will be protected by several anti-cosmic radiation, anti-meteoritic debris, anti-shock shields.

To distinguish it from other space objects and satellites, KEO shall be adorned with wings that will fold themselves in the cap of the parent rocket. Fabricated by the Spatial European Industry, KEO will be a secondary passenger of a scientific mission launched by the rocket Ariane.

Made from shape-remembering alloys, KEO's wings will flutter in accordance to the temperature changes that the satellite encounters during its long journey through outer space.

The materials that make up KEO, tungsten, titanium, aluminium, metallic sponge, glass, heat and carbon have been chosen because of their capacity to resist hostile environments.

During its long voyage of some 50,000 years, KEO will describe millions and millions of orbits that shall imperceptibly and ineluctably direct it towards its native soil. KEO shall be subject to the forces of gravity and the pressure of solar radiation.

Some minutes before its return to Earth, trapped by the forces of terrestrial gravity, KEO shall signal its arrival to our descendants by creating artificial northern lights provoked by the combustion of its thermal shields.

Altered by the luminous signal in the sky, it will descend to Earth and our progeny will welcome KEO. They shall find the archaeological gifts that we have carefully prepared for them, along with a collection of our words, writings and hopes.

A gift from the people of today to the people of tomorrow, KEO is a satellite sent into time to tell the world of tomorrow where the humanity is today. In other words, we are their ancestors, the ancestors of the people of tomorrow were today.

What is our civilization's path in the next 50,000 years?

The text on the screen is the address to which messages should be sent.

Who are we? Where are we? And where are we going?

I am going to try and show you why this project has been initiated. I saw some of you smile when we mentioned the length of time, 50,000 years. But these are the three questions we are trying to answer here. Where are we? Who are we? And where are we going?

Where are we? It is easy. Here is our galaxy under the exact spot where our Sun and the Earth are located.

Who are we? If we take science as reference we will see that our Sun and our Earth appeared 4.8 billion years ago but over this time scale we have developed as humans and quite recently our species joined the species living on Earth, only five million years ago.

Let us look at the evolution of our species. At the start, we were a mammal, capable of reproducing itself. It took millions of years to develop the first tools. It took other millions of years for mankind to start wondering about metaphysical issues. At the moment, we know that 500,000 years elapsed before our minds developed to a point where we were capable of abstract thought, integral calculus and so on and so forth.

What happened over recent months? We know that our species has been playing with two other forces of nature, genetics and nuclear power. This is a time when we should take a step back and reflect as a species.

And the idea of the KEO Project was to give the public at large, humanity at large, such an opportunity to take a step back and reflect and meditate on this point in our history, in our evolution, ask ourselves some important questions. And this is what the KEO Project is all about. We invite every inhabitant of Earth to write a message about his or her life, on four pages. I am going very fast, summarizing the text.

In 2007, 2008, the satellite will be ready. It has two major characteristics. It should exist in space for tens of thousands of years and it contains a math memory space to accommodate six billion times four pages, that is every man, woman and child living on Earth can write the four pages and will be retained in KEO's memory. This satellite, because of our technological know-how, will thus survive for 50,000 years and then provide these imitation northern lights to warn our ancestors that it is returning to Earth.

Today, I am going to make one point in particular. The testimony that it will carry will be interesting for our descendants, no doubt, but it is even more interesting for ourselves. This kind of testimony, anonymously submitted by all of us living on Earth, can be analyzed to give us a cross-section in an instance photograph of the thoughts of men, women and children today, be they Europeans, Chinese, Iranians, French, others, we can re-initiate a new dialogue and on cultures and nations. This project is being controlled by the European Space Agency and its feasibility has been demonstrated and we have been able to defend it. The satellite will be resistant to all the various hazardous forces and hostile environments that exist in outer space.

Furthermore, the messages carried by this satellite will be supplemented by archaeological gifts, representing the various elements that exist on Earth today which make it possible for life to exist on Earth, a bit of the ocean, a bit of the atmosphere, a bit of arable soil and so on and so forth.

We also want to extend to our descendants the courtesy of letting them know when exactly the satellite was launched by providing the exact configuration of the solar system at the present time and we introduce these glass discs that will contain all the messages that we are collecting from the entire world today. There are two ways for people to send messages to KEO today, by mail, by postcard and the French embassies around the world will be sending these messages by diplomatic pouch, or by the Internet, using the website address on the screen.

Thus, this is going to be an archaeological gift to our descendants but also a great tool for us to reflect on where we are in our development today. Take a page from the evolution of humankind and the world, making it possible for us, through analyzing these messages, to understand what we, as a human community, can do together.

Today, as of now, we have messages from 200 countries in 80 languages and they express the wishes, the dreams, the aspirations of the various cultures and nations on Earth.

Why is this project feasible? It is feasible because of the competencies accomplished over the 10 years in its history. It has been possible to accomplish this project through four types of competencies. One, to create the satellite, that was done by the European Space Agency. Two, to be able to communicate information about the project around the world and the slide shows how we are communicating this

information. Three, and we have made enormous progress here, is information technology, how to make the messages secure and how to analyze them and today, thanks to our partners, we have been able to develop even more powerful research tools than those used for surveying the territory of various countries in the past. Our partners since the start have graciously contributed towards the project and you see them listed in this slide.

The estimate that was made for us exceeds 12 million Euros from the start of the project. It is a project that is useful to the world today for meeting its challenges. That is the main objective. It is also a project that, through outer space, touches the population of the entire world, the entire planet, making it possible for the future generations, for the young people of today, to feel today, be they Europeans, Chinese, others, representatives of humankind, the human species, to know where humankind finds itself at this stage in its development.

Once Ariane has put our satellite in orbit, we are going to be able to share all these messages. They will be directly accessible through the Internet site and we will make public all the analyses that we are going to carry out. UNESCO, World Bank, other international institutions have already asked to share in the project.

Today, our greatest challenge, and that is why I am so happy to be here, are challenges to communicate information about this project to all the cultures around the world and I am going to show you what we have already done in that regard.

When the messages will be sufficiently representative of the existing cultures on Earth, we are going to try and share the dream that is the KEO Project with as many people as possible and our greatest opportunity lies with the world's media, that they come after us, that they show an interest, that they distribute and disseminate this information through all means possible.

And before concluding, I would like to show you the types of actions that we envisage to communicate information about this project. We are going to have exhibitions. We are going to start communication campaigns in the various linguistic(?) \_\_\_\_\_, communicate online via the Internet and, for a number of months now, Ministers of Education and governments of countries have started disseminating this information as well.

So, from a poetic project, this has turned into a real political project with major international interest already shown. For example, Zinedene Zidane, the famous star athlete, has already volunteered to make a video clip where he shows a balloon that morphs into the KEO satellite and that is being disseminated around the world. And he is a hero for young people, a sports hero, so this will be very effective. I regret that there are no more philosophers, intellectuals or politicians who are stars of that calibre who could be promoting this project as well. That may change.

The campaign of communication will include exhibitions, I already mentioned that. One of these exhibitions will travel around the world on a large surface. It will show technological progress, the things that we consider to be most precious on Earth today, the media, the political authorities. There are three ministers in this picture, two Ministers of Education and one Minister of Culture, who have already started taking a very active part in putting this exhibition together. A number of artists have given us as a gift their works of art for the exhibition. We try to trace the history of humankind from times immemorial, at the time of the Pharaohs(?), only the Pharaohs(?) could take cultural artefacts with them to the other world. Today, all of humanity can do that.

Next, media. We are going to carry out press conferences around the world. People you see in this slide, the woman here, Madam Savna(?) Asme(?) is a well-known artist, a star like Zidane but in another field and she has done a lot to communicate information about KEO. So press conferences, meetings and lectures in French of schoolchildren and students, billboards in some countries. This is an example of such a billboard, in this case in India, reminding every Indian if you appreciate your culture, send a message to KEO. I think Bulgaria is represented here. In Bulgaria, we have made an exhibition in Plovdiv at the Space Technology Expo. This is a small exhibition in scale but the extraordinary thing is that the Minister of Education of Bulgaria asked for our pedagogical kit to be translated into the Bulgarian language and then distributed among schoolchildren in Bulgaria.

I think today the United Nation has a major role to play to inspire young minds to contribute to the communication campaigns that we have just started around the world.

Thus, in China, and I have just been to China, in December of last year, we went on a visit, sent a delegation to inform the Chinese authorities of this project and our Chinese friends at first asked questions

about the feasibility of the project. The representative of China, I hope you recognize senior members of your authorities, Mr. Zing Ot(?) particularly has studied in France and he has worked with the European Space Agency on this and went to a number of industrial enterprises to introduce this project and we have been able to convince China that this is feasible. China has set up a website and created a Communication Committee specifically for the purpose of disseminating this project. Mr. Zang Zin Shua(?), a senior member of the Chinese Government, has joined the Committee, as did the Chief of the Statistical Bureau of China and Mr. Assante(?), Vice-Secretary General of the Central Committee of the Communist Party, has also become a participant.

Today, our species is asking itself some fundamental questions as to humanity's future. This is an exhibition that was set up for Canada. It will open in September. And to come back to China, we have been remarkably successful.

Moving on to Iran, the communication campaign there. Our delegation was received there at a very high level and we have been able again to convince the Iranians that this project is feasible, that it will promote the value and the beauty of their culture and history. This is the Chief of all external communications for the Iranian Television Authority, this is a press conference we had. The live TV show where we spoke about the project and this gentlemen, I am going to try and pronounce his name, Mr. Messae(?) Inudi(?), Vice-President of Iran. It is thanks to him that we have been able to communicate this project to children, young people and also the Minister of Education in Iran who decided at the start of the next school year to communicate information about the project to millions of professors, teachers and schoolchildren to make it part of the curriculum.

So this project was started as a poetic project, as an idea, as a dream. It is turning into a major international campaign to boost the capacity of humanity, to analyze itself its capacity for invention, its vision of the future. Today, when science and technology are thriving, we also see great threats to our danger(?) and this is a message that we are conveying to young people, people who are going to lead their countries in the future, be careful, do not destroy your planet, this planet belongs to you and to future generations.

And to conclude, in Egypt today, we have also been to Egypt and we have been able to communicate throughout the Arab world information about the KEO Project, set up an important partnership. This is at the

Alexandria Library. We were received by the Minister of Education of Egypt who also will communicate this information through natural science and history courses throughout the school system, and the Vice-President through the official channels. This is part of the experience we have had in the various countries, meet with children and with students and you see the children are fascinated by outer space. Children in technologically-advanced countries see ways of going into space, of using space for all kinds of scientific research. People in developing countries see in space the symbol of the grandeur of humankind, the profound mysteries of life and also ways that space can be looked to for development. We are going to share our dreams as a family, not as a family at a time when a legacy is being divvied up, who gets most of the oil and natural resources, but as a family that lives in love and sharing.

And finally, to conclude, we have started working in Africa. We have received a number of messages from young Africans. We have great partners, particularly the Minister of Education of Senegal. The President of Senegal is also a fan of the project. The Minister of Education here in this slide in the white robes has decided to communicate the project through all schools at the start of the next school year.

In Latin America, I have too many slides, I am going to abbreviate this. Today, what is KEO? KEO is a project based on vision, on a dream which calls on children, men and women of the world to ask themselves about the forces unleashed in the world, the future of our species, of humankind. It was perceived as a exotic project, and you smiled when I started talking about it. I hope I have convinced you that this is a project of great historic value and is going to be implemented by everybody on this planet, working together in September 2005. Governments of countries around the world are going to communicate this project to almost two billion people around the world and, of course, that would leave four billion people that will still need to be informed in the months and years to come.

I call on you to engage your governments to contribute to this communication campaign, get in touch with the Education Ministers, the authorities of your countries, make sure that children get to know about this project through the educators, through their families, that the project requires the dimensions that we hope it will acquire.

One word of warning. We have refused commercial partnerships. We have great difficulties. We have had approaches from the oil industry, the

automobile industry, the atomic industry, because we wanted to stay clean from commercial encumbrances and we want to keep it that way.

Again, you know the address on the Internet site, and I conclude by a quotation from Albert Schweitzer: "Humanity will only have the future that it will be able to construct for itself through its capacity for thought".

Space is important. Humanity has a place in space. Every human being has a responsibility, vis-à-vis, the planet will live on. That, in a nutshell, is KEO. I know I have spoken too long. I apologize for that. I thank you and I hope we will be able to put together a real joint project cooperation between KEO and the United Nations. I remain at your disposal and I thank the Belgian delegation and the European Space Agency once again.

Thank you.

**The CHAIRMAN:** Mr. Philippe of the KEO Project, thank you very much for your presentation. Please get(?) back(?) there. Your presentation of the "KEO Space Time Capsule Project of the Twenty-First Century" is very timely because we are looking at the future. We are looking at different aspects of what we are all about and this is an issue before this Committee. I think you did justice to your presentation. Yes, you spoke longer than expected but you see you were able to capture, if I tried to stop you, the Committee probably would have put a hammer on my head. I wanted to stop you but I know Member States wanted to hear you so I could not stop you. But I do not think I did justice to your presentation by making an analysis or a summary. I will make my summary at the end. I just open the floor for comments.

The Ambassador of Colombia, you have the floor. Brief comments please. Let us be brief. No lectures.

**Mr. C. AREVALO** (Colombia) (*interpretation from Spanish*): Thank you. No, it is not my habit to give any lectures on any topic actually and also especially because I do not feel like an expert in any of them. I just wanted to express my thanks. I feel this is very interesting but he really skipped quickly through Latin America. The continent came up and then he just rushed past it. And I would like to ask if he could be so kind as to go back to Latin America, even if it means a couple of minutes more. I think it is worthwhile. It is an interesting area with an archaeological past and proven sophistication which also involves a great vision of the future in many areas

with pre-Colombian civilization that also had its visions of passing on messages.

Thank you.

**The CHAIRMAN:** I thank you the Ambassador of Colombia and I did not mean that you in particular should not give a long lecture. I meant everybody to address us very briefly because of time.

You want me to open the floor for questions or you want to go on one-by-one?

**Mr. J.-M. PHILIPPE (KEO):** One-by-one please.

**The CHAIRMAN:** OK. You have the floor.

**Mr. J.-M. PHILIPPE (KEO)** (*interpretation from French*): Of course, I had already used up all my time. I did not have a chance to go into actions with Latin America. Our communication programme with Latin America aims, for the first half of 2006, but we have had contacts with Chile, Mexico, Brazil, Uruguay, Argentina, they are developing contacts with our embassies of France on the thought and we have KEO contact points for the project until we manage to link up with the Ministers for Education who are the best investors(?) for impact and effectiveness. But, of course, it is on the agenda for the future and we are already doing groundwork.

**The CHAIRMAN:** The distinguished representative of Canada.

**Mr. T. OUATTARA** (Canada) (*interpretation from French*): I would like to thank you for that fantastic presentation. In the Canadian Space Agency, I think we share your dream. At cultural level, you have done some fantastic work. What we are a little worried about is the critical mass of illiterate people who do not have access to schools, who do not have the traditional means of expression. How are you going to work on that angle? I just wanted to draw your attention there.

Also there are different cultures around the world. There are indigenous people. In Canada, there are political angles. How can you write the true history of the world and not just the beautiful history of the world?

**Mr. J.-M. PHILIPPE (KEO)** (*interpretation from French*): There is great resonance through spirit so it self-propagates, if you wish, on illiteracy. I do not have any images with me but there is a great deal of

work that remains to be done. We have many cultures in Madagascar, for example, where children know how to write, have gone to their grandparents for messages to write these down, to transcribe them. In India, we asked the young schoolchildren of upper castes to approach the lower castes for their information.

In any case, we will never manage to do everything that should be done. We will do our best, the best that people with the best of will can help us. We know that we just cannot manage everything but that will be said in humble terms on the satellite, that we have done our very best.

**The CHAIRMAN:** Thank you very much. Any other comments?

Professor Cassapoglou of Greece.

**Mr. V. CASSAPOGLOU** (Greece) (*interpretation from French*): Thank you Mr. Chairman. It is with great emotion that I followed Mr. Philippe's presentation, especially when he showed us the glass disks on which our contemporary history will be written and I was thinking of the Festhos(?) disks that have not been read. We have messages from our ancestors, the Festhos(?) disks are from the third or fourth millenary(?) before us and we in Greece have not managed to receive those messages. And it is with that in mind that my emotions were triggered. But I also feel that I should indicate the highly political aspect of this and I am thinking of ancient Greece, politics in the true sense of the word. The political message is a message which is democratic and not in the sense of the great freedom to express yourself outside, above and beyond the media. That is what of tremendous importance with this effort in communication and that, not only looking towards future generations. Of course, there will be the outcome of this work that can be reflected upon and that, in the light of all the thoughts of all the inhabitants of our planet, looking at our history.

And something else that touched me. I do not want to think of it in global or globalized terms but it is just this cosmic assembly that we are facing.

I would like to thank you. Our Prime Minister, who is also Minister for Culture, will be dealing with this matter personally and it is a tremendous opportunity for re-unification of humankind.

Thank you.

**Mr. J.-M. PHILIPPE (KEO)** (*interpretation from French*): If you can be of any help in our action, I would be most grateful.

Thank you.

**The CHAIRMAN:** Mr. Philippe, on behalf of the Committee, I want to thank you very much for your visionary contribution, not only to the work of this Committee but to the totality of our being and our history as a people. When you started your presentation, and the first thing that registered in my memory is a number of reports that most of us in this room have seen in our newspapers whereby somebody discovered a bottle with a message that has been wrapped in their bottle and sealed up, either from France or from Thailand or from Japan or from Chile, and that bottle travelled all across the world's oceans and ends up at a shore and then somebody has picked it up. And then you open it up and it is a message that was written maybe 50 years ago or 30 years ago. All of us are aware of this and this is what we are trying to do, using the essence of space science and technology. What is very critical is that, instead of travelling the world's oceans, we are travelling through the Universe and through space. And because your capsule is coming back to Earth and I was thinking you are asking for help to popularize this and, of course, talking about space, the first mechanism the United Nations has is the Office for Outer Space Affairs, the people who are sitting on this podium with me. Whether we can give this to them in all the official languages of the United Nations, in 10-minute, not a long video, but a 10-minute summary of what you are trying to accomplish because I think it is a truly great, I do not know exactly the word to use, especially when \_\_\_\_\_ (*not clear*) the term from what you have said is going to be wrapped in various protective shields. So that is very important. Dr. Camacho and myself here were exchanging views on your presentation and then we said, by the way do you have a deadline for submission of not applications, but submission of input into your capsule? Can you make this a little bit flexible so that it will give everybody, for example, in the United States, they have this Globe Project through their Academy of Sciences, I think. Canada itself started a Global Star project some time ago. But yours is very unique and I just want to congratulate you and Belgium and ESA for being futuristic in this respect and for attempting, through KEO, to capture what I call the totality of the inhabitants of planet Earth, including the history of its human population.

So on behalf of the Committee, I thank you but you can still respond to some of the comments I have made if you want to.

**Mr. J.-M. PHILIPPE (KEO)** (*interpretation from French*): Thank you. What I would really like is the United Nations, when we looked at from the outside, is a huge institution. If it can join our project and communicate about it, it would be so helpful. Sometimes this projects gets laughed at. It is not even credible to some. If the United Nations can promote it. UNESCO now is looking how to communicate KEO with its sixty-first anniversary. If the United Nations and UNESCO worked together for communication on this around the world, these are two organizations that have made dreams come true for years. This is of true value for the humanist efforts that can make a better world for us all.

I would also like to say that with Ja(?)-Jacque(?) Dedan(?), the Director-General of the Space Agency, he is now looking at a study to look at linkages for KEO. It is not for KEO to go with the first possible launch. It is to say that KEO is ready because it has representative messages. Then the collection of messages would be stopped officially at the end of 2005 but, thanks to UNESCO, we could announce that the collection is deferred because the project has a new dimension, hoping that each State can give its own testimony. So in the next few weeks, we will be addressing all Heads of State around the world saying "Heads of State of this world, what you have is so much space to say what you want about your political actions and your message will be uncensored and put in KEO in the name of what you were doing with your political responsibilities on Earth at that time". And the Vatican Library, other libraries, the collections of knowledges, Alexandria's library, we will be asking them what they feel is essential to be put out in the way of knowledge. So this project has taken on a worldwide cultural dimension.

**The CHAIRMAN:** OK, I thank you Mr. Philippe and I think the Secretariat and the Committee will put heads together at this session and reflect on what will be an appropriate response to the KEO Project except that you have not defined the letters KEO. What does it stand for?

**Mr. J.-M. PHILIPPE (KEO)**(*interpretation from French*): Thank you. We looked for a universal name. We did not find one. We wanted methodological(?) references but that would not be right for all the different countries around the world so we did a study through the National Centre for Scientific Research in France. Looking out at the 100

most spoken languages on Earth, what the sounds most present were. And we were surprised to hear that the first sound in all languages is the 'k' sound. The second is the 'e' and then 'o'. So KEO is something that can be pronounced by anybody, Chinese, African, anybody on Earth can pronounce the name KEO. That is how it got its name. That way we also put it on the Internet because www.keo was free.

**The CHAIRMAN:** We thank you very much Mr. Philippe.

We now invite our own lady from Japan. You know her. She actually does not need any introduction, Ms. Takemi Chiku. She used to be one of the staff members of the Office for Outer Space Affairs and she is now a Senior Education Administrator at JAXA in Japan and she will address us on "Activities of JAXA Space Education Centre".

Ms. Chiku, you have the floor.

**Ms. T. CHIKU (Japan):** Thank you Mr. Chairman for giving us the opportunity to brief the Committee on the space education activities of JAXA. I am very pleased to be back here representing JAXA's Space Education Office today.

In my presentation, Mr. Chairman, I hope to share with you and the distinguished delegates the principles behind our space education activities and perspectives for future activities.

Mr. Chairman, last month JAXA received a milestone in space education for Japan. JAXA established its Space Education Centre by an executive decision by the President, indicating the high-level of support that space education received from JAXA top management. JAXA educational activities had long been carried out as part of the public affairs and outreach activities of the Public Affairs Department but the growing recognition of the fundamental difference between public outreach and education resulted in the establishment of a separate unit dedicated to space education.

The goal of our Space Education Office is not just to publicize the achievements of JAXA and their return of benefits to the society. It goes even beyond promoting space activities in general. Our goal is to use space activities as a common thread that affects many aspects of human activities in order to inspire young people and help them realize the importance of life, the importance of the society and the importance of doing something for the society.

Now very quickly to go over the organizational facts. The Space Education Office was established to implement the activities of the Space Education Centre which is actually a virtual entity that could be even considered almost like a temporary project without fixed time.

The term of the Centre and the availability of its additional financial and human resources would very much depend on what we will accomplish in a year or two from now. Right now we have only nine staff members and they constitute 0.17(?) per cent of the JAXA budget.

This slide shows the scope of activities that have educational components carried out by various centres and offices of JAXA.

Following the establishment of the Space Education Centre, we also anticipate a central entity, which might be called Space Education Promotion Council or Committee within JAXA's organizational framework that provides overall coordination of educational activities.

So what do we actually do through the Space Education Centre? This slide shows the major categories of activities of the Centre. There are three.

One is to organize on-site events, such as one-day events or short-term courses lasting for perhaps a week. For these educational events and courses, mainly for primary and secondary schoolchildren, we develop our own education programmes including instructors manuals and textbooks for the participating students.

Another major category of activities is to provide support to teachers. With the manpower of only nine staff members, we recognize our limit in organizing on-site activities which is a labour-intensive process. So that is why we are now more focusing on this type of activity. We provide teaching materials for use by teachers to introduce space science and technology or space activities in their classroom teaching or extra-curriculum activities, as they fit the school or classroom schedules. We also work intensively with the teachers to develop their own unique programmes for classroom teaching.

And finally, we, of course, make those materials and education programmes that we have developed widely available through our website. And we are working right now hard to complete a website named "Tree of Knowledge", which compiles those

materials and programmes in a user-friendly format for use by anybody who has access to the Internet.

With these three pillars of activities, we are aiming for a rapid increase in the number of educators and students who benefit from our products and services. And we, of course, place emphasis on the collaboration with research institutes, industry, professional educational associations, as well as various educational entities.

Now the next slide shows the principles that we follow in our activities for young people.

We place importance on assisting young people in understanding the thinking process behind what they acquire as knowledge.

We are trying to take advantage of children's simple curiosity embedded in their minds towards nature, lives and space, and we offer them opportunities to learn the joy of solving mysteries by themselves.

Importance of life, or dignity of life, is something we would also like the young people to appreciate as they participate in our education activities.

The sad reality is that we often hear the horrible crimes committed by juveniles in Japan. And, at the same time, we noticed in the young people that we have encountered that when they realize that there has been a lengthy chain of relays of life run from another before a certain life is created and they realize that the lives on the Earth today have come a long way from the pieces of the galaxies and stars, many of them started to think deeply about the origin and evolution of life and also the importance of life and that is what we wanted to work on the young people.

We also would like to increase the young people's appreciation of science and technology, in order to acquire insight in their daily lives and also to understand and master the logical thinking process.

Another important thing that we would like to let them learn is the spirit of "Never Give Up". The history of our endeavours in exploration and use of outer space is full of examples that show how important this is and we also think that this is important for almost everybody who wants to achieve something meaningful and significant in this challenging world.

Finally, through our space education activities, we would like our young people to

understand how important, and how exciting, it is to be part of a society to build a better future together.

Space activities, as we all know, are not something that individuals can easily carry out by themselves to achieve meaningful results. But together, a large number of people of various backgrounds, from various countries, can build a global system that could benefit the entire global society. And we would also like our young people to appreciate the importance, and the power, of the collective efforts made towards the common goals and we want them to think about what they can do for their own society together.

This slide shows some statistics for our achievements and goals. Within five years from now, we are working hard to provide support to 2,000 teachers and to benefit 10,000 primary and secondary schoolchildren through our education support services and 1,400 students through our on-site education activities \_\_\_\_\_ (*not clear*) with the manpower we have.

This slide lists the schools that received our support in their classroom teaching or extra curriculum activities. As many schools and teachers already seem to be overwhelmed with packed curriculum, our support was provided to a selected few schools that have been identified as either Super Science Highschools, or SSH, which focus on enhancing science and math education, or the schools that have Science Partnership Programmes, or SPP, to provide students with more opportunities to get intellectually stimulated. Both SSH and SPP are promoted by the Ministry of Education, Culture, Sports, Science and Technology, or NEXT. We also provided support to classes of integrated learning, also promoted by MEXT.

Our on-site educational activities mainly consist of events and short-term courses at various places in Japan organized as part of what we call Cosmic College. The Cosmic College offers courses at three levels.

One is Kids Course, for participation by the first-year to the fourth-year students of primary schools, together with their parents. The programme focuses on something that those young students can enjoy by learning something, through building something together with their parents like the model rockets, or learning about the constellations and associated mythologies, something that they can get familiar with easily.

The Fundamental Course is for the upper-level primary school students up to the second-year students of secondary schools. Students receive lectures on basics of space science and technology and conduct some basic scientific experiments relating to space activities.

The Advanced Course is for those students who have completed the Fundamental Course and these students learn more specific subjects relating to space science and technology and applications, as well as other areas of science relating to space activities.

And from this year, we plan to organize a three-day course for high-school students. And we are also exploring possibilities for organizing something for university students and this is where we are looking for opportunities to collaborate, particularly with partners from other countries.

The collaboration and cooperation with various entities engaged in education would be the key for our success and the close collaboration with teachers is considered most essential.

To enhance our services and products to meet the various unique needs of classrooms, we spare no effort to exchange views and ideas with associations of teachers, boards of education, as well as publishers of textbooks and companies of educational materials. We intend to work with various entities that contribute to education and to expanding human knowledge.

It is obviously important that we collaborate with those entities, for example, involved in space science, space development, life science as well as studies on Earth science and environment. What we would like to do is to go even beyond that to work also with those entities engaged in studies on humanities and civilizations, as well as arts and philosophies. This is a very comprehensive approach that we have decided to undertake in expanding our space education activities.

This slide shows the ultimate goal that we would like to achieve in space education in Japan. We envisage something that could serve as a union of various entities involved in space education, space activities and educational activities together.

At the core of that union would be the government, together with JAXA, research institutes, space agencies of other countries and international organizations with space activities, private companies and educational entities which would create and

disseminate essential educational information that benefits all.

Around that core would be various entities engaged in education or educational activities that provide opportunities to participate in a wide range of space education activities. Around that circle is, of course, the beneficiaries of various kinds.

In this picture for the future, the strengthening of cooperation with space agencies of other countries and international organizations that have space education programmes is something that we consider very essential.

We have just started as a separate unit to focus on space education, first for the benefit of schools in Japan and it may be a little bit too early to talk about solid activities for international cooperation but we should like to mention at least those ongoing activities that contribute to strengthening cooperation in space education.

The first is the Asia-Pacific Regional Space Agency Forum, which has a Space Education and Awareness Working Group. That Working Group continues the Water Boost Rocket Competition where participants can learn about the theory of rocket science while having fun and becoming more familiar with space activities in general. And we are inviting secondary schools students from member countries of APRSAF to participate in this Competition.

And for the benefit of the international community, we are also pleased to assist in the convening of the United Nations/IAF Workshop which will be held under the theme entitled "Space Education and Capacity-Building for Sustainable Development". And we sincerely hope that this Workshop will yield concrete results to promote space education and training in a manner that meets various needs of participating countries.

During the International Astronautical Congress which has various space education sessions, we also assist in the organization of student programmes during the Congress.

We have also established, and we intend to continue, the JAXA Fellowship to support students to participate in the summer session programmes organized by the International Space University.

And finally, we would like to briefly mention the ongoing efforts among NASA, ESA, the Canadian Space Agency, the CSA, and JAXA to establish a

framework for collaboration in promoting space education. Once established, hopefully on the occasion of the International Astronautical Congress this year in October, the International Space Education Board would aim to increase science, technology, engineering and mathematics literacy achievement and to support the future workforce needs of space programmes. While details are yet to be discussed and determined, this entity would facilitate, among other things, the exchange of educational information and materials, the organization of joint education programmes and projects, and the organization of exchange programmes for students, educators or researchers.

Mr. Chairman, we in JAXA's Space Education Office recognize the tremendous challenge before us. We certainly do not have enough resources and manpower yet to expand our activities to achieve all our goals presented today. But the reason why we came here today is because we are looking for partners who share our principles and visions for space education and we would like to exchange views and ideas with those partners to identify a few space education activities that benefit many in the global society with minimum additional resources, while maximizing the opportunities for our younger generation to have a better future through space activities. And we are hoping to achieve something concrete with visible benefits for the society in a year or two.

And we believe that space is no longer a special programme or a specialized disciplinary field for a limited number of selected people. In fact, space has been embedded in our daily activities, our daily lives from civilizations ago.

As we further expand our activities in space education, we will focus on the linkage between space and various aspects of our daily lives, our history and our future. And this way, we in the Space Education Centre believe that space education would make significant contributions to enhancing the society in a comprehensive manner.

And that concludes my presentation. I thank you very much for your attention.

**The CHAIRMAN:** Ms. Takemi Chiku, on behalf of the Committee, I want to thank you very much for that presentation on the activities of JAXA in the area of space education. And before I make my own comments, let me open the floor for comments from delegates.

The Ambassador of Colombia, you have the floor.

**Mr. C. AREVALO** (Colombia) (*interpretation from Spanish*): Thank you Mr. Chairman. I have asked for the floor because this is a subject that is of particular importance to Colombia. I am going to be brief. I just wanted to congratulate Madam Chiku for this very well prepared, high-quality presentation. Information about the JAXA Space Education Centre is very welcome and I am going to just briefly highlight three points that I found particularly important.

First, the need to raise the awareness of young people of the importance of life, dignity and the future of humanity, a life in the service of society. I think this is a very noble activity. It is a challenge that the Centre has taken up and we welcome that.

Next, I wanted to point out the need for collective work, cooperation, among countries, organizations, entities and society at large. The speaker mentioned the need to set up partnerships. I am going to point out that the Secretariat of the Space Congress held in Cartagena is very active in this area and is willing to set up a partnership.

Thank you very much.

**The CHAIRMAN:** I thank the distinguished Ambassador of Colombia for his comments.

The floor is open for additional contributions.

I see none.

Ms. Chiku, the Ambassador of Colombia referred to your presentation as being excellent and the only comment I have to say on that is that this Committee does not expect anything less, given your very excellent contribution to the work of this Committee over the years. And we are very grateful for what you have done. I looked at your slide number three and that slide states that your Space Education Office was established on 1 May 2005 and you opened the door of the Centre on 19 May 2005. If I flash my mind back, that was three weeks ago and if you started working three weeks ago and you are able to put before us this type of programme, I wonder what we are going to see in another year or two. I am very happy that this Committee had this particular agenda item as a continuing subject in its agenda. It is, therefore, I am sure, although I do not have the permission, but I am speaking on behalf of the Committee that we would like to see the achievements of this particular Centre

next year under the same agenda item and in particular the collaboration you are asking for because I think you have put before us a significant education model which I think everybody might wish to emulate.

So on behalf of the Committee, let me thank you very much and your country for the excellent presentation you have given us this afternoon. Thank you very much.

Distinguished delegates, our last presentation this afternoon is coming from one of our sister organizations, the United Nations Economic, Education, Scientific and Cultural Organization, UNESCO, from Paris, and the speaker is Ms. Berenguer and we call her, popularly known as Yolanda. She will be addressing us on "Space and the United Nations Decade on Education for Sustainable Development".

Ms. Berenguer, you have the floor.

**Ms. Y. BERENGUER** (United Nations, Education, Scientific and Cultural Organization):  
\_\_\_\_\_ (in *Nigerian language*) Mr. Chairman. That is thank you in Nigerian. We have just come back from Nigeria. I learned one of these important words.

Thank you Mr. Chairman for giving me the opportunity to update the members of COPUOS on the Space Education Programme of UNESCO which was launched in 2002. Just to recall to the members, these are our objectives: to promote the integration of space-related subjects in the curricula; provide opportunities to educators to improve knowledge and skills in space science and technology; and at the same time, to raise public awareness of the important contribution of a space-based system to the development of society.

Our overall contribution, overall objection is to contribute to the preparation of the next generation of space workforce.

And UNESCO is cooperating with different entities in achieving these objectives. We work very closely with space-related institutions and, of course, with different space agencies.

Just to give you a little background, last year I gave a presentation on what our activities were, with a view to coming up with the results this year. And one of our activities was the drawing contest for children from six to 10 years old. We have produced a 2005 calendar out of these drawings that were selected, the best entries, sent by more than 75 countries and this calendar was distributed, we sent it to the Office for

Outer Space Affairs, which was distributed to the different members of COPUOS. So I hope that everybody here has received a copy of this calendar. We have sent just recently another box so anyone who wishes to have a copy of this calendar, even if we are already in the middle of the year, we can still give them away. Just for your information, we have received offers from schools and for children to buy them. We are giving them out, of course, free of charge.

Now this is a drawing of a little boy from China who sees life in space. This is how he interprets life in space. So you can see a telescope protruding from the planet and that is more or less his interpretation of school life in space.

This is a little boy's drawing of life in space, how to go from one planet to the other, a little boy from Kenya drew this painting.

Another drawing we have heard, this is an interpretation of a little girl who says that this is an astronaut who is holding hands with an alien but the lady astronaut just lost her gravity shoes. So there she is flying out in outer space.

These are the interpretations of a little boy from Romania. This is a space hotel where you see all the spaceships coming in.

And this is the green people. They are out to clean the outer space so this is a green man and this is a drawing of a little Russian boy, a six-year old Russian boy.

Christmastime in outer space. This astronaut is putting together all these little stars, little blobs, to come up with a Christmas tree.

This is a space bus and a space taxi in outer space. And finally, this is the big winner. This is a drawing of a Norwegian boy and this is how he sees life in the future in outer space.

We have, for this year we are organizing a science fiction writing contest for two age groups from 12 to 14 and 15 to 17 years old.

One of our activities is to organize space education workshops, the first of which was held in the Philippines in October 2004. And what we do is we bring in experts from different fields and this is a gentleman from the National Space Society who, at the same time, donated telescopes and we had an expert from NASA who participated in this session in the Philippines, as well as a Professor from China.

The second one that we had was recently in May in Nigeria and this is one of the activities that we had, it was a rocket launching. As you can see here, this is just to show the dynamics of rocket launching. We invited the organizers, NASDA(?), invited high school and teachers to participate in the different sessions which were held in three areas of Nigeria. And recently as well, post-graduate students and professors also participated. They were so interested in this activity, in this event that they also participated when, in fact, our target audience were high school students.

You see the rocket launch and they are all watching for the rockets that were made by high school students to go up into the air.

These are the university professors there who were participating in one of the presentations given by an expert on astronomy.

We also gave out educational materials to all these experts. On your left is one of the Space Generation representatives, Professor \_\_\_\_\_(?) is the Director of the Centre for Basic Space Science in Insuka(?), Nigeria. The gentlemen holding the book is from Ahmad(?) Planetarium. He really gave a very wonderful hands-on demonstration on rocket launching. And the gentleman on the right is one of the science teachers in Insuka(?).

Just to give you a little background on what we are doing. For space education workshops, we have Nigeria for this year and we intend to do one in Colombia as well this year. Next year we intend to organize one in Tanzania, in Viet Nam and in a pacific island, date to be determined. In 2007, we intend to organize another workshop in Latin America and the Caribbean and one in Africa. Africa is a priority continent for UNESCO in view of the new \_\_\_\_\_ (*not clear*) which is why we would like to include it in our programme activities every year. I am sorry here for Middle East countries. We have not forgotten you. We would like to organize something in the Middle East either in 2006 or 2007 or in 2008.

Milestones for the programme are the following. In 2007, UNESCO is launching the International Year of the Planet Earth and we would like to work closely with the United Nations Office for Outer Space Affairs and the International Heliophysical Year. In 2009, UNESCO is launching the International Year of Astronomy and this is going

to be our contribution to the United Nations Decade on Education for Sustainable Development.

Now I turn to the United Nations Decade on Education for Sustainable Development. This is the decade that starts this year and it will go on until 2014. UNESCO is the lead agency for this Decade and the overall goal of the Decade is to integrate values inherent in sustainable development in all aspects of learning, to encourage changes in behaviour that allow for a more sustainable and just society for all. The basic vision of the Decade is a world where everyone has the opportunity to benefit from education and learn the values, behaviour and lifestyles required for a sustainable future and a positive sustainable transformation.

UNESCO emphasizes quality education. This is the development of knowledge, skills, perspectives, values that are related to sustainability and poverty education should be gender-sensitive.

The pillars of sustainable development, as you all know, is society, economy and environment. These are just three things that should be taken into consideration to help sustainable development and education and sustainable development should take into consideration these three pillars.

UNESCO considers that in order to obtain education for sustainable development in order to implement education and sustainability(?), it should have the correct following characteristics. It should be value-driven, meaning that the education should know how to share values and principles that underpin sustainable development. People and society should learn how to think critically and to know problem-solving. This would lead to confidence in addressing the dilemmas and challenges of sustainable development.

Applicability. The youth should apply their learning experiences that should be integrated in day-to-day personal and professional lives.

Another characteristic is participatory decision-making. The educated would lead to participate in decisions on how they are to live and learn.

And lastly, education and sustainable development should be relevant to local need, address local but, of course, global issues as well using \_\_\_\_\_(?) language, \_\_\_\_\_(?) culture, \_\_\_\_\_(?) identity (*not clear*), belief philosophies and way of thinking.

So where does space come in this whole scheme of sustainable development? Space, as we all know, scientific knowledge is the driving force of economy and if a country is economically viable, the country will be socially transformed and will have repercussions on the environment. Space is a major tool in achieving science and technology, the driving force of society and of the country.

The Space Education Programme is contributing to this so what we are looking into is international cooperation and assistance and awareness of all governments who are the major stakeholders in this drive to consider the different aspects of sustainable development.

I would like to end by quoting the Director-General of UNESCO who said that “the Decade must be more than a slogan. It must be a concrete reality for all of us, individuals, organizations and governments, in all of our daily decisions and actions so as to promise a sustainable planet and a staple world to our children, our grandchildren and their descendants.”

Thank you Mr. Chairman.

**The CHAIRMAN:** Ms. Berenguer, on behalf of the Committee, I wish to thank you very much for your excellent and a very interesting presentation, getting us to know what UNESCO is doing in the area of space education, not only in Paris but globally and in the years ahead.

Before I make my own comments, I invite delegations who have any comments to make to please do so on your presentation.

Any comments?

I have a suggestion, Ms. Berenguer, you are aware of the International Space Week Association and I am sure they are trying to do the same thing that you have been doing. That is an NGO, a non-governmental organization, and I think a sort of collaboration between the two of you will go a long way. I remember when you are planning a Nigerian event, I said yesterday that you might want to bring them onboard to see what they have in mind. And I also know that ISPRS and some of the other intergovernmental organizations, probably like IAF and COSPAR, they might have an education programme for the youth. So you might consider speaking with them in terms of collaboration. But similarly, you have told us the most important thing. Education is an indispensable tool for sustainable

development which is exactly what the Chinese said when they say “Give a man a fish and you feed him Once. Teach a man how to fish and you feed him for life”. And for us, to be able to develop in a sustainable way, we need education and that is what your presentation has addressed and we thank you very much.

So please join me in thanking her once again.

Distinguished delegates, I will now adjourn this meeting. Before doing so, I would like to inform all delegates of our schedule of work for tomorrow morning, as well as representatives.

We will meet promptly here in this room at 10.00 a.m. in the morning. At that time, we will continue and conclude our consideration of our agenda item 6, that is, Implementation of the Recommendations of UNISPACE III. We will also resume our consideration of agenda item 7, that is, Report of the Scientific and Technical Subcommittee on its Forty-Second Session. And at that time, we will hear the progress report from the Chairman of the Working Group on Space Debris. Subsequently, we will continue and conclude our consideration of agenda item 9, Spin-off Benefits of Space Technology: Review of Current Status, and continue with our consideration of agenda item 10, that is, Space and Society.

We will also begin our consideration of agenda item 11 tomorrow, that is, Space and Water, as well as agenda item 13, Other Matters.

Agenda item 12 is meant for Thursday. We will do that on Thursday. So tomorrow we begin our consideration of agenda item 11, Space and Water, and agenda item 13, Other Matters. So I invite all delegations interested in addressing us on item 6, item 7, item 10, item 9 and item 11, to please do so this evening and first thing tomorrow morning so that we can wrap up and start considering our report.

At the end of tomorrow morning’s meeting, there will be one technical presentation by the representative of Germany and their presentation will address the subject “DLR School Laboratories – How to Enhance Interest in Space Sciences”. So that is tomorrow morning.

Also tomorrow morning, the Working Groups on Space Debris and the Use of Nuclear Power Sources in Outer Space of the Scientific and Technical Subcommittee will continue to hold their ongoing

intersessional sessions. I understand that these sessions will start tomorrow at 9.00 a.m. in the morning.

Are there any questions or comments on this schedule of work for tomorrow? Is this agreeable to all delegations?

OK, I see none.

Before adjourning, let me make an announcement. This G15 of this Committee, that is the G15 that is the Bureaux, the past, the present and future, they will meet in the office of the Chairman of COPUOS at 5.50 p.m. this evening.

So this meeting is adjourned until 10.00 a.m. tomorrow.

*The meeting closed at 17.35 p.m.*