

**Committee on the Peaceful
Uses of Outer Space***Unedited transcript*557th Meeting

Monday, 12 June 2006, 3 p.m.

Vienna

*Chairman: Mr. G. Brachet (France)**The meeting was called to order at 3.03 p.m.*

The CHAIRMAN (*interpretation from French*): I now declare open the 557th meeting of the Committee on the Peaceful Uses of Outer Space.

This afternoon, we will continue our consideration of agenda item 7, Implementation of the Recommendations of UNISPACE III, and 8, Report of the Scientific and Technical Subcommittee on its Forty-Third Session.

On this agenda item, there will be two presentations this afternoon. The first one will be delivered by the distinguished representative of Germany, Karl-Ulrich Müller and his colleague, Ulrich Huth. It will deal with "Disaster Management from Space – Bridging the Gap in Bonn".

Next, the second presentation will be made by Mr. José Achache of the Secretariat of the Group on Earth Observations.

After that, we will consider agenda item 7 and we will try to suspend this meeting about 4.00 p.m. so that we can have a Symposium on "Space and Forest". It is envisaged for 4.00 p.m.

**Implementation of the recommendations of
UNISPACE III (agenda item 7)**

Now, first we are giving the floor to the delegation of Germany. Mr. Müller, you have the floor.

Mr. K.-U. MÜLLER (Germany): Thank you Mr. Chairman. Mr. Chairman, since the first meeting

of the DMISCO Expert Group last year, the German Government has been working on an offer to host DMISCO in Germany.

With regard to the objective of DMISCO, I quote "To strive to ensure that all countries have access to and use all types of space-based information to support the full disaster management cycle". The German Government considers Bonn to be the ideal location for DMISCO.

Mr. Chairman, I believe that pictures may say more than a thousand words. Hence, please allow my delegation to highlight the main features of the German Government's offer that was distributed to all delegations present of installing DMISCO in Bonn with a short presentation. Thank you very much.

The CHAIRMAN (*interpretation from French*): Thank you very much. Mr. Huth.

Mr. U. HUTH (Germany): As you have heard, the German Government on the first day of this COPUOS presented its offer and we thought it useful just to summarize what is said in that paper.

As you know, the German offer is composed of several elements which is, one, the provision of a rent-free office space on a permanent basis and with the equivalent initial equipment included.

Germany is also offering an amount of some 150,000 Euros per annum, which is roughly, given the present exchange rate, US\$180,000, for at least for four years. Two, generally support either operations and/or projects. Also included is the support in human resources by two experts which are the equivalent to

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the P-3 to P-4 level. And with the offer, and of the building is obviously included, the capacity to have high-speed data links.

We think that Bonn is, well you allow me a special place, where synergies play either between industries, research and also administrative and the United Nations entities, and it is this symbol of synergy which allows also us to host an important international conference as recently, as you know, the Early Warning Conference III was hosted in Bonn and we consider Bonn as really a good place for leading on this global dialogue as we say.

Actually, in Bonn, and there are several United Nations entities which by what they are doing, are inter-linked with the theme of the disaster management cycle, and when I say cycle, that means prevention and also evaluation of disasters. And, as you may know, we have in Bonn the Early Warning Platform of ISDR, we have the United Nations University, we have institutions, the Climate Change Convention in Bonn and also United Nations institutions, voluntary programme and supporting capacity-building. And what you see is the central building of the United Nations campus in Bonn, which officially be inaugurated in July this year.

Also in Bonn, and that is why we think it is a good place, is a network of experienced partners where my home institution, the German Aerospace Centre, DLR, is the main partner, is in Bonn, or close to Bonn, is the headquarters of DLR and also the Space Agency, that means the function of the space agency is integrated into DLR as a research centre and agency at the same time.

Despite the move of the Government, there are several Federal Ministries which further on stay in Bonn and also we have in Bonn the Federal Office for Civil Protection, Disaster Response, we have the Technical Aid Agency THW, the German Committee of Disaster Reduction and so on. We would say that there in Bonn we have interaction through national or international programmes of these partners. And if you allow myself that I take the picture of the SPIDER which was discussed in the Working Group as the symbol of interaction between different organizations with different emphasis.

As I said, in Bonn, is located the headquarters of the DLR and, again, as a matter of example, how we see the future DMISCO activities, it is the interaction between different players, and here I have taken our own example where, through different programmes, we are interacting together with the Space Agency, we are

working within the context of projects and services. We are obviously a partner as a research entity and we think we understand the needs of the users where the users again, eight organizations and humanitarian organizations.

Again, the picture or the symbol of the SPIDER is symbolized by what we mean.

Behind DLR is the capacity in Earth observation of DLR and we think that with that kind of infrastructure, we certainly will be of help for future DMISCO's work where as also this brown space segment and the IT is a backbone of all activities.

Assuming that major DMISCO activities will be in Bonn, it will meet an environment of the German Space Policy which is expressed again by the building up or expansion of DLR's Satellite-Based Crisis Information Centre. We are waiting for the launch of TerraSAR-X, as you heard in the Subcommittee this year, a presentation on that mission which shall be launched October. There is a Rapid Eye Mission coming up and the follow-up of TerraSAR-X which is pandemics(?).

You may know, through the decision of the ESA Ministerial Conference in December, Germany has taken in a way the lead within ESA's Earth observation programmes, particularly in GMES. And also you may know that initiatives were taken right away after the tsunami disaster during the Koba Conference, within the context of what is called the Hyogo Framework for Action. And also Germany participates substantially in the GEO.

It is obvious that capacity-building is also an element of our policy.

Let me take here another example of how we think networking can be done. It is the example of a research network which was created several years ago which unites the different German Research Centres in a kind of coordinated programme. And within that programme, research in disaster management is one major element, again the SPIDER shall symbolize that. It was that research programme which enabled Germany to propose in early 2005, within the context of the UNESCO-IOC, the launch of a tsunami early warning system, and I think you heard from the representative of Indonesia's status report, all what I am saying is that through good networking, one is able then to launch projects, programmes which are of immediate help.

Let me go back to the United Nations building in Bonn. This building actually, 11 of the 12 United Nations organizations are moving in that building and that shall give you a visual impression. It has been completely renovated. It was the former building of the Parliamentarians which as long as Bonn was capital of Germany.

So things are moving in the area and one symbol will be the establishment or the building-up of the new Convention Centre where an investor has been found and this shall be ready in 2008. And obviously we are not lost, that means we are close in one hour's drive of three airports, a good, let us say, interconnection is there.

Last but not least, within the Bonn area, we have major universities and I may say that already the United Nations University and Bonn University are closely cooperating by the way also in the areas of disaster management.

Last but not least, what is the basic message? We heard last in February and here this is a quote "disasters do not wait". Our intention, since the very beginning of the Expert Group work was to, and we followed it up and I would just say that Germany is ready to host DMISCO in Bonn as it was discussed, Gateway, Bridge or Facilitator.

Thank you very much Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you very much Mr. Huth for your presentation. I thank the German delegation for providing detailed information to illustrate the proposal distributed among delegations by Germany.

We are still on agenda item 7. I would now like to recognize Mr. José Achache, Director of the Secretariat of the Group on Earth Observations. You have the floor José.

Mr. J. ACHACHE (Group on Earth Observations): Thank you Mr. Chairman. On behalf of the Secretariat of GEO, the Group on Earth Observation, I would like first to take a few minutes of your time to introduce GEO and this Global Earth Observation System of Systems that GEO is supposed to implement. And then at the end, I will make a few remarks and comments regarding DMISCO and trying to express the point of view of a number of our GEO members.

You probably all know and heard and have been involved in the implementation of GEO. GEO is

essentially created after the recognition that we have an increasing number of problems with environment resource management and natural disasters for which there is a need for information and observations on Earth's processes. And GEO was created with the intention of addressing almost all the potential applications of Earth observation, that includes disaster and response and mitigation but also health, epidemiology, energy management, water management, of course, weather forecasting, climate change, agriculture, biodiversity and eco-systems. So you see it is a fairly wide range of potential applications of Earth observation and Earth sciences in covering almost all of the political issues related to Earth observation.

The reason why GEO was billed GEOS, is intended to cover all these nine societal benefit areas, essentially to the fact that for one particular problem in Earth sciences, you need data from many different sources and today we are in the situation which reminds me of the Tower of Babel where different Earth observations systems, whether the different satellites or even different local *in situ* systems provide data in different formats, different standards, with no interoperability and trying to bring in all this data into a single model is very difficult because they do not speak the same language. So one of the objectives is to try and bring all this data from different sources into a single system through a GEO portal and a GEO clearing house or a GEO information system.

And, at the same time, there was also the recognition that one particular piece of observation, like altimetry or multi-spectral land imagery, can be used for many different applications and, therefore, that it does not make sense any more to specify requirements for observing systems, disciplines by disciplines, and we should really look for a global Earth observation system of systems serving all the applications of Earth observation.

So this is why what happened and this is why GEO was created for a series of three international summits. In the end, GEO was created in February last year and has now been joined by 65 countries, the European Commission and 43 Participating Organizations, many United Nations organizations in particular, and there are more candidates today which will join GEO very soon.

The GEOS and the role of GEO is to try and coordinate the collection of Earth observation data to make sure that this data is properly distributed and access is being given to all potential users, including developing countries where the technical facilities are

not very often not there. And also to try and support the development of the user for Earth observations for many applications.

The way GEO works is through a series of work plans. There was a first Work Plan for 2006, which is in the process and is about to be completed, and the principle is that the Work Plan is bringing together activities of individual members in order to try and coordinate the activities which are being conducted independently with different members and organizations but which, in the end, are trying to achieve the same goals. It is really about coordinating the activities of members and certainly not creating any new additional activities.

We are currently implementing the new Work Plan which will cover the next three years, 2007 to 2009, and the first draft has been circulated and all GEO members, that includes a large number of the countries in this room, have been invited to make informal technical comments for the time being and soon formal comments to the Plan.

The main highlights of this Plan, to give you an idea, are, one, we are currently conducting an assessment of the capacity-building activities in all areas of Earth observation, including technical capacity, as well as education. There was a major Symposium in Brazil two weeks ago, through which we have initiated a collection of information on capacity-building programmes from all the countries and organizations. And this will lead to a major symposium in Spain, in Madrid, presumably early next year, to evaluate the situation in terms of capacity-building for Earth observation in trying to bring again a little bit of coordination and efficiency on what is being conducted.

There are activities on the efficient use of energy using remote sensing. A major part of the programme will also be related to *in situ* water monitoring, whether it is for water management, flood prediction or the understanding of sea level change where the input from continents appears to be now the major uncertainty in the origin of sea level changes.

LANDSAT continuities are also going to be a major activity for GEO and it is likely, either for this generation or for the next generation of multi-spectral imagery, like LANDSAT, that we may have to use, rather dedicated satellites, when LANDSAT and MENSAT(?) is not always operating any more, SPOT-V may not be operating any more in a few years. We will probably work with a constellation trying to bring together all the available resources. Germany

mentioned Rapid Eye, which could be one component of this constellation to ensure continuity of multi-spectral imagery.

And GEO-Netcast is also a significant programme for GEO. GEO-Netcast is an effort to build upon the EUMETCAST(?) Broadcast Dissemination System that EUMETSAT has developed for broadcasting meteorological data to Africa into a larger system which includes broadcasts through satellites, but also distribution through the Internet in order to reach not just Africa but all the countries of the world and possibly even using this system to collect the data as well as to distribute the data. So GEO-Netcast is a really very ambitious programme of collection and distribution of Earth observation data to all potential users.

There is also going to be, to give you another example, a last example, a programme on the analysis of the connection between biodiversity and epidemiology. You know that there has been a lot of discussion lately about the fact that new epidemics are related to climate changes, even though this is real and climate change does have some impact on the re-emergence of some diseases. It turns out that biodiversity changes is also a major factor in the emergence of these diseases. So we are trying to address this issue by seeing how global Earth observation of biodiversity and biodiversity changes in eco-systems evolution can be used to better understand epidemiology.

So on this Work Plan, of course, comments are expected both from experts and members. And on GEO, new membership is also welcome since the membership to GEO is open to all United Nations member countries.

Regarding DMISCO now, very shortly, the last GEO Plenary discussed the issue of the coordination, again GEO is about coordinating activities, not creating new ones, so the GEO Plenary discussed the coordination of activities in the area of disaster prevention, disaster mitigation, response and so on, and there was a recommendation and some broach(?) from the Scientific and Technical Subcommittee of this Committee and from the GEO Plenary that the GEO Secretariat engages with the United Nations Office for Outer Space Affairs in order to see how DMISCO could be made to provide advice on the build-up of DMISCO.

From the point of view of GEO, what is really important is that we avoid duplications. This is the main driver of GEO in whatever activity we are

conducting that we try and inform the members of activities of similar types which are being conducted so as to reduce and possibly avoid duplications in order to better address the gaps.

In the area of disaster management and disaster situation management using remote sensing, there are a number of activities, groups and mechanisms which already exist. I guess you all know about the Charter on Space and Major Disasters, the activities that UNOSAT is conducting. There is also a major reorganization and re-thinking of the Strategy for Disaster Reduction within the United Nations system under the leadership of Jan Eglund(?) and ISDR is conducting this. And, as I mentioned earlier, GEO intends to, is actually currently developing what we call a GEO portal which, together with a clearing house, will be a mechanism to make data available to all potential users.

So we had a meeting with Sergio Camacho and the United Nations Office for Outer Space Affairs three weeks ago, something like that, and we discussed the current draft of the proposal and we made some recommendations and a new document, which is still a preliminary document which was sent to me and sent to GEO later, was more focused on pre-activities. I must say that at least two of these activities are very important, need further support and could very well be conducted within DMISCO and that is capacity-building. There is definitely a need for building the capacity to use remote sensing information to use space imagery and actually, as far as GEO is concerned, not just space imagery for disaster management, and there is a huge need for more capacity-building.

There is also a need for the second part which is to build awareness within the users about what potentially can space imagery bring to disaster management. Some countries, some experts do know, the vast majority of countries which have to deal on a regular basis with disaster management and disaster situations, are not informed properly of the tremendous capacities that this technology can bring. And there, there is a need for educating the users, informing the users and building the awareness on the potential. So that is the second task which is described in the document in which I think is very important.

And the last one, it is probably in reverse order, but the last one is the support to the users. There, again, there is a need to support the users. The only concern is that it is not clear whether this support to the users should actually be given in real-time and the only caveat that we would is whether there is actually a need for real-time support with a hotline on

_____ (?) 27 and 24 by 7 basis because, I guess, if the users have not been prepared ahead of a disaster to deal with the situation and to deal with the daytime terms of accessibility, processing and transfer to the right persons, the real-time needs in the situation of disasters seems to be a little bit far-reaching.

In summary, I would say that the position of GEO is that the three families of activities which are being recognized, at least the document which was distributed to me and sent to the Secretariat three weeks ago, two of them are fundamental and there is a need for further support to address them. The third one is needed but maybe not necessarily in real-time and we are still discussing about this. But that in order to properly contribute to these activities, I really would like to stress how important it is to coordinate with existing activities and the existing mechanisms in order to avoid duplications.

Indeed, the Charter for Space and Major Disasters is not a continuous sustainable process. It is a good will activity of the number of space agencies and the question remains to ensure the sustainability on the long-term of this kind of process and for this an answer needs to be brought and maybe DMISCO is the way to bring the answer to this problem but again in complete recognition of existing similar activities in other agencies or organizations, which are actually other members of GEO, like the United Nations Office for Outer Space Affairs.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you to the Director of the GEO Secretariat for his statement.

Before we move on to the next agenda item, I would like to ask delegations whether they wish to make statements or perhaps put questions on the two presentations we have just heard.

I see none.

We will continue, and I hope conclude, our consideration of agenda item 7, Implementation of the Recommendations of UNISPACE III, tomorrow morning.

Report of the Scientific and Technical Subcommittee on its forty-third session (agenda item 8)

Let us move on to consideration of agenda item 8, Report of the Scientific and Technical Subcommittee on its Forty-Third Session.

We here have four speakers. As we have to conclude our session at 4.00 p.m. to provide time and space to the colloquium on "Space and Forest", I invite each of the speakers to limit themselves to five or six minutes of speaking time.

I will start by giving the floor to Italy, Mr. Alessandro Gabrielli.

Mr. A. GABRIELLI (Italy): Thank you Mr. Chairman. Mr. Chairman, distinguished delegates, allow me to review the main recent efforts carried out by Italy in the frame of international cooperation for sustainable space exploration.

According to the Italian National Aerospace Plan, Italy is committed to contributing to the improvement of the knowledge of the Universe and to expand human boundaries through space exploration.

In this context, Italy has been participating in the ESA lunar mission SMART-1 and in missions to Mars, respectively with NASA, through the Mars Reconnaissance Orbiter mission and with ESA, through Mars Express mission. And Italy has also been contributing to the ESA Venus Express mission and to the Bepi-Colombo mission to the planet Mercury.

In addition, Italy continues the scientific participation to the Cassini-Huygens mission to Saturn and its moons, representing the best successful international cooperation between the Italian Space Agency, NASA and ESA.

Mr. Chairman, the Italian Space Agency is following with great attention also the international scenario of the space exploration, in particular the NASA Vision for Space Exploration and its related workshops.

At the European level, Italy is the major contributor of the European Space Exploration Programme, Aurora, and in particular, of the robotic mission ExoMars.

At the national level, the scientific community has been carrying out 13 studies, three science-related and 10 technology-related, as to elaborate the national "Vision for Moon Exploration". The Italian roadmap for Moon exploration and missions planning will be released by the beginning of 2007.

Mr. Chairman, distinguished delegates, Italy is firmly convinced that space exploration, through robotic missions and human missions for the exploration of the solar system is by its very nature a long-term endeavour whose sustainability and robustness can be undertaken and strengthened specially through international cooperation.

The Italian Space Agency is pleased to provide an opportunity to enhance the dialogue on cooperation in space exploration endeavours, through the organization of a series of dedicated workshops.

The first Workshop on "International Cooperation for Sustainable Space Exploration", organized by the Italian Space Agency and the European Space Agency, was held last year at the Spineto Abbey, surrounded by a landscape of blossoming Tuscany's nature. It was focused on deepening mutual knowledge of each international partner's exploration plan, as well as starting preliminary discussions on potential commonalities and synergies.

The second Workshop on this matter, convened last May, gathered, as the first one, over 60 participants representing space agencies from Europe, North America and Asia, along with a number of space policy experts.

Mr. Chairman, the ASI/ESA Workshops on International Cooperation for Sustainable Space Exploration intend to provide the forum to enhance mutual understanding and share information as a first step to establish a permanent dialogue among all countries interested in space exploration.

Italy is a convinced supporter of space exploration as a global undertaking, defined by globally-shared strategy resulting in internationally accepted reference architecture.

Mr. Chairman, Italy believes in the lasting importance of robotic and human space exploration, in particular in the exploration of the Earth's Moon and Mars, as a continuing undertaking that will advance scientific knowledge and foster technological innovation.

The benefits for humanity of a sustained space exploration effort will include economic profits, improvement of the quality of life on Earth, as well as the answering of fundamental questions about the fate of life in the Universe.

Finally, Italy is pleased to invite the interested countries to convene again a gathering in the third Workshop at the Abbazia di Spineto, next year in May, in order to assess the progress being made in developing mechanisms for international cooperation for sustainable space exploration.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Gabrielli. Thank you indeed to the Italian delegation for its statement on the topic of space exploration. I thank you for the information you have provided us on the organization of these workshops which you are organizing in this most pleasant part of Tuscany to debate the issue of international cooperation in this field.

We will now move on to the statement by the delegation of India. Mr. Radhakrishnan, you have the floor Sir.

Mr. K. RADHAKRISHNAN (India): Thank you Mr. Chairman. The Indian delegation is very much pleased with the progress and significant achievements made during the forty-third session of the Scientific and Technical Subcommittee, under the able guidance and leadership of Dr. B. N. Suresh, as its Chairman.

Mr. Chairman, the United Nations Programme on Space Applications plays an important role in implementing the recommendations of the UNISPACE III, particularly in improving the capacity-building of developing countries to apply space technology to support the sustainable development efforts. We fully appreciate the fact that identification of priority themes for the Programme on Space Applications is a very useful initiative. The success of this will depend on the benefits these pilot projects will provide to the developing countries towards capacity-building in space science and technology.

Mr. Chairman, we are happy that during the forty-third session of the Scientific and Technical Subcommittee, consensus has been reached on two major initiatives taken up under the agenda items, namely space debris and space-based disaster management. These are two concrete results being achieved towards implementation of UNISPACE III recommendations.

The Indian delegation attaches high importance to the subject of space debris in the Scientific and Technical Subcommittee. We fully appreciate the good work carried out by the Working

Group in arriving at the final Space Debris Mitigation Guidelines document, using the technical content of the IADC document. We are happy that the final document has been accepted by consensus as "Guidelines" and "for voluntary application by member States through their national mechanisms". The target to get the formal approval of the document during the forty-fourth session of the Scientific and Technical Subcommittee in 2007 is quite appreciable.

Mr. Chairman, we fully appreciate the task carried out by the Ad Hoc Expert Group on the possibility of creating an international entity to provide for coordination and the means of realistically optimizing the effectiveness of space-based services for use in disaster management. We compliment the experts and staff of the Office for Outer Space Affairs for the excellent job they have carried out in supporting the Ad Hoc Expert Group and towards preparation of the draft report. We are happy that consensus has been reached on the establishment of an international entity under the United Nations umbrella for space-based disaster management coordination activity.

This entity should serve as a nodal point for all countries, particularly for developing nations to quickly assist them at times of need on all matters of disaster management. This entity should also attempt to create a Global Virtual Network in a progressive manner, with all other similar resource organizations existing in different parts of the world, for easy and effective coordination. The Indian delegation is willing to extend its assistance to the proposed virtual network with its Earth observation resources, particularly to serve the Asia-Pacific region.

The Indian delegation is of the view that the use of space-based systems to address the disaster management issues, so as to benefit the affected population in a timely manner, would require proper integration of the space and ground-based segments.

Mr. Chairman, we note with satisfaction the extensive work carried out by the Working Group on the Use of Nuclear Power Sources in Outer Space. The deliberations during the two-day Workshop, held along with the IAEA, to evolve the framework for internationally acceptable potential safety standards for the use of nuclear power sources in outer space were quite informative and useful. We are sure the Working Group will continue with the good work.

The Indian delegation fully appreciates the presentations made by experts from various countries during the Workshops held on the subject of disaster management support using GSO-based communication

and meteorological satellites and remote sensing applications of Synthetic Aperture Radars. The presentations and deliberations during the Workshops were of high quality and very informative for the developing countries.

Mr. Chairman, the Indian delegation attaches special significance to the science and technology aspects of outer space activity. It should be our endeavour to identify specific and concrete action plans for the space-related activities for knowledge-sharing, capacity-building and increasing awareness among various member States. Towards this effort, the work of the Scientific and Technical Subcommittee is very important.

Finally, Mr. Chairman, we endorse the report of the forty-third session of the Scientific and Technical Subcommittee.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Radhakrishnan and to the Indian delegation for its statement which reflects the active participation which is undertaken in the work of the Scientific and Technical Subcommittee, in addition to its chairmanship for Dr. Suresh.

I will now give the floor to the representative of Nigeria and I will ask my predecessor, Mr. Adigun Ade Abiodun, to take the floor.

Mr. A. A. ABIODUN (Nigeria): Thank you very much Mr. Chairman for allowing Nigeria to make its own contribution to our deliberation on agenda item 8, the Report of the Scientific and Technical Subcommittee.

At the outset, my delegation takes this opportunity to thank Dr. Suresh of India for his able chairmanship of the Scientific and Technical Subcommittee at its last session in February this year.

During this intervention, the Nigerian delegation will be addressing three subjects, that is, on matters relating to remote sensing of the Earth by satellite, the space-system-based disaster management support, and use of nuclear power sources in outer space, in that order.

To begin with, my delegation wishes to congratulate Malaysia on its statement regarding its satellite when it made its intervention. Particularly I am referring to the satellite RazakSAT, which is supposed to be a near-equatorial orbit satellite that can

benefit or that will benefit Malaysia and other countries within the Equatorial Belt by providing a maximum number of unique opportunities as compared to the traditional polar orbit.

We congratulate them for this initiative and for this first effort in that orbit as well as the support they are getting from the United States Government for the launching of that satellite in the middle of next year and Nigeria looks forward to benefiting from the experience of Malaysia in this particular venture.

Mr. Chairman, allow me to reiterate the position of my delegation on DMISCO, which we articulated in our statement on the general exchange of views. Nigeria support the creation of the Disaster Management International Space Coordination entity as a programme under the Office for Outer Space Affairs, as well as joint effort to implement and integrated global system, especially through international cooperation, to help developing countries gain access to and be in a position to use space-based technology for risk reduction and disaster management.

Nigeria is pleased to express her willingness to support the DMISCO initiative through the coordination of a DMISCO programme in Africa and through the donation of two Nigerian experts as well office accommodation with working facilities. Nigeria will also support the disaster management activities of DMISCO through access to her space assets in accordance with Nigeria's national data policy.

Mr. Chairman, on nuclear power sources in outer space, my delegation notes with appreciation, the work of the Scientific and Technical Subcommittee of COPUOS and its Working Group on Nuclear Power Sources in Outer Space. That appreciation also goes to all the organizers and participants of the Joint United Nations/International Atomic Energy Agency Technical Workshop on the objectives, scope and general attributes of a potential technical safety standard for nuclear power sources in outer space held here in Vienna last February.

We are particularly pleased with the Working Papers submitted to that Technical Workshop by Mr. Sam Harbison of the United Kingdom in his capacity as the Chairman of the Working Group on Nuclear Power Sources, by the Russian Federation, France and the United States of America, as well as by the Working Group on Space Debris.

We are also pleased to note, in its response to the questions that emanated from the Technical Workshop and directed to it through the Committee'

Secretariat, that is the Office for Outer Space Affairs, that the IAEA would be pleased to “cooperate with the Committee in the development and support of a safety framework for nuclear power sources in outer space”. We also noted in that same document that the IAEA Secretariat was to bring to the attention of the IAEA Commission on Safety Standards, at its nineteenth meeting held here in Vienna, just about a week and a half ago, the “formulation of nuclear safety standards”.

In paragraph 5 of this same document, the IAEA Secretariat offered a suggestion, as follows. “The focus” of the Committee “should be on elaborating a technical safety framework for nuclear power sources in outer space prior to establishing the specific safety standard to be associated therewith.”

Mr. Chairman and distinguished delegates, the Nigerian delegation expects these issues to be addressed at the intersessional meeting of the Working Group on Nuclear Power Sources scheduled for this week, 12 to 14 June, which is even as I am speaking going on.

For us, in Nigeria, we have a number of outstanding issues which we would like to bring to the attention of this Committee.

First, what are IAEA safety standards that can today be applied to govern the operation of nuclear power sources in outer space? Gleaned from the general observations and comments at the Workshop was the following: the currently consolidated IAEA draft Safety Fundamentals were not written with space nuclear power sources in mind.

Two, the absence of any safety standard for nuclear power sources in outer space notwithstanding, a number of member States are undertaking space missions that depend on nuclear power sources. This approach is justified in paragraph 4 of the report of the afore-mentioned Technical Workshop as follows:

(a) According to current knowledge and capabilities, nuclear power sources are the only available energy option to power some missions and significantly enhance others; and

(b) Space nuclear power sources have been in use for more than four decades.

The report went further to list a number of such missions.

Other general observations and comments made at the Technical Workshop included the

following: comprehensive space nuclear power sources safety frameworks exist and are in use in two member States. Some member States have been cooperating recently to develop a plan for regional space nuclear power sources safety framework.

Now, here comes our concerns.

Given the nature of space exploration, the global community is anxious for a comprehensive, internationally acceptable and workable safety standards for nuclear power sources in outer space at the earliest opportunity.

First, the Working Paper from the Working Group on Space Debris on Nuclear Power Sources and Space Debris is chilling, very factual and very frank.

The Working Paper from the Chairman of the Working Group on Nuclear Power Sources reminded us that the General Assembly, in adopting resolution 47/68 on nuclear power sources in outer space, recognized and noted that the principles being adopted then would require further revision in view of the emerging nuclear power applications and evolving international recommendations on radiological protection. He also noted that in 1997, the Scientific and Technical Subcommittee of COPUOS agreed that, until a firm scientific and technical consensus had been reached, it would be inappropriate to pass the topic to the Legal Subcommittee.

Here is our question. How much longer do we have to wait? Let me quickly quote from the lecture Professor Vladimir Kopal of the Czech Republic eloquently delivered in this chamber two years ago. At that time, he addressed us, by our own invitation, the title of a topic called “Progressive Development of Space Law by the United Nations”, in which he stated the following.

“Today, when the drafting and adoption of a space legal document last usually a decade or more, it may seem incredible that the 1967 Outer Space Treaty, the most important instrument United Nations space law, was worked out during a few months between May and December 1966.”

An examination of the work plans proposed at the Technical Workshop dealing with nuclear power sources in outer space, shows that this Committee may not have a final internationally acceptable document on “Safety Standards for Nuclear Power Sources in Outer Space” that has passed all the scientific and technical and legal huddles(?) (hurdles?) for another decade.

Mr. Chairman and distinguished delegates, do we need a bigger catastrophe on nuclear power sources in outer space before we can get on a fast or what I call a faster track to accomplish such an objective? What type of proven an internationally acceptable safety protection plan can the global community rely on before that process is accomplished? Particularly when one realizes that no less than four missions based on nuclear power sources in outer space are envisaged between 2008 and 2011.

Let me remind all of us here that after the tsunami of 26 December 2004, where no preparation was in place before, today Tsunami Watch System has been developed and deployed, all within 18 months in their region. If there was no tsunami, all we would be saying is that we need to study it further.

Mr. Chairman, my delegation and like-minded delegations deserve a response from those countries that are using nuclear power sources in support of their space activities.

And let me say also that we also plan to reiterate these concerns at the sessions of the Working Group on Nuclear Power Sources that is ongoing. I have already presented the same ideas to them.

Thank you Sir.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Abiodun for your statement. I have one general comment to make on the work that has to do with the nuclear power sources in outer space. It seems to me that the Committee has wanted this work to rely on profound technical analysis. For that reason, in cooperation with the IAEA, we have started joint work which has made it possible to prepare important results in February. And after that joint start, we wish that this work should continue. All the matters will be discussed by this Committee and then reported to the General Assembly but they should be based on technical analysis, as detailed and profound as possible.

I note the remarkable work accomplished by space authorities. The Committee, its Scientific and Technical Subcommittee has largely benefited from the technical work realized by this inter-agency group which has considerably stepped up the tempo, the speed of this technical work and I hope it will progress at a good clip work with regard to the use of nuclear power sources in outer space. And we will, of course, verify that next year.

I do not see any further speakers on the list on this agenda item for this afternoon.

Do delegations have questions or comments on the three statements that we have heard so far?

Distinguished delegates, I am thus suspending the discussion on item 8 of the agenda and will continue tomorrow morning and I hope that we will be able to conclude it tomorrow morning.

In the days to come, we will hear the report of the Chairman of the Working Group on Nuclear Power Sources in Outer Space and he will share with us the progress made in that discussion.

Distinguished delegates, I will thus shortly suspend this meeting so that the Symposium on "Space and Forests" can commence.

Before doing so, however, I would like to inform delegates of our schedule of work for tomorrow morning. We will reconvene promptly at 10.00 a.m. At that time, we will continue and hopefully conclude our consideration of agenda item 7, Implementation of the Recommendations of UNISPACE III.

We will also continue and hopefully, at that time, be able to suspend consideration of agenda item 8, Report of the Scientific and Technical Subcommittee on its Forty-Third Session, pending the report of the Chairman of the Working Group on the Use of Nuclear Power Sources in Outer Space.

We will continue and conclude our consideration of agenda items 9, the Report of the Legal Subcommittee on its Forty-Fifth Session, and 10, Spin-Off Benefits of Space Technology: Review of Current Status.

Finally, we will start considering agenda item 11, Space and Society.

At the end of tomorrow morning's meeting, there will be four technical presentations by the representatives of Germany, France and the International Astronautical Academy and the Centre for Space Information and Education for Asia and the Pacific.

I would like to inform delegates that the Working Group on the Use of Nuclear Power Sources in Outer Space of the Scientific and Technical Subcommittee will continue its intersessional meeting tomorrow in Room C-0713, starting at 9.00 a.m. All

interested delegations are, of course, welcome to attend that meeting.

Any questions or comments on this proposed schedule for tomorrow morning?

I see none.

I would like to remind delegates that they are invited, following the Symposium on "Space and Forests", to attend the official opening of the exhibition "Mars Images", organized by the German Aerospace Centre, DLR, in cooperation with the Office for Outer Space Affairs. The opening of the exhibition will take place in the Rotunda of Building 'C' and will be followed by a reception in the Mozart Room of the VIC Restaurant.

I now invite Mr. Lothar Beckel of the Austrian delegation to moderate the Symposium on "Space and Forests".

This meeting will be suspended after the Seminar. Thank you.

The meeting was suspended at 4.06 p.m.