Committee on the Peaceful Uses of Outer Space

545th Meeting Wednesday, 15 June 2005, 3 p.m. Vienna

Chairman: Mr. A. A. Abiodun (Nigeria)

The meeting was called to order at 3.23 p.m.

The CHAIRMAN: Distinguished delegates, good afternoon. Yes, Ambassador Gonzalez, we have not seen you for the last few days so I was waiting for you to come in before we rang the bell.

Mr. R. GONZALEZ ANINAT (Chile) (interpretation from Spanish): I sense something about abstinence there, and it was not 48 hours. It was just a little bit under. But any event, I have asked for the floor for something that is quite important for me and for my country and unfortunately due to reasons of work, I was absent this morning and I was informed of the innumerable indications of solidarity that were expressed in this meeting with regard to the natural disaster that hit the north of my country, the earthquake. And I would like to especially and most sincerely thank everyone here for their shows of condolences. Fortunately, I have to say, quote on quote, it did occur in an area that is not densely populated but it is, however, a clear demonstration of the need to continue with actions and undertakings in an area as is important as natural disaster management.

Once again, thank you so much to everyone here for your expressions of condolence. I am truly very touched. I was very touched by the gesture by my colleagues.

Thank you Sir.

The CHAIRMAN: I thank you very much Ambassador Gonzalez. You were not here yesterday and early this morning as you rightly indicated when Member States, distinguished delegates on behalf of their respective countries expressed their condolences and the Committee as a whole has done the same. We are very sorry and we convey our sympathy to you and through you to your people and your Government and the Secretariat will reflect our feelings in the final report of this meeting.

Thank you very much.

Good afternoon distinguished delegates, once more, I now declare open the 545th meeting of the Committee on the Peaceful Uses of Outer Space.

This meeting will continue and hopefully conclude our consideration of agenda item 6, Implementation of the Recommendations of UNISPACE III. Thereafter, we will resume our consideration of agenda item 7, Report of the Scientific and Technical Subcommittee on its Forty-Second Session. And at that time we will hear a progress report by the Acting Chair of the Working Group on the Use of Nuclear Power Sources in Outer Space on its intersessional work.

We will continue and conclude our consideration of agenda item 9, Spin-off Benefits of Space Technology: Review of Current Status. We will also continue and hopefully conclude our consideration of agenda item 10, Space and Society, as well as continue with item 11, Space and Water.

Time permitting, we will begin our consideration of agenda item 13, Other Matters.

At around 4.00 p.m., or there about, there will be a presentation by Mr. Richard Bräucker of Germany

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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Unedited transcript

on his presentation on "DLR School Labs: How to Enhance Interest in Space Sciences".

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.

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

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

I would also like to resume where we left off before lunch and return to the discussions on the progress report of the Ad Hoc Expert Group on Disaster Management, as contained in CRP.13.

To begin with, therefore, the first speaker on my list on this agenda item, number 6, is the distinguished representative of Nigeria, Mr. Osewa. Sir, you have the floor.

Mr. F. M. OSEWA (Nigeria): Thank you Mr. Chairman. Mr. Chairman, my delegation would wish to convey to the Government and people of Chile for the earthquake which occurred yesterday. Our delegation also wishes to congratulate the Ad Hoc Expert Group for a good job done.

Mr. Chairman, we approve and support the inclusion of DMISCO as already stated under agenda item 5(?). We also agree that the ______(?) function under the United Nations because it is evident that ______(?) the system do not eliminate the needs of all Member States. Therefore, the DMISCO coordinating role becomes relevant(?) particularly for the benefit of developing countries. The previous role the Office for Outer Space Affairs(?) has linked between the Charter and Member States is notable.

Mr. Chairman, my delegation supports the idea that the Ad Hoc Group should take all concerns into consideration to update the report and present it to the Scientific and Technical Subcommittee and COPUOS in 2006 for further refining before going to the General Assembly. Before then, the report will have gone through considerable tests for final approval for its implemented(?) plans(?).

Finally, Mr. Chairman, my delegation would like to see, for example, the ______ (*not clear*) and linkage between the ______(?) stage to avoid duplication and focus mainly in the area of _____ (not clear).

Thank you.

Note from typist: this speaker was not very clear.

The CHAIRMAN: I thank you Mr. Osewa for your contribution to agenda item 6 on DMISCO.

The next speaker on my list is the distinguished Ambassador of Colombia, Ambassador Arevalo. You have the floor Sir.

Mr. C. AREVALO (Colombia) (*interpretation from Spanish*): Thank you very much Mr. Chairman. As a delegation, we could not express our views on document CRP.13 which we understand in terms of substance as a report on the progress achieved in this area and to report to the Committee. And we understand that it contains a series of elements which are very complex.

Mr. Chairman, as a developing nation, moreover, we understand and I should add that we were part of the Group of Experts mentioned in paragraph 5, we understand then that there is a need to create a body, an umbrella body, which would cover this matter. And, further, there is a need to supply nations, especially developing nations, as we just saw unfortunately in Chile where people are suffering or in Colombia and many other nations in region we see people suffering due to natural disasters hitting. And past experience has shown, for example, the tsunami, the need for rapid reaction to react quickly and intelligently. So we think that ultimately the existence of a body, if it helps to expedite matters in natural disaster management, is helpful, if it does that.

Now turning to some specific elements in this document. We think that three conditions should be set forth, Mr. Chairman. First, there should be a process of coordination amongst all bodies that are mentioned here. These bodies should also systematically work on coordination because that is the main problem, coordination.

And secondly, it needs to be rapid and expedited, flexible.

And third, it needs to be truly viable and that is a fundamental element, Mr. Chairman, and, of course, it does involve consultation with various capital cities in this regard. And finally to conclude my remarks, Mr. Chairman, this is an issue of principle now, the establishment of any group or body, be it in this subject area or any other subject area, the creation of a group or body requires a detailed study beforehand and consultations should take place at all levels. It should be done at individual level and at a regional level. And I say it not just with regard to this specific case but it is a principle for our delegation. Regardless of the intention behind establishing a new body, and, of course, any body which would help the Committee, it must involve an accepted means of consultation for all Member States.

Thank you very much Mr. Chairman.

The CHAIRMAN: I thank you very much distinguished Ambassador of Colombia.

I now invite Mr. Peychev, the distinguished representative of Bulgaria.

Mr. A. PEYCHEV (Bulgaria): Thank you Mr. Chairman. I would like to join other delegations and express our condolences to our Chilean colleagues for the disaster in their country and we hope that things would less heavy _____(?) they might have been in the first minutes that heard it.

Mr. Chairman, the Bulgarian delegation would like to commend the Ad Hoc Expert Group on space-based services to use in disaster management, the Action Team 7, their important and excellent work, the diligent(?) work to implement one of the major recommendations to UNISPACE III. Of course, we wish the Action Team the luck to manage and to appear also at the sixtieth General Assembly session which would be very important. It would be important and useful, especially if it comes with the COPUOS nameplate.

Thirdly, Bulgaria would like to join this Action Team, though at a later stage, and I have a name for the record for that purpose. We have received in the Ministry of Foreign Affairs a letter from the National Agency on Disaster Civil Protection, who have shown interest in two working groups and one of them is this group which we are considering at the moment.

Thank you Mr. Chairman.

The CHAIRMAN: I thank you Sir, the distinguished representative of Bulgaria, for your contribution to agenda item 6 on DMISCO.

I now invite Professor Cassapoglou of Greece.

Mr. V. CASSAPOGLOU (Greece) (*interpretation from French*): Thank you Sir. Sir, I, too, wanted to express our solidarity with the Chilean people. We are only too well aware of what impact earthquakes can have, given our own experience at home.

Now, as regards the results of the Ad Hoc Group on the item dealing with establishment a coordinating body, a national entity on disaster management. I would like to submit an idea which I think might help here. My feeling is that at the world level, this activity should take place within the scope of the United Nations, namely that we should exploit a system similar to that of the UNHCR, looking at what that body does for refugees. Because it is not just a matter of the humanitarian activities of the United Nations here, what we are doing here is asking that the United Nations become the all-encompassing jack-ofall-trades and yet we are not providing the necessary means. So what I am suggesting is that we could draw upon the formula, if you like, of the UNHCR because that body has the experience and it also has the necessary practical tools at its disposal to provide us with a solution to this institutional and organizational problem. I am thinking here of the management of disaster management and major(?) disasters for that matter. And it is important to underline what the Colombian Ambassador has just said, namely regional organization, for instance, the Mediterranean which has been affected by disasters on a number of occasions, earthquakes and other kinds of natural disasters and we feel that a regionalization of the information system and also the humanitarian assistance system would be a good thing. That is what humanitarian assistance is, after all. That is what it amounts to.

Thank you very much Mr. Chairman.

The CHAIRMAN: I thank you Sir, Professor Cassapoglou, for your contribution to this debate.

I invite the distinguished representative of Spain to address us on this subject.

Mr. J. M. LÓPEZ-AGUILAR (Spain) (*interpretation from Spanish*): Thank you very much Mr. Chairman. I note that the Chilean Ambassador is here and I would, therefore, like to convey my condolences directly to him and express the solidarity of my delegation in these difficult moments.

Mr. Chairman, given this major document, there is one thing that is of particular note. A

committee or body dealing with issues of space cannot just simply sit back, arms folded, we have got a challenge here and any initiative of this kind must be examined and must lead to a decision. Hence, my delegation wishes to express its support for the work which has been done to improve this document. The representative of Belgium said this this morning. We are convinced that the ESA can and must be specifically mentioned in this document and as other delegations have already said, it is important to improve this text.

The Spanish delegation is anxious to say that, given the challenge of natural disasters and the fact that we are close to the General Assembly, we cannot accept that this Committee simply sit back, arms folded.

Thank you.

The CHAIRMAN: I thank the distinguished representative of Spain on his statement on agenda item number 6.

And I give the floor now to the distinguished representative of Belgium to address the Committee. Sir, you have the floor.

MAYENCE Mr. M. (Belgium) (interpretation from French): Thank you very much Mr. Chairman. Apologies for taking the floor a second time on this item. Before lunch I asked a question and I think it is still relevant. It is simply a matter of clarification because I do not quite understand the schedule and the kind of action to be based on the report. Firstly, I think we agree that a system of this kind is desirable but it requires the consultation of organizations not mentioned in the report. They should be mentioned as having been involved in and consulted for this work. And I mentioned the ESA, one could also mention the European Union, which is an organization in charge of GMES system.

Now, there is the question of how these organizations are going to be associated with this work and secondly, if I follow the schedule and I have understood the schedule here correctly, we are told that in September 2005 the final report is going to be presented to the General Assembly. Firstly, what will this report look like, this final report? What elements we have mentioned in it? And what kind of decision will be submitted to the General Assembly and which will arise out of this report? Because you will understand that the consultation and involvement of founders must take place at the right time for the decision to be taken properly and in good time. So, Mr. Chairman, I would be grateful if I could have clarification with regards to the actual schedule of action which arises from this report.

Thank you.

The CHAIRMAN: I thank you, the distinguished representative of Belgium. I think we will address your questions after everybody will have had a chance to make their contribution.

I invite Ambassador Gonzalez of Chile to address the Committee.

Mr. R. GONZALEZ ANINAT (Chile) (*interpretation from Spanish*): Thank you very much Mr. Chairman. A few comments, if I might. Overall, the consultations might take place with those delegations who are present in the room. That is my first comment.

Now, a number of delegations generally do not come to meetings or make a brief appearance and then disappearance. There is one delegation that made a statement and has not returned since.

Secondly, there are some delegations that endeavour to come to every single meeting but cannot participate in everything given that in another room there is another meeting going on and there are not many people necessarily in said delegations and, therefore, they cannot be everywhere at the same time. There is a structural problem therefore.

What would be positive would be to draw up a list of those delegations that come to meetings and we should enumerate the number of days during which they participate in the meetings and in this way we would avoid any last minute requests and it would eliminate the problem of participation in future. And the point of this is to give everybody an equal opportunity to make statements on questions as important as those which we are dealing with here.

This delegation can, in principle, accept what we find in document 13. This is a very important issue. But to be absolutely honest, I have to say I have not had time to read it all for the reasons I have just indicated but I will base myself on the comments made by Spain and by Greece and I endorse the support for this document in that light.

And so, the first opinion that I should like to express is as follows. And I am anxious here to underline that it would have been better had participation been on a greater scale because this Group is, after all, a legitimate group. This is not a group that has just appeared in the space of a few days. And I am anxious, Mr. Chairman, to say to you that my group cannot accept the establishment of a group which does not fall under a mandate of this Committee and I would like to say that, Sir, there are no surprises in the future and you will also find out that they have been(?) in GRULAC(?) on this.

That is the first thing I have to say Sir. Thank you very much.

The CHAIRMAN: I thank you Sir, Ambassador Gonzalez.

Do I have any other delegation wishing to address us on agenda item number 6?

The distinguished representative of Canada. Dr. Ouattara, you have the floor.

Mr. T. OUATTARA (Canada) (interpretation from French): Thank you very much Sir. The Canadian Space Agency was involved in practically all the DMISCO work and we feel that after a number of years work, we feel that the issues are very relevant but as I was saying, after a few years work, it would be a better idea to look into how we should complete this work rather than to mention or criticize the participation or otherwise of whoever. We think, at this stage, that the Indian remarks are very relevant. The United States have also made very relevant comments and we must draw on those remarks as on others in order to move the cause forward. But, once again, it is my certitude that the European Space Agency and the European Union and practically all those players who would like to be involved in this initiative, would be most welcome and we would be very surprised if they were not allowed access this. This is not a problem, therefore, for there is the Canadian Space Agency.

But the real challenge that we need to take up is to deal with all the clarifications that delegations have requested and I would like, once again, to thank everybody and congratulate them on their work.

The CHAIRMAN: Thank you very much Sir, distinguished representative of Canada, for your contribution on agenda item 6.

Distinguished delegates, what I intend to do in terms of our continuation of our discussion on this item 6 is to suspend it for now and give our German colleague, Mr. Bräucker, the opportunity to make his technical presentation. Immediately after that, we will invite the distinguished representative of the Spaceweek International Association, one of us, Mr. Michel Laffaiteur, to address us. And then after that, then we will come back and hopefully conclude our deliberation of agenda item number 6.

Is this agreed to all of us?

OK, Mr. Bräucker, you have the floor.

Distinguished delegates, Mr. Bräucker will be addressing us on "DLR School Labs: How to Enhance Interest in Space Sciences". DLR is the German Space Agency. Thank you.

Technical presentation

Mr. R. BRÄUCKER (Germany): Thank you very much Mr. Chairman, distinguished delegates. DLR is the German Aerospace Research Centre, as well as the Space Agency of Germany and the fields of research are aeronautics, space flight, transport research and energy technology. Being a research organization, the need for new young colleagues is mandative(?). However, we have seen that, during the last decade, the interests in young people decreased for sciences and especially for mechanical engineering and electrical engineering, and taking into account the demoscopic(?) change we just expect during the next year, we should do something and you already decided to use to see how to support the schools for making young people more interested in these topics.

So the target group of our DLR School Labs are grammar and middle school students, teachers and interested public. DLR began to build up a School Lab in the year 2000 in its site at Göttingen and during the years 2202 to 2003, we built up even more of them in Berlin and Cologne, in Oberpfaffenhofen, in Munich, in Hamburg and just recently in Lampoldshausen.

So what are the objectives? As I pointed out, we want to promote the interest in natural sciences and in aerospace research. We want to encourage young people to study sciences and we want to inform the public about DLR.

How to arouse interest in young people? What can we do to pull them away from the Game Boy and direct them to natural sciences? I think we should use three factors. First we should use fascination. Fascinating things that young people have not seen so far, just like dinosaurs or like big machines like locomotives and just _____(?) a very strong impact as space technology who has dreamt of being

an astronaut. We can fascinate young people using these topics.

The second thing is we have to use authenticity. We have to bring the people to the workshops. We have to bring young people into our labs and show them the equipment we use for science research.

And third is hands-on experiments. They should do the experiments themselves. They put their hands on the experiments and be fascinated by the work of scientists.

So the school labs offer experiments close to current research in an authentic environment. We let space students lead to scientists and to young students of scientific topics.

We support them for evaluation and discussion of results. We give lectures and supporting materials for lessons at school and, of course, we prepare multimedia presentations and exhibits.

We want to transfer the knowledge from science to school very quickly, much quicker than it would be possible by a schoolboy and we want to create a network of scientists and teachers.

The School Labs are located at DLR research institutes and there are two examples here. This is the School L Lab at DLR in Göttingen and you can see behind the wind tunnels of this DLR site. Or the School Lab at Cologne is located in the room of the human centrifuge. This blue apparatus in front is the human centrifuge which has been used by most of the European astronauts and is still in use. And we take the pupils here and build the experiments around this apparatus.

We have now about 50 experiments close to current research in all the School Labs together and all the experiments differ between the School Labs because they are taken from the active topics of research from the institutes. And I would like to show you three examples of these experiments. First. You know a comet is a dirty artificial comets. snowball so it is easy to build something what we think is like a comet. We can use water and some mineral powder and put this into liquid nitrogen to build and we can put this material into an artificial space environment. We can put it into a vacuum and cool it down and shine an artificial Sun on it. And what happens is they see a coma(?) of a comet. They get a material from which we think it is very similar to a comet and, of course, we can draw some conclusions to

the Rosetta Mission which is now ongoing and which we hope these young people will evaluate in the next 10 years.

A second example is microgravity. Most young people, and let me say, even some teachers have some problems of explaining what is microgravity. So we take simple a scale in an elevator to show the inertia of Mars and then explain what is the gravity and why we have a gravity and the freefall equipment. We have a very slow drop tower which is only two metres high and we can use this little drop capsule for doing We have only 0.6 experiments in microgravity. seconds microgravity but we can do a lot of experiments here. We can show what is the system of water and air changing, this is during microgravity, by this changing and we can show what are capular(?) forces acting under microgravity conditions. And we can show how a flame is changing during microgravity. This is very fascinating to young people to do it themselves and say we have done experiments with microgravity.

The third example is gravitational biology which is, by the way, the topic of my research, is a single cell able to sense a gravity vector. We use a very slippery(?) animal(?), _____(?) pro datum as a model system to see whether this works and how a cell could just sense the gravity vector. So the pupils first watch the cells, watch their behaviour and then analyze the behaviour by means of computer They direct(?) the cells, they do programmes. calculations on the statistics of movements and on velocities and try to build a model how this could work in cell. This is, of course, quite complex but to be successful you have to use variable complexity. So we can use the (?) experiments to 10-year old boys and girls to show them that a cell is able to sense environmental vectors. But we can also take 18year old boys and girls and incorporate them into a parabolic(?) flight campaign so they can do the experiments very close to the current research and do it themselves.

Does our concept work? We have noticed since we opened more School Labs the number of visitors has just increased so, excuse me there is a mistake, of course, the numbers are from June 2000 to March 2005. We had about 19,000 pupils in our School Labs and about 18,000 other visitors and 1,000 teachers who just were there to be informed and to take all this knowledge into their lessons.

And we are very proud to have and very happy to have 40 per cent of female visitors and we have one, of course, in the middle classes around the grade of the eighth to the tenth form and I think this is due to interdisciplinary concept we have in the School Labs. So we take them from biology to physics to technology and show young people that science is as well as easy and as well be done for field.

We have a scientific evaluation from the Institute of Didactics of Sciences in Kiel and they have shown that 90 per cent of our visitors classify the School Labs of this being good or excellent and most of them would like to come again. The pupils feel that they have learned during one day at school than more during a day at school. And a single visit of a Lab significantly augments the interest in sciences. Six weeks after this visit, this effect was found to be even increased.

So we are very confident that we can, by our School Labs, increase the interest in space sciences and, of course, enhance the interest in sciences as all.

Thank you very much for your attention.

The CHAIRMAN: Thank you very much Mr. Bräucker for your contribution to our debate on space education, particularly for the youth and I am very sure that the Committee has taken note of the contribution of Germany, through DLR, and we would like to be briefed about the progress of this Lab as time progresses. Thank you very much. Do not go yet. I think, Mr. Bräucker, delegates may have questions for you.

Distinguished delegates, the floor is yours to ask Mr. Bräucker any questions you may wish to ask him.

Yes, the distinguished representative of UNESCO, you have the floor.

Ms. Y. BERENGUER (United Nations Educational, Scientific and Cultural Organization): Thank you Mr. Chairman. I would like to ask the representative of DLR how long did it take the Institute to create this type of laboratory, whether it be different ways of building up this type of laboratory and is there any mechanism that this could be extended to other countries?

Mr. R. BRÄUCKER (Germany): It took about half a year to one year to build up a new School Lab although we have some experiences from the first School Lab. And I think this concept could easily be transferred to other institutes, such as universities or big science centres. I do not think it is only in DLR stuff. **The CHAIRMAN**: I thank you very much for that. Any more comments?

India.

Mr. B. N. SURESH (India): ... good presentation. We appreciate the microgravity experiments that have been carried out. I understand that the time taken is 0.6 seconds but I would like to know the value of microgravity. How much you are able to get.

Mr. R. BRÄUCKER (Germany): We do not have a vacuum so we can only use the first one and a half metres for doing this experiment. When we have a big fraction of the aerosol, the quality of microgravity is quite bad. So this is only a demonstration facility. We can show the effects to the students. We cannot do research with this. For research we should, of course, use a drop tower in Bremen or Japan or somewhere.

The CHAIRMAN: Any more comments?

Mr. Bräucker, thank you very much for your contribution.

Distinguished delegates, I will now invite the distinguished representative of the Spaceweek International Association, Mr. Laffaiteur, to address the Committee. Mr. Laffaiteur, you have the floor.

Mr. M. LAFFAITEUR (Spaceweek International Association) *(interpretation from French)*: Thank you Mr. Chairman. I would like to join those delegations that have expressed condolences before me to Chile for the earthquake that hit them.

(Continued in English): Thank you Mr. Chairman for your capable leadership of COPUOS and for your support as dedicated Chairman of the Spaceweek International Association Board until last year.

As Vice-President of Spaceweek International Association, I am going to present the report of its activities during the past year in the field of the celebration of World Space Week. As you may recall, World Space Week was declared in 1999 by the United Nations General Assembly, after the recommendation of the UNISPACE III Conference. The objective of World Space Week is to increase awareness of the benefits of space activities and, in particular, the peaceful uses of space. World Space Week takes place annually from 4 to 10 October.

Spaceweek International Association, which is a non-government organization, supports the United Nations in the global coordination of World Space Week. In particular, this Association proposes every year the theme for organizing events all over the world, in the framework of a general strategy consisting in having themes that can be easily used by all countries, even if these countries are not space-faring countries. One of the main criteria is that the selected themes must be part of the culture of the various nations. We also try to alternate scientific themes, for example, in the exploration of the Universe and themes for the benefit of the society and the mankind.

Spaceweek International Association works closely with the Office for Outer Space Affairs in order to encourage global participation in World Space Week, in particular for the development of educational material and awareness of space activities for youngsters and the general public.

I wish to refer all distinguished delegates to the document entitled "Report on World Space Week 2004", printed with the support of the Office for Outer Space Affairs. It describes the results from around the world about events organized in many countries. The theme for last year was "Space for Sustainable Development". It has allowed the organization of many events in the world, as you will see in the report which is available. I just want to mention one figure: 42 nations have reported participation in World Space Week. This indicates a large participation that shows the interest for World Space Week.

The theme for 2004 focused on the contribution of space tools for development. So the theme for this year is dedicated to science and astronomy, "Discovery and Imagination". Astronomy and solar system exploration are key goals of space programmes throughout the world. This theme thus encourages World Space Week programmes about the exploration of space and science but also the impacts that exploration has on the human imagination and the inspiration of youth. As always, this theme gives the opportunity for any country to organize interesting events, even if they are not space-faring countries. The theme was selected by the Spaceweek International Association Board of Directors at its annual meeting held on 6 October 2004 in Vancouver, Canada.

Participation can be very simple. Those organizations that already have planned public outreach or education programmes during the World Space Week timeframe can simply promote those events as part of World Space Week. Organizations can also consider rescheduling programmes to that week. By doing this, the events receive a greater attention and the message of a peaceful use of space will have more audience.

Mr. Chairman, before finishing, I would like to insist on two important points. First, I encourage all countries and organizations to organize events in the timeframe of World Space Week. Second, I encourage all countries and organizations to support World Space Week by providing voluntary contributions or in-kind to the Office for Outer Space Affairs. I also thank organizations and companies for their support to World Space Week.

Thank you for your attention.

The CHAIRMAN: Mr. Laffaiteur, thank you very much for informing this Committee of the work of the Spaceweek International Association and your efforts to promote space education globally. On behalf of the Committee, we congratulate you on your achievements and we wish you continuous success.

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

Distinguished delegates, I would now like to re-open our continued consideration of further comments on DMISCO, with reference to CRP.13 and my hope is that we will be able to get, through the effort(?), some solution one way or the other at the end.

Are there any other delegations wishing to take the floor to address the Committee on the DMISCO report?

OK, if not, let me try and put together, the Secretariat and myself have been brainstorming and we have been listening to, it appears, two different points of views. There are those who believe there is still some work that needs to be done and there are those that are very concerned and I fully say that with DMISCO in place, space technology will have played a meaningful role in such incidents as the tsunami and we do not know when the next tsunami is going to hit or the next earthquake, except the one that hit yesterday in Chile unfortunately.

So with those two points of views, where do we go? The distinguished representative of the United States has suggested that maybe one way to move the process forward is not to wait for a long future but for an immediate future by re-visiting this subject during the General Assembly beginning with the Fourth Committee. And at that time, the report of the Expert Group, and some of the comments that have been made here and the final study can be re-visited at the time at the Fourth Committee which will then imply that those of you who are active in putting all these things together, rather than your political representatives who do not anything you have been doing, will be present at the General Assembly to contribute to the process of moving this forward. And at the General Assembly, therefore, this year, depending on where you are, if you are able to move the process forward enough for your own satisfaction, I do not know whether the Committee then, whether you do then is to come back to the Committee or you want to go forward, but in case you have to come back to the Committee next year, then from the General Assembly, you need to have in place something the Scientific and Technical Subcommittee needs to finalize to bring back to this Committee in the year 2006.

After everything I have just said, I do not believe, that is not correct (*this sentence is not clear*). This may not be a satisfactory process for everyone but it is just the suggestion of the Chair. Bearing in mind that we have a beautiful document that serves a political need and all of us are aware of the fact that where there is a will, there is a way. I would like to believe, honestly and sincerely in my heart, that there is a will to get this job done. Accordingly, I challenge all of you to find a way to do it.

So that is my own intervention as your Chairman. The floor is open for an analysis of my own summary.

If there is no comment, are you telling me that you are buying what I am saying or what I have just said? Which I hope because I can repeat of most of what I have said anyway but I believe the Secretariat got it.

I invite the distinguished representative of the United States.

Mr. K. HODGKINS (United States of America): Thank you Mr. Chairman for allowing me to take the floor once again on this topic.

I would like to at least give you my thoughts as to how I think we should proceed, based on the comments we have heard from you, Mr. Chairman, as well as other distinguished delegates and participants on the Ad Hoc Expert Group. It seems to me that that there are three issues here.

The first one is that the Ad Hoc Expert Group has to resolve certain substantive matters based on some of the comments that we have heard here in the room. So that is something that only the experts can resolve.

The second issue is, what happens to this report within the Committee structure? It has always been my delegation's understanding that this report would be processed, much like the reports of the other Action Teams which would be once the work is done by the Experts Group, the report would then be presented the Scientific and to Technical Subcommittee for its consideration, then to the full Committee and then on to the General Assembly, depending on what the full Committee concludes. So, under that scenario, I think it would be quite difficult to present anything to the General Assembly in any formal way because that process has not been completed. And if your recall, this Group was established under very specific terms, which is that it is an Ad Hoc Expert Group, it is not a working group of the Scientific and Technical Subcommittee, so at some point the results of its work needs to be brought into the formal process.

Now with that said, certainly during the course of the Fourth Committee and the General Assembly, if individual Member States, particularly those whose experts have participated on the Ad Hoc Expert Group, want to report on the progress of the Ad Hoc Group, I think that is quite appropriate and would probably be quite welcome just so that people know something is being done within the context of COPUOS in this area.

Now the third point I would like to make, and again this is something for the Expert Group to consider, which is there is no reason why individual Member States cannot raise the DMISCO concept in the context of the other activities that are going on. And I come back to my earlier point which is that it is crucial for activities such as CEOS and GEO and whatever other activities are occurring under the WMO umbrella, for example. It is crucial that they understand what we are trying to do and that they are comfortable with that exercise, because otherwise we would be in the position where we are competing with other groups that are much further along in their deliberations or we could be creating a duplicative type of exercise. Only the Expert Group needs to start bringing in and talking with these other organizations and committees in order to determine where we are doing something unique and where we would be doing something that duplicates other activities. And with all of that information, we would have a much stronger case to be made next year in the General Assembly as to why DMISCO should move forward. But that, again, would fall, in my view, to individual Member

States who have a particular interest in this report and in the concept. And then, obviously at a later stage, after the Scientific and Technical Subcommittee and the full Committee considered the report, then that could become part of COPUOS' contribution to the work of these other groups that COPUOS does participate in through the Office for Outer Space Affairs.

Thank you.

The CHAIRMAN: I thank you Mr. Hodgkins for that intervention. Before I give the floor to the distinguished Ambassador of Chile, let me just you ask an immediate follow-up question. At the beginning of your intervention, you indicated that there are a number of substantive issues that still need to be addressed. Are you comfortable in actually articulating what those substantive issues here are or can you pass this to the Expert Group through your own representative, whichever you are comfortable within doing?

Mr. Hodgkins, you have the floor.

Mr. K. HODGKINS (United States of America): Thank you Mr. Chairman. I was making reference to comments made by other delegations. Obviously, my expert that participates in the Ad Hoc Group will receive the results of this week's work electronically, he was unable to make this meeting. He may have other comments as well. So I was not suggesting that we have, that is the United States, has at this stage, any substantive points or concerns regarding the report, I was just reflecting on what I heard from other members here in the Committee.

Thank you.

The CHAIRMAN: Now, having listened to your Sir, I think I was not suggesting in my earlier submission that we give in what has been said today, this morning and this morning, that we are now ready to go to the General Assembly, that even when you meet the Fourth Committee, you need not come back to the process. I agree with you the Expert Group still has to go to the Scientific and Technical Subcommittee and the Scientific and Technical Subcommittee has to come back to COPUOS. So if we are going to go to the General Assembly at all, the earliest time we can get there is the year 2006. And that was what I said. Therefore, the Action Team that is led by, I think, France, Canada and ... bear with me ... The Ad Hoc Expert Group. I think, on behalf of the Committee, I will appeal to the Ad Hoc Expert Group to please take cognizance of all the things said in this room today on

the basis of the CRP.13 that has been circulated and work harder also at the Fourth Committee this year and present or give its substantive work to the Scientific and Technical Subcommittee so that the Scientific and Technical Subcommittee itself can finalize its job so that when we come back here next year, we will have very little to do other than to say, ratify it, it can go to the General Assembly.

Is this agreed?

Iran, you have the floor.

Mr. M. REZVANIAN RAHAGHI (Islamic Republic of Iran): Thank you very much Mr. Chairman. Mr. Chairman, I know that maybe this report is not without any shortcoming. I know that the job which has been done has been excellent and I understand that this Group had a very short time and some restriction and limitation in communication. It was impossible(?) for them to come together and to directly speak all of these suggestions. They just had some meetings during the Scientific and Technical Subcommittee and also during the COPUOS meetings. And I understand that is this issue is supposed to be delegated, to be deferred to the next Scientific and Technical Subcommittee, again these limitations will continuously exist. I am not very optimistic to make a substantial change in the text. Maybe some additions, as suggested by different delegations, could be made to the text.

But with respect to consultations with other United Nations, like WMO or others, or IMO or FAO or others or UNESCO, which are active in this field. I do not know how this Ad Hoc Expert Group could make contact with them and to get some positive reactions from them. I think this issue should be done not through the Ad Hoc Expert Group. It needs to be done through the General Assembly. A letter could be sent through the President of the General Assembly to the Chairmen or Presidents or Director-Generals of those organizations. Or it could be possible through adoption of a decision in the General Assembly. But I think this small group, with this limited mandate, and with limited resources, it would be very difficult to be in touch with other agencies and to push them and to convince them to join. I think this needs a more stronger push through a United Nations agency and for the United Nations General Assembly.

Thank you.

The CHAIRMAN: I thank the distinguished representative of Iran for his contribution. Please give me a second to have some discussion here. Thank you.

Distinguished delegates, I would like to give the floor to the Director of the Office for Outer Space Affairs.

Mr. S. CAMACHO-LARA (Director, Office for Outer Space Affairs): Thank you Mr. Chairman. I would like to provide some information that is part of the process and perhaps it may clarify a little bit.

In the first place, the Group of Experts has actually tried, and not just tried, has been in contact informally with GEO. So GEO is aware of what is going on because GEO has been receiving the drafts. GEO provided some comments in writing which were discussed by the Ad Hoc Group of Experts. I could not stay for the whole meeting so I do not know what was incorporated from the comments that came from GEO. This is all at the working level. It has not been necessary really to get officers from GEO, to get information through officers of GEO.

There has been also informal contact with entities like _____(?) because some of the members of the Ad Hoc Group of Experts are on the _____(?) so they have taken this into consideration.

The contact in WMO would be, let us say for instance, the Office could ______ (not clear), it would be much faster than having to go through formal higher level channels.

But I want to qualify one thing. GEO is not part of WMO. GEO is only housed in WMO. As such, the status of WMO would be about the same as any other specialized agency or entity of the United Nations system that has activities in outer space because then they also have something to compete with.

ESA was invited to participate. They indicated interest but they did not provide a name. So there has been these contacts. And in the process of taking into consideration, the Ad Hoc ... WMO is part of the Ethnic(?) Group. WMO has been receiving the information as well. And what I was going to say that it is part of the process with the Expert Group, takes into consideration the comments that have been made by delegations. And the Group would be incorporating as well interest and comments that might be made by a number of these other entities that have activities related to disaster management. I just wanted to help to clarify, Mr. Chairman, at least the status of putting together the final draft study.

Thank you Mr. Chairman.

The CHAIRMAN: I thank you Dr. Camacho for that contribution. I think that is a response to some of the concerns of Mr. Hodgkins in terms of what the NGOs could do in support of this document.

Now, giving that some steps have been taken, Mr. Hodgkins, do you see the process that you are talking about ______ (*not clear*) already because of all these efforts to get these other outsiders, not outsiders, observers, involved in the work of the Ad Hoc Expert Group.

You have the floor Mr. Hodgkins.

Mr. K. HODGKINS (United States of America): Thank you Mr. Chairman. I appreciate the information that has been provided by the Director of the Office for Outer Space Affairs. I have no reason to doubt the fact that people from these individual organizations have been involved on the Ad Hoc Group, either directly or through electronic means. But I see my point as being a bit different, which is we will be asked as governments, in the Scientific and Technical Subcommittee and in COPUOS, to take a decision on this report. At what point are we going to ask other organizations to take a similar decision, that is, a corporate decision on whether DMISCO is something that will help what they are doing or is duplicative of what they are doing. Having input at working level does not get you to that stage. And I think everyone in the room agrees that what we are suggesting here in CRP.13 is a rather major undertaking that could have an impact on other activities that are underway. That is why I am urging we have to get this view from these other organizations sooner rather than later in order to put together a concept that actually will work.

And while I had no doubt that the comments provided at the working level from these various organizations are good and are helpful to the process, I think there is another layer of decision-making that we are going to have to cover because we are doing here in this Committee as well because we are going to send to the General Assembly a final report on the basis of government-level decisions that we want to make sure it makes sense and has the backing of these other groups where some of the same governments are also participating.

So it is more of a process question and we have to think about at what stage do we try to get that higher level of ______ (not clear) from these other groups.

Thank you Mr. Chairman.

The CHAIRMAN: I thank the distinguished representative of the United States on his comments.

I invite the distinguished representative of India.

Mr. B. N. SURESH (India): Thank you Mr. Chairman. CRP.13 is a very major document. It needs capable attention. We have received a lot of comments from the participating delegates. As we said in the morning, I think considerable effort has been put from the Working Group but it is important to consider the various ______ (not clear) brought by the delegates. It is important that these various issues arise and may be required attention and then reflected properly in the CRP.13.

We agree with the United States delegation that such an important document has to be properly, it should reflect all views of participating countries here and would be appropriate that we sort of amend this document with these comments appropriately and maybe discuss, as we have pointed out in the morning, and again we would like to reiterate that it would be appropriate to discuss in the Scientific and Technical Subcommittee as well as this COPUOS and then take it as a document which will be presented to the General Assembly.

Thank you Mr. Chairman.

The CHAIRMAN: I thank the distinguished representative of India.

I now invite the distinguished representative of Belgium.

Mr. M. MAYENCE (Belgium) (*interpretation from French*): Thank you very much Mr. Chairman. I would like to thank Mr. Camacho for his explanation and, having listened to the United States as well, I am getting a clear view of the schedule for the Plan of Action, as envisaged.

I would like to be absolutely clear on one point. In the questions I mentioned, I was not suggesting that the DMISCO initiative was not legitimate. That must be very clear. The only question that I am asking, that this delegation is asking, as a member of the ESA, is how effective this initiative is if we follow the schedule as suggested. So we have no problem with what is being presented but the point is that there is no point in giving rise to a system without the principle players being involved. It is a shame that the ESA was not involved in the Ad Hoc Expert Group. That is something that should be discussed at ESA. But as long as reference is made to systems which are not just United Nations systems and a body(?) like COPUOS, it is important to mention the organizations which are in charge of the implementation or the setting up of such systems.

Thank you.

The CHAIRMAN: I thank the distinguished representative of Belgium.

Any other delegation wishing to address the Committee on this issue.

Iran has the floor.

Mr. M. REZVANIAN RAHAGHI (Islamic Republic of Iran): Thank you Mr. Chairman. Mr. Chairman, one question. Is there any time limit for a deadline for submitting the report to the General Assembly and for the work of the Ad Hoc Expert Group? ... a resolution or in the Terms of Reference of this Committee or something which has been approved by COPUOS? Or that it is open-ended?

The CHAIRMAN: Let me seek advice from the Secretariat. The Secretariat has the floor.

Mr. S. CAMACHO-LARA (Director, Office for Outer Space Affairs): Mr. Chairman, I apologize. I was being briefed at the same time so did not get the question, the question the distinguished representative of Iran would repeat it.

The CHAIRMAN: Please can you indulge us by repeating what you just stated? Thank you.

Mr. M. REZVANIAN RAHAGHI (Islamic Republic of Iran): Thank you. Is there any time limit or any time schedule for finalizing this report to the General Assembly, I mean within the framework of a General Assembly resolution or any decision by COPUOS or any Terms of Reference adopted by COPUOS or the work of the Ad Hoc Expert Group?

Thank you.

Mr. S. CAMACHO-LARA (Director, Office for Outer Space Affairs): Thank you Mr. Chairman. I apologize for having you repeat the question.

There is not really a time schedule in the General Assembly resolution. It indicates the process but it does not indicate the time. The closest that there would be would be the Terms of Reference of the Ad Hoc Expert Group. But having said that, it is really up to the Committee to say, this is when we want it to get there, we want to get it there by such a time at the earliest or at the latest.

Thank you Mr. Chairman.

The CHAIRMAN: OK. I thank the Director of the Office for his response.

Distinguished delegates, I think we need to move on and take a decision on this issue. I see a solution here but that solution would depend on how fast the Ad Hoc Expert Group can work on it. Our friend from the United States, Mr. Hodgkins, has brought out the need to involve other agencies. Our Director of the Office for Outer Space Affairs has informed that the steps they have taken. Our distinguished representative from Belgium has indicated this is due to be tabled at the ESA meeting.

What I would like to suggest is the following, that the Committee mandates the Office, to direct and inform all interested delegations to send CRP.13 out to all Member States as well as all these other agencies and intergovernmental organizations that have been mentioned here and to give a deadline for their response because the Ad Hoc Expert Group has to work on their response. And this response is all compiled together with CRP.13 and other documents available and analyzed probably by the Expert Group before the General Assembly in October. Is this a process that is agreeable, Dr. Camacho?

Mr. S. CAMACHO-LARA (Director, Office for Outer Space Affairs): Thank you Mr. Chairman. My impression is that that would be quite complex because we would be sending it to, things to be corrected, to all governments, not just COPUOS governments. It would involve then also those that have not been following it closely.

The CHAIRMAN: Let me correct myself. I would take COPUOS only because this has been a COPUOS document.

Mr. S. CAMACHO-LARA (Director, Office for Outer Space Affairs): And my understanding

before had been that there are two levels, the expert level and then the government level and at the expert level, where the _____(?) is taking into account what the governments have already indicated. And once that process was complete, what the Office then could do would be to take that document and then send it to COPUOS governments to see what the governments believe was incorporated or addressed for consent(?). I can imagine that might be a little bit faster than asking for inputs directly from the government level before the experts have had a chance to incorporate the comments that have been made.

The CHAIRMAN: OK. Thank you very much Dr. Camacho.

Ambassador Gonzalez.

Mr. R. GONZALEZ ANINAT (Chile) (*interpretation from Spanish*): Thank you very much Sir. Mr. Chairman, I fully agree with what the Director of the Office has said. That is the most logical way of moving forward. It means that a division of labour will be optimal and we will do things at the right speed. The working method suggested is something that already exists and it means that governments can be directly involved in the Scientific and Technical Subcommittee and also at Committee meetings. All of this structure exists. There is nothing new about it.

Now, I am not trying to open up a debate. I would simply like to suggest an idea to you. And I would like to reiterate my full support for the Director.

In the course of the Fourth Committee, I said that the vast majority of States tend not to take part in the meetings and it is to be hoped that such States will come to the meetings and that we will be able to continue such deliberations as part of our general debate. The aim here is to achieve a result, namely that what we decide in the debate will be an achievement of it can be taken up by the Scientific and Technical Subcommittee, of which is legitimate, it has a certain legitimacy at governmental level.

And I have got something else to say, and here I am referring particularly to the work done by the Director of the Office for Outer Space Affairs, namely that the fundamental activities, namely the links with the GEO, and I am thinking of the fact that there is going to be a due meeting on 14 and 15 December in Geneva and it would be appropriate for the Director to take part in that meeting and you can be absolutely sure that you have the full support of this delegation in so doing. Consultations must be pursued, bearing in mind that GEO has shown itself to be very open-minded,

especially when it comes to the question of accepting debates which have taken place in this body. So the necessary consultations must take place. But to resume, I would say what the Director has suggested seems the most cohesive and is consistent and accurate, a sensible way of going ahead when it comes to the legitimacy of government.

Thank you.

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

Distinguished delegates, with your permission, let me invite the Director of the Office to briefly summarize the process for us and see whether that is acceptable to us and we can move on.

Dr. Camacho.

Mr. S. CAMACHO-LARA (Director, Office for Outer Space Affairs): Thank you Mr. Chairman. I agree that perhaps it might be expedient. It would be that the Committee request the Group of Experts to take into consideration all comments that have been made by the governments, by the delegations, and that they incorporate, as appropriate, in the study. There will be, I would imagine, technical areas where the experts will have an expert opinion.

That being done, the report could then, the study would then be sent, by the Office, to all governments and members of COPUOS for their governmental evaluation. What I would suggest as well is that perhaps the experts might be in consultation with their governments regarding the incorporation of the governmental comments that have been made in this session.

And I agree with picking up from what the distinguished Ambassador of Chile said, that we would then, at that point, the Working Group of the Whole of the Fourth Committee could be the frame, one which that could be informal(?) consultations on the contents. So the report itself or the study itself would not be in front of the General Assembly, it would not be in front of the Fourth Committee, but that framework could be used to move the process forward and it would then be validating, because we do not have a session of COPUOS before we get the Scientific and Technical Subcommittee. That would provide an opportunity for governments to provide a reaction to the work that the Group of Experts would have done in incorporating And then it would go to the those comments. Scientific and Technical Subcommittee and be a more fluid process at that moment.

Thank you Mr. Chairman.

The CHAIRMAN: I thank the distinguished Director.

Italy? No.

What I am going to suggest, therefore, if this is agreeable to you, then I am going to ask the Secretariat to issue this in writing, what the Director has said, to put it in writing for us tomorrow as a Conference Room Paper or Secretariat Paper or whatever would be the appropriate name we give, and have it for us ready tomorrow and then we ratify it.

Unless there is any objection, any objection?

No.

That is decided.

Can we move on then, distinguished delegates?

Distinguished delegates, by now you should have received, either through the pigeon hole or on your table, CRP.15 which the Secretariat has circulated, concerning the contribution of this Committee, at this session, to the High-Level Plenary Meeting of the General Assembly in September this year, particularly with regard to its input, that is the Committee's input, to the draft outcome document for the General Assembly.

Now, either last week, when we were discussing, I told you that when we met the President of the General Assembly, we had a discussion with him and the document that has been circulated to you, CRP.15, is a document that has been circulated by me, as your Chairman, on behalf of the Group of 15 of COPUOS. Which means then that the Group of 15 of COPUOS, that is the five members of the Bureaux before myself came, my own set of the Bureaux and the Bureaux that is to come. We dialogued since the beginning of this session and we came up with this document.

The document is before you. We just got it. I do not know whether you want to discuss it now or you want to put on a coat, sleep over it and come back tomorrow to approve it.

Let me hear any comments please.

Ambassador Gonzalez.

Mr. R. GONZALEZ ANINAT (Chile) (*interpretation from Spanish*): Mr. Chairman, I would like to have the opportunity to read this document in my language, being one of the official languages of the United Nations. I only have a copy in English before me.

The CHAIRMAN: ... to have the Committee out. The Secretariat has the floor.

Mr. S. CAMACHO-LARA (Director, Office for Outer Space Affairs): Mr. Chairman, it would be possible to do it as maybe a working paper. A CRP is normally presented in the language in which it is distributed. It is a fast way of getting information. If the Ambassador of Chile would agree then it is much faster. It is possible to turn that into a working paper and in that case, we would translate it. Although right now, the Translation Services are translating material(?), Section I of the report of the Legal Subcommittee and the report of the Scientific and Technical Subcommittee, but it is possible, Mr. Chairman.

Thank you.

The CHAIRMAN: Thank you very much Mr. Director. Ambassador Gonzalez, the Committee is in your hands and as the Director said, and I agree with him fully, with your permission, we can deliberate on this as it is for now.

Thank you very much. We are very grateful.

So, distinguished delegates, I am not pressing that. We have to approve this now. If you want to make any comments, you are free to do so but we still have tomorrow morning to look at it. So if you want to go and drink some Austrian wine before you look at it the better, because that will help you accept it even more.

Chile has the floor.

Mr. R. GONZALEZ ANINAT (Chile) (*interpretation from Spanish*): Thank you very Mr. Chairman. I have not had time to go through this document in detail but I have a general comment to make. And that is that I have some doubts with regards to the topics. They need to be better described. Look at page 2, for instance. The first part is very high quality. We are talking about the part that deals with the amendments and the question of natural resources. I am wondering whether we had a clear idea of what we mean by this last paragraph. But I would ask you

to be kind enough to translate the last paragraph to me when we talk about space assets because this seems to me to be wording which could lead to some other uses(?). It might do in Spanish. If I had the translation in Spanish probably I would be able to understand better. Just the last paragraph Sir.

The CHAIRMAN: I am only going to use my own limited knowledge. When we talk about space assets, essentially we are talking about instruments, facilities, vehicles that we use in space to monitor the surface of the Earth and all its immediate environment. Therefore, we are talking about satellites, really generally we are talking about satellites, we are talking about some space vehicles, like the Shuttle.

They are translating it now, are they not? I believe they are translating what I am saying.

You want it in written form in Spanish.

OK, I see what you mean.

Let me leave the floor. The Director nationally is your next door neighbour. So you have the floor.

Mr. S. CAMACHO-LARA (Director, Office for Outer Space Affairs): Thank you Mr. Chairman.

(Continued in Spanish) I will attempt to translate this into Spanish: Recognize the spatial global view that space assets and that includes satellites, observation satellites, positioning satellites and so on, navigation satellites, meteorological satellites and so on. That is, space assets provide for monitoring Earth's environment and natural resources and encourage the full application of the world's space resources to develop a special and temporal global information databank or databanks, says the speaker, in the plural, on the condition of the Earth's environmental and natural resources.

Thank you Mr. Chairman.

The CHAIRMAN: Thank you very much for that assistance and Ambassador Gonzalez, are you satisfied? OK.

I give the floor first to Professor Cassapoglou of Greece.

Mr. V. CASSAPOGLOU (Greece): Mr. Chairman, I am not satisfied, not with the Spanish translation that my dearest colleague, Dr. Camacho, but in general I do not like to see this formula space assets

in a document because it will confuse with the space assets term used in the so-called Space Assets Protocol.

The CHAIRMAN: Tell us what you want there.

Mr. V. CASSAPOGLOU (Greece): I am not ready to give you the exact but the only term we can use immediately is satellites, the satellites. But let me think about it. But as a first reaction, we do not like to see, to confuse these terms because we have already in the draft Protocol the definition of the term "space assets" and it is completely different, vis-à-vis, what the author of this document wished to say.

Thank you.

The CHAIRMAN: Thank you very much Professor Cassapoglou.

I invite the Ambassador of Colombia.

Mr. C. AREVALO (Colombia) (interpretation from Spanish): Thank vou Mr. Chairman. I do not want to add any complications to matters and I think the translation is very good which was done with great knowledge. Of course, Dr. Camacho did a great job there. But I do agree with what was just said by the distinguished delegate of In English, "space assets", in Spanish Greece. "bienes? (Spanish)", are more related to international private law. Of course, we are also looking at those texts here as well. It would seem to me that we would be more referring to what Dr. Camacho was talking about "equipo?" (Spanish) which means, loosely translated, says the interpreter, "equipment" or "material". But I am not sure that that is appropriate either, says the Ambassador, because it is not in keeping with the Protocol. So we might want to look for another alternative here, that to "bienes?" (Spanish) or "equipo?" (Spanish). I do not have an alternative, Sir, but I do think we need to make a distinction here so it does not lead to confusion.

Thank you.

The CHAIRMAN: I thank the distinguished Ambassador of Colombia.

And the next speaker on my list is Professor Kopal of the Czech Republic.

Mr. V. KOPAL (Czech Republic): Thank you very much Mr. Chairman. I, too, have some doubts about the use of this term "assets", not because it is used in the Space Protocol because it would have a similar meaning, then it would be OK, but here it is not quite simply. The use of the term "assets" is not good because "asset" means indeed a piece of property. But here it is not a piece of property or any ownership or, I do not know, but simply the use of space technology or use of space technology. Taking advantage of the global monitoring capabilities enabled through the use of space technology. That is all.

The CHAIRMAN: Thank you very much Professor Kopal.

I invite the distinguished representative of France, who is the next speaker on my list.

Mr. C. LECLERC (France) (*interpretation* from French): Thank you Mr. Chairman. The comment I had is more a question on a different passage of the text. So this is bullet seven bis, a different part of that, and it is about developing a global information databank, so spatial and temporal global information databank on the Earth's environment.

It seems to me that this needs to be more specific in its wording. Is it a new initiative? And if it is a new initiative, then that leads to a number of other institutional problems that might arise and, of course, we would have trouble solving those problems before the sixtieth General Assembly takes place. Or, what are we doing here? Are we highlighting the principles, the problems, without specifically going into a chapter on the institutional aspect of things?

Thank you Mr. Chairman.

The CHAIRMAN: I thank the distinguished representative of France.

I invite the Ambassador of Chile, the next speaker on my list.

Mr. R. GONZALEZ ANINAT (Chile) (*interpretation from Spanish*): Thank you Mr. Chairman. First, I would like to state for the record that with regard to the document in general, I have no problem. But with regard to this paragraph, it is clear that what the distinguished representative of Greece, followed by the distinguished Ambassador of Colombia and Professor Kopal, all of what they said makes a great deal of sense.

It is nothing new. We need to refer to space technology rather than space assets. I think that is the only comprehensive solution and which would not lead to misinterpretation. And with regard to what the delegate of France just said, indubitably he has made a very valid comment and it might not be very clearly defined here. Perhaps what we can do is approximate things. We could approach this in one of two ways then. One would be to reflect a concern and the other approach would be to reflect a concern and the other approach would be to refer to the databank in such a way as to be in keeping with existing mechanisms, and there are existing mechanisms. So we might just follow those lines what already exists in this area.

My delegation does have some doubts as to the need to duplicate institutionality and it seems to me that we are not going to get anywhere but strengthening the existence of mechanisms or existing mechanisms or strengthening existing mechanisms, something along those lines seems to me that it might respond to the concerns of the distinguished delegate of France.

Thank you.

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

Now, let us now look at this paragraph and the suggestions before us. The two space assets, one is on the first line, the second is one the second line, I think they can now be used interchangeably but let me consult with the Secretariat because they are formulating something right now and I am formulating my own.

Professor Cassapoglou?

Mr. V. CASSAPOGLOU (Greece): Thank you Mr. Chairman. Mr. Chairman, also we have to modify the text of the previous wide bullet.

The CHAIRMAN: ... Thank you very much.

I am equally cognizant of the point raised by the distinguished representative of France and which was alluded to by Ambassador Gonzalez on the third line, where we are speaking about spatial and temporal global information databank, I think the word there that may create a problem that maybe to the fore, the issue of an initiative, is the word "developing" and we may be able to play around that. Let me see what the Secretariat has.

Between myself and the Secretariat we are making this suggestion to you for your consideration.

The second bullet, recognize the spatial global view that space, or can you say that space, or you can say that the use of space technology, or we can say that space technology, one of those three. You can say recognized the spatial global view (a) that space, (b) that space technology or (c) that the use of space technology. So any of those three.

One of those three should meet that requirement and any of them would pass of my understanding of the discipline. And then we continue by saying "provides for monitoring the Earth's environment and natural resources and encourage the full application of" the, you stop at "the", not the "the", you say "the full application of space science and technology to preserve the Earth from the", you say "application of", then delete from the word "the", delete the following "the world's space assets to developing a spatial and temporal global information databank on the ". You delete up from one "the" to the other and then the final text will read as follows:

"Recognize the spatial global view that space technology provides for monitoring Earth's environment and natural resources and encourage the full application of space science and technology to preserve and improve the condition of the Earth's environmental and natural resources."

Ambassador Gonzalez.

Mr. R. GONZALEZ ANINAT (Chile) (*interpretation from Spanish*): Thank you very much Mr. Chairman. In general terms, I think your proposal is a fine one. I have no problem with it. But there is a repetition here with the space but I would leave it in the hands of the Secretariat to draft the text but I do think we might want to think about space technology as the term to be used. That would also involve then correction of preambular paragraph 3, in the last sentence, where it also refers to space assets. We would have to change that and bring the two in line.

But then with regard to what was put initially in this paragraph, on the existence of a databank, we could say, and I will read this at dictation speed:

"in this sense, it would be desirable to have a databank to fully comply with the objectives presented."

Thank you.

The CHAIRMAN: I thank the Ambassador of Chile.

I invite the distinguished representative of France.

Mr. C. LECLERC (France) *(interpretation from French)*: Thank you Mr. Chairman. I just wanted to say that the wording proposed by the Secretariat would cover the concerns that I had expressed and so we would be in a position to approve that wording.

With regard to the proposal put forth by the distinguished delegate of Chile, I must say it raises the same questions for me, that is the definition of the databank that is being created. I fear that this wording does not entirely address the problem.

Thank you.

Sir.

The CHAIRMAN: Thank you very much

I give the floor to Greece.

Mr. V. CASSAPOGLOU (Greece): Thank you. First of all, I would like also to accept the new wording you proposed for the last white(?) bullet. Also I have some doubts about the near(?) sub-set of these proposals for the worldwide bank of data. And I am afraid, I am suspicious maybe, but I am afraid that it is maybe the prelude to establish a private bank. You know very well that in Geneva, the United Nations has already an important, a very important databank which gives necessary information about all events concerning natural catastrophes, rescuing(?) problems, etc. So I have also this remark to make because this very general mention, I am not very sure for the real inter____(?) of this databank.

Secondly, Mr. Chairman, I would like to say that the previous white(?) bullet should be also adjusted to the new wording, also, as it concerned the background of this paper.

Thank you very much.

The CHAIRMAN: Thank you very much.

Professor Kopal.

Mr. V. KOPAL (Czech Republic): Thank you very much Mr. Chairman. I, in principle, agree with your re-drafting of the last paragraph or of the second white bullet, if you call it in this way. And I would also like to draw your attention to a set of difference in the wording for "monitoring Earth's environment and natural resources", in the beginning of the last paragraph, this is correct in my opinion. But then at the end, you say "the condition of the Earth's environmental and natural resources". I know what the natural resources are. I do not know what are environmental resources. So it should read equally it means for "monitoring Earth's environment and natural resources" and then again "on the condition of the Earth's environment and natural resources".

The CHAIRMAN: Yes, the Secretariat does. I would depend on them.

The United States.

Mr. K. HODGKINS (United States of America): Mr. Chairman, I have no strong feelings one way or another on the various proposals that have been made regarding this language. Precisely for all the reasons stated on the first page in the last paragraph which is that the document is open to modification and proposes for the consideration of Member States of COPUOS. They consider their representatives to request the following modifications to the document. And what we are doing here is completely discretionary on the part of our national authorities. I cannot speak at the Ministerial level here as to what my Government would finally decide as to changes being made to this General Assembly document. So I have no objection to the general idea that is being reflected here but I think we have to understand that our individual governments are going to decide precisely what we wanted to say in any correspondence with the President of the General Assembly, regardless of what might be decided here.

So we may have different ways of expressing ourselves in this Committee. This is what we might say at a national level and I think we have to bear that in mind because it could be, for example, a government is more comfortable with using the term "space assets". We cannot tell them they cannot use that term, if they chose to do that. I think it is good that we try to get some kind of language here that everyone is comfortable with but this exercise is much different if we are negotiating consensus language, here I would say the report of the Committee, but this is just a recommendation that governments might follow.

Thank you Mr. Chairman.

The CHAIRMAN: I would like to close this debate today so that we can continue tomorrow but before we do that, I will give the floor to Ambassador Gonzalez of Chile.

Mr. R. GONZALEZ ANINAT (Chile) (*interpretation from Spanish*): Thank you very much

Mr. Chairman. The truth is that I am a little surprised by what the distinguished representative of the United States said. I had understood that we were here as representatives of our governments. We are not representing anyone else. I am representing my Government, the Government of Chile. So one would assume that we, therefore, have the capacity to take a decision otherwise we would never adopt any COPUOS reports. We have taken a number of decisions last year. We took decisions and then there was a Ministerial-level meeting during the General Assembly and this had an impact for COPUOS, including representatives from the United States and other delegations as well. So I would not have thought there would be a procedural issue here. We can quite perfectly recommend. And then Ministers can read or not read the recommendations and they can accept it or not. But every time we want to recommend something to the General Assembly, if we theoretically are assuming that they are looking at this at a Ministerial level, then we cannot actually carry on with our work. The issue of substance here is, is there political will or not, to make a recommendation to the General Assembly. So let us be clear on that. There is nothing that prevents us from making this recommendation.

And then, that is why I think we can think about why the President of the General Assembly was here at our opening session and I think when we express our concerns to the President of the General Assembly, we do not have to wait for a reaction from various countries in order to do so. So, once and for all, I think we should make our recommendations and it should be in a document of this sort. This is an opportunity that we cannot let pass us by. This is an issue or a subject matter which will show whether or not we really have an interest in promoting international cooperation in this area and I think that is clear.

With regard to the term "space assets", I am almost be forced to speak in English. It is unfortunate because Spanish is truly a very beautiful and rich language but since this is written in English, it is difficult for me to address this and it is not my language. In some countries, English-speaking countries, that is, Spanish is the second most popular language to be spoken in those countries, some 20 per cent of the population in English-speaking countries speak Spanish, but since we are dealing with English here, an English term "space assets", let us just address it. There is no legal connotation here. It is used in the context of UNIDROIT in international private space law. That is it. Now, we are not re-inventing the wheel here. In none of the space treaties, which, of course, are quite obsolete anyway, but notwithstanding that, in none of them do we see reference to this subject. If someone can point to any of the five treaties or any of the resolutions that were adopted or approved where they talk about space technology or space activities and international cooperation, which is not a minor issue. They do not speak of space assets. So let us not get into this whole mistaken game from a procedural point of view which, in fact, ultimately impacts the substance here. The issue at hand is, do we or not want to make a recommendation to the special session of the General Assembly? I do not even remember what it is called at this point.

But anyway, that is the question but please could we come to an agreement on that. That is the core of the issue, do we want to make the recommendation or not? Because nobody is going to be able to come along and say, I did not go along with this. And countries that do not have the mandate, OK. They may try and obtain instructions as quickly as possible but it would be for the first time in the history of COPUOS that a subject could not be defined or a body which is autonomous by its very nature and which is a clear mandate, to precisely make a recommendation to the General Assembly. And I want to insist again that the President was here and last year there was a special plenary of the General Assembly on this subject. So could someone correct me if I am wrong here but I think that that was at the request of COPUOS.

So I think this is fully consistent with what happened last year and I would be prepared to discuss this at length and if we want to keep going into the content of the paragraph and, just saying in passing, I am not entirely in agreement with this but I do think we need to strengthen international cooperation. And to do so we need a database. It is not a minor issue, especially for developing nations. It is key to international cooperation. When there is a natural disaster, which unfortunately in the case of my country, we were just affected today and other countries will continue to be impacted and the worst scourge of all is the scourge of poverty which impacts all of us. So we need to cooperate in these areas but if we start getting into the nitty-gritty of negotiating the paragraphs and the wording of them, we are forgetting the larger picture which is it is vital to have a database. Some countries provide data, some others might not and that is irrelevant. The point is the principle. Can we accept the proposal put forth by France in this regard? But we are not prepared to move away from the idea of sending this document to the General Assembly. What

would be the point to be drafting a document if we are not planning to send it on? It would be an irrational use of resources, once again. Supposedly the industrialized nations want to rationalize the use of resources. We have told the President of the General Assembly, for this session and last year, that we would have this and then we do not follow through with any action. That would be a major degree of irresponsibility on our part if we were to do that.

Thank you.

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

Professor Cassapoglou, be very brief please.

Mr. V. CASSAPOGLOU (Greece): I will try not to extend my intervention. I already agreed with, I understand the sensibility of our United States colleague but I would like to remind you that the document of which we speak is a just-out(?) outcome document so it is not a finalized document, even coming from the United Nations General Assembly.

Secondly, as I understand, the second white bullet is an addendum, it is an additional paragraph so it is from our, ______ (not clear) who had the initiative to draft this paragraph. And because I have here the outcome document of 3 June, I do not know if there is somewhere in this document is mentioned the term "space assets". So give us the possibility to study this document if it is here otherwise we find it in the electronic, in the website of the United Nations and then coming back tomorrow morning and re-discuss the whole matter. But in any case, we are authorized also to propose a modification or an additional paragraph to any document which is officially deposed(?) (not clear) to us.

Thank you Mr. Chairman.

The CHAIRMAN: I thank the distinguished representative of Greece.

Mr. Ken Hodgkins, can you please give me a second to say something before you come in.

Distinguished delegates, I have listened to all of you. I want you to go back to the document itself and look at paragraph 3. Paragraph 3 tells us why we are doing, what we are doing, on page 1. And that is, in the draft report that has been circulated to Member States, and you have the website on paragraph 2 on page 1, there is no reference to the benefits or use in space. And that meeting is a High Level Meeting, it is a United Nations meeting, it is looking at all of the things of agendas of sustainable development, of environment, of information, and whatever. Therefore, what is our relevance if that is what is going to happen? As a result of which, the G15 has come up and said, recognizing it further, we already sent a letter to the Secretary-General of the United Nations saying that either the issue of space should be considered at future United Nations meetings or should be considered the implementation of the recommendations of United Nations future meetings, let us know try and see whether we can make an impact in this draft report. And with that information, authentic information, from the President himself of the General Assembly, that a document being circulated will be reviewed but this Committee is not going to be there to present this document.

All we can do and all we are trying to do is to arrive at a mutually agreed text that we are going to give to our own Member States. They are the ones that can speak for us. I am not going to be there. The Director of the Office is not going to be there. It is your representatives at the General Assembly, at the High-Level Meeting. So all we are saying is that, let us come up with an agreeable text that individuals, individual delegations can use. But let us not prevent that same delegation, not to modify what we are presenting them to use. They can modify it. They have an obligation to the Committee to say we have to use it because it comes with the(?) Committee. We hope they will do it. We pray they will do it but they are not obligated to do it.

My suggestion to you is the following. The Secretariat has listened intensely. Why do we not wait until tomorrow morning and if you have any comments you are so passionate about, please give it to the Secretariat and let us suspend our discussion of this issue now so that there are some other issues we can quickly arrive at, we can easily conclude and move on because I do not see us between now and 6.00 p.m. agreeing on anything on this text. We agree on the generality of the idea but the language I do not seeing us agreeing. Why do you not allow the Secretariat and those who are interested in this text to talk to the Secretariat and give them the idea.

But having said that, Mr. Ken Hodgkins, if you still want to take the floor, you have the floor. Thank you.

Mr. K. HODGKINS (United States of America): Thank you Mr. Chairman. I appreciate the explanation because I must say I was close to total confusion as to what exactly we are trying to do. My

understanding is exactly what you have suggested which is, we are asking Member States to consider approaching the President of the General Assembly to add in their report something to do with outer space. Now, I think that is a quite reasonable request on our behalf and I think the paragraph on page 2, that first paragraph beginning with "established worldwide early warning system", that makes sense.

Where I become confused, however, is on the next paragraph which is suggesting the establishment of a spatial and temporal global information databank. I do not think we will be able to reach agreement as a Committee on this, and as you point out, the Committee has not been asked as a body to make any kind of contribution to this event in the General Assembly. So then it is going to leave that decision to be made at the national level and I am not entirely convinced that every delegation here is in a position to do that. And to say, yes, we will suggest to the President of the General Assembly that we should establish or develop a spatial and temporal global information databank. I am not saving it is a bad idea. I am just not convinced that everybody would be in that position and it has nothing to do with whether you have instructions here or not. This is a completely new idea. And I hope that when people look at this paper, they will look at it in that regard.

Thank you Mr. Chairman.

The CHAIRMAN: Thank you Mr. Hodgkins.

Can I take it then that we can accept my recommendation and the Secretariat comes back tomorrow morning with the refined text for us?

Thailand.

Mr. S. ARIYAPRUCHYA (Thailand): Thank you very much Mr. Chairman. I think what you told us seems to be reasonable but the idea that behind these two paragraphs here, I think it has been drafted by the Group of 15. They are quite new to us but I think the Group of 15 has drafted it. I would like to know the rationale behind it. Perhaps somebody can explain, in particular the paragraphs 18(?) and bullet seven *bis*, because this is quite new to create a databank, temporal, spatial and temporal global information. Can somebody who was involved in the drafting of this explain to us the reasons why they want to put this as an amendment, as an addition to the outcome?

Thank you.

The CHAIRMAN: Apparently, you did not take note of what I said earlier on. If you go to page 1 of the document before you, CRP.15, paragraph 3, paragraph 2 tells you of the existing document, paragraph 3 tells you why the G15 has taken this initiative. Now when you put the two together, then you go back to page 2, and then you see the modifications. Then if you go into the Internet and you will see what we are trying to do is we look at the existing document, you open it up on page 6, you consult paragraph 18 of the existing document, you contact, you refer to bullet five and we have modified bullet five to add what is shown there in bold. That is all we have done.

The same goes for page 6, paragraph 18, there is no bullet six. There is bullet seven and we have added bullet seven *bis* and the debate this afternoon has mostly been on bullet seven *bis* we have added.

I hope this is clear Sir.

Thank you very much.

Distinguished delegates, I think now we are satisfied that the Secretariat can go ahead and take your concerns into consideration and help us get out of this situation we are in tomorrow morning or some time tomorrow, do not let me say in the morning. I do not understand how the Secretariat survives. If I am in the Secretariat, you know me, I would have come back to you and tell you no. They are really overworked. But they will do this for us and I begged today and they will come back to you tomorrow, early morning, late morning, some time tomorrow and we will get this from them.

So let us suspend this list OK.

Thank you very much.

Therefore, we shall continue our consideration of agenda item 6, Implementation of the Recommendations of UNISPACE III, tomorrow.

Distinguished delegates, I would now like to resume our consideration of agenda item 7, Report of the Scientific and Technical Subcommittee on its Forty-Second Session.

And we are now inviting Ms. Alice Caponiti of Italy ... Sorry, I changed the flag, my goodness. When you look at it maybe there is some Italy there but that notwithstanding, Ms. Alice Caponiti of the United States. You are welcome and forgive me for that

mistake. She is the Acting Chair of the Working Group on the Use of Nuclear Power Sources in Outer Space.

Madam, you have the floor to address us on the work of your intersessional meetings.

Ms. A. CAPONITI (United States of America): Thank you, Mr. Chairman, for giving me the floor and I am very proud of my Italian heritage.

On behalf of Mr. Sam Harbison, Chairman of the Working Group on the Use of Nuclear Power Sources in Outer Space, I have the pleasure to report to you this afternoon on the results of the intersessional work of the Working Group.

As a result of the discussions conducted during the intersessional meeting, the Working Group, in close cooperation with the IAEA representative, finalized a list of objectives and topics and a provisional agenda 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. The workshop is scheduled to take place during the first three days of the forty-third session of the Scientific and Technical Subcommittee in February 2006.

I understand that this list of workshop objectives and topics and the provisional agenda have been distributed to all delegations this afternoon in the form of a Conference Room Paper. That paper is A/AC.105/2005/CRP.16 and this paper is before the Committee for its consideration. This document is currently being translated into all of the official United Nations languages and will be available by the end of this current session.

The Working Group also discussed and finalized relevant logistical aspects for the organization of the workshop, including the necessary arrangements and preparations for possible papers and presentations during the workshop, as reflected in the provisional agenda.

The Working Group also agreed to communicate to the Office for Outer Space Affairs, by 15 September 2005, any intentions of preparing any additional papers or presentations for the workshop. In that respect, proper invitations and requests for papers that would include the provisional agenda and a registration form for participants are to be sent out by the Office for Outer Space Affairs and the IAEA Secretariat by the end of June 2005. Finally, I wish to inform you that, as a followup action to the work undertaken during its intersessional meeting, the Working Group agreed to continue its work after the session of the Committee by electronic means with a view to contact and identify potential speakers for the workshop and to finalize the workshop agenda. The Working Group will also work jointly and closely with the IAEA Secretariat and the Office for Outer Space Affairs to achieve this goal.

The Working Group has concluded today its intersessional meeting.

Thank you Mr. Chairman.

The CHAIRMAN: Ms. Caponiti, thank you very much for your brief report to us and the efforts(?) of your Working Group for the diligent work they have done and also to your Chairman, Mr. Harbison, for this good work.

Distinguished delegates, do we have any comments on Ms. Caponiti's presentation to us?

Do I take it that you accept the report as presented?

It is so decided.

Distinguished delegates, for the time being, we suspend our consideration of agenda item 7, Report of the Scientific and Technical Subcommittee on its Forty-Second Session, pending the final report by the Chair of the Working Group on Space Debris on its intersessional meetings.

What we have just heard was the final report of the Working Group on Nuclear Power Sources.

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

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

And the first speaker on my list is the distinguished representative of Canada, Mr. Ouattara. Sir, you have the floor.

Mr. T. OUATTARA (Canada) *(interpretation from French):* Mr. Chairman, the Canadian delegation would like to start by presenting its sincere condolences to its sister nation, Chile, following the earthquake in Chile yesterday.

Mr. Chairman, my delegation is delighted to contribute to this item on our agenda and to share with you some of the examples of spin-offs from Canadian investments in space technology.

Mr. Chairman, Canada is making two major scientific contributions to the debate on climate change. Two satellites, OSERIS(?) and SC-SAT, are helping scientists better understand the depletion of the ozone layer and to determine whether measures such as the Montreal Protocol are producing tangible results. Canadian scientists in Canada and abroad are using data from these two satellites in order to produce better models by way of predicting future amounts or levels of ozone. The two satellites preside(?) accurate information rapidly on greenhouse gases and the areas where the ozone has been destroyed.

Mr. Chairman, MOPIT(?), which is a Canadian tool, produces three-dimension, highresolution maps, which measure the level of carbon dioxide around the world. These are maps which are created on a four-daily basis and they help distinguished between normal and artificial sources of pollution and they provide necessary data when it comes to assessing the need to reinforce measures against pollution.

In 2003, when a large number of forest fires broke out in the west of Canada, MOPIT was in a position to measure the amount of CO_2 in the atmosphere above the areas where the fires were taking place. The 3-D MOPIT maps also helped get a picture of pollution in industrial centres in North America, Europe and China.

Mr. Chairman, precision agriculture which uses the data and techniques issued from remote detection means that money can be saved and it also avoids the over-use of chemicals which can render our eco-systems, which are already precarious, even more fragile, and it also means that agriculture prediction can be carried out, both in terms of vield and productivity. And the monitoring of the water levels in the earth and also phenological(?) study of crops is something that we are in a position to control perfectly from space, thanks to space techniques. In Canada, space techniques mean that disaster experts and farmers can more exactly, more accurately evaluate each damaged acre from the point of view of claims and the payments made by insurance companies. This means not only to optimize these claims when disasters take place, but it also means that there can be a reduction of the premiums paid.

Mr. Chairman, more than 300,000 sea birds get covered in oil and die along the Atlantic coast of Canada on a yearly basis. The conventional way of monitoring these territories in Canada is a costly and time-consuming and a not very effective one, namely aeroplanes, where as now, integrated satellite tracking of pollution in Canada means that our waters are being actively monitored and in less than 90 minutes, the appropriate information can be provided. And unlike planes, the RADARSAT satellite works during storms and it can work through cloud cover and even during the night and it offers a rapid alternative which is vital when it comes to detecting illegal polluters.

The RADARSAT satellite has demonstrated its ability time and again to identify ships which are illegally emptying oil into Canadian waters.

Mr. Chairman, in order to take up the challenges that is faced by Canada of health including the constant lack of healthcare professionals and increasing costs, Canadian companies are innovating and developing good value solutions using satellite communications. And these telecommunication satellites, including NEF(?)-2 and TELESAT, which is a recently launched satellite, can provide bi-directional signals which means that doctors visits can take place and monitoring of patients can take place in a remote fashion by interactive voice video and transmission of data to North America as a whole. Satellite telecommunications interact just like high-speed communications help get access to patients who are living in the countryside and a long way from urban centres and they can get access to health services which are first-class.

Mr. Chairman, thanks to satellite telecommunications, people in the air can make calls and telephone, fax and Internet are available, so is video-conference on commercial flights and this is becoming ever more frequent.

Mr. Chairman, citizens living in 4,700 of the 6,000 communities in Canada do not have or did not have access to communications in 2001 as available on the market. Given the enormity of the territory to be covered, wireless communication is the best value way of providing uninterrupted service to thousands of users via high-speed Internet and they have access to multimedia services, remote education, remote medicine and e-commerce.

ANIK-F2(?) has the potential to link up that last kilometre that means that each and every Canadian, wherever they are living, can take part in our economy, based on extended knowledge. Mr. Chairman, there are several examples of integrated space technology today which are used in our everyday life, technology which is so well integrated that actually the users forget what the origin of such technology is. Space investment has not only demonstrated how it can help and benefit the Canadian population, but it also contributes to resolving world problems such as climate change.

Mr. Chairman, technological advances and international coordination of our efforts when it comes to development of new technologies can but reinforce initiatives and action undertaken to improve everyone's quality of life. This is something that Canada believes in and will support and Canada will always be there wherever Canada is needed in order to push this message as far as possible.

Thank you Mr. Chairman.

The CHAIRMAN: I thank you very much Mr. Ouattara, distinguished representative of Canada, for your contribution on agenda item 9 of our debate.

Distinguished delegates, is there any other delegation wishing to speak on agenda item 9?

If not, we have, therefore, concluded at this forty-eighth session of COPUOS, our consideration of agenda item 9, Spin-off Benefits of Space Technology: Review of Current Status.

Space and society (agenda item 10)

Distinguished delegates, I would now like to continue and also conclude our consideration of agenda item 10, Space and Society.

I, therefore, invite the first speaker on my list, the distinguished representative of Canada, Mr. Aldworth, to address the Committee. Sir, you have the floor.

Mr. D. ALDWORTH (Canada): Thank you Mr. Chairman. Mr. Chairman, Canada would like to remind Member States of important initiatives underway associated at the United Nations World Summit on the Information Society which are related to the subject of space and society and in particular space and education.

At Phase 1 of the United Nations World Summit on the Information Society, WSIS, held in Geneva, 10 to 12 December 2003, Member States agreed upon an extensive Declaration of Principles: "Building the Information Society: A Global Challenge in the New Millennium" and upon a Plan of Action. This United Nations consensus, reached with the participation of many stakeholders, provides a broader context for discussion than the focus of space and education. Should discussions in this session result in a consensus to develop further in this or related areas, Canada would wish to ensure that such activities are undertaken within the broader United Nations context. The activity is worthy of our best efforts and we should confirm that COPUOS activities are not duplicative of others within the United Nations family. So further consultations are recommended.

Canada draws particular attention to the role of governments and all stakeholders in the promotion of Information and Communications Technologies for development and the importance of mainstreaming ICTs in development initiatives.

Canada would also draw members' attention to the importance accorded to communications networks and services within the WSIS, which includes communications via satellites, to the importance of access to information and to the targets established in paragraph 6 of the Plan of Action which complement the goals expressed in the United Nations Millennium Development Declaration.

We would also draw your attention to paragraph 9 of the Plan of Action, with its references to networks and space-based communications and to many other sections which refer to capacity-building and ICT applications.

Thank you Mr. Chairman.

The CHAIRMAN: I thank you very much Mr. Aldworth of Canada for your input on agenda item 10.

And the next speaker on my list is the distinguished representative of France, Mr. Leclerc. You have the floor Sir.

Mr. C. LECLERC (France) *(interpretation from French)*: Thank you very much Mr. Chairman. The French delegation would like to tell you and the Committee about some action taken by France under agenda item 10, in particular with regards to space and education on the one hand, and also remote medicine in the countryside.

Firstly, space and education. For more than 40 years now, the National Centre for Space Studies has been thoroughly engaged in promoting space

activities for young people. It is a public entity and it has a mission to train and to transmit knowledge to citizens. Education is, therefore, a major priority in our space agency and it has two aims.

On the one hand, it wishes to contribute to disseminating space activities and their applications for the benefit of young people, and on the other hand, using space as educational material, material for apprenticeship and learning and, thus, young people can continue(?) with scientific or experimental methods, with other projects and team work. The presentation was made yesterday by young members of the GAREF Space Association and that is an excellent example of this kind of initiative. And this means that every year, more than 100,000 young people in a position to get involved in activity linked to space. Nine hundred teachers are trained, 50,000 microrockets, 250 mini-rockets and 20 experimental rockets are launched on an annual basis and 15 boys are monitored. Such action for young people is pursued at the level of higher education. It is meant not only for the students who are specialized in space but it is also destined more generally for all students of science.

Partnerships established with major French schools and with establishments that are providing specialized education.

High-level scientific training is organized for the young graduates. And experimental projects are often based on international cooperation, for instance, when it comes to parabolic flights or small satellites.

An international perspective is promoted by active partnership. I am thinking of the IAF Education Group, UNESCO, especially for developing countries, and the European Space Agency, which also has an ambitious education policy, and other space agencies are onboard.

Mr. Chairman, the second point which my delegation would like to address for the benefit of the Committee is under agenda item 10 is that of medical spin-offs of space technology in the countryside, in rural areas. For several years now, France has been anxious to develop the use of space systems and data gathered by satellites and to apply them to the medical area. The aim is to improve the quality of healthcare in precarious environment circumstances. And also to improve the prevention of contagious diseases caused by modifications environment(?). Also to set up networks of epidemiological monitoring.

Programmes and pilot projects are generally applicable in rural areas and healthcare staff and the

National Space Study Centre have particular focused on remote consultation and remote epidemiology and on remote training of healthcare professionals.

As regards remote consultation in isolated areas, remote areas, remote medicine networks have been set up in the area of dermatology, emergency medicine and also tropical diseases. With these use a portable station which is called a Remote Medicine Case and this means that tele-diagnosis can take place. This is a portable station, as I have said, and it uses satellite communication, generally using INMARSAT.

Remote medicine networks have, thus, been developed in the following regions and countries. In French Guyana, following a pilot phase which brought together the remote satellite consultation network using the hospital in Guyane and involving the CNES and the Space Medicine and Physiology Institute, the MEDES(?), this remote medicine system has been maintained, thanks to the support of European funds and funds provided by the Health Ministry.

On Reunion Island, an assessment of the use of remote medicine cases, in extremely isolated areas, is in its final phasing.

Senegal, when it comes to maternal and infant health, remote eco-graphs have been validated under the responsibility of local health authorities.

In Cambodia, upon the request of the NGO Medicin du Monde, an INMARSAT network for cervical cancer smears and diagnosis, has been up and running since 2001, in Cambodia, screen centres and in French hospitals.

Looking forward, the French Foreign Minister is supporting an international market study, in particular for India, Brazil, the African continent, Indonesia and the Far East, supporting an international market study by way of looking into whether it is useful for emergency infrastructure to use remote medicine cases in their health policy.

And in addition, Health Ministries in New Caledonia and French Polynesia are evaluating such equipment on isolated islands.

As regards remote epidemiology, predictive mathematical models are being developed and they use data gathered by satellites such as the SPOT, METEOSAT, TOPEX-POSEIDON(?) and ENDOSAT(?) satellites and they combine these with clinical, human and animal observation data and also hydrological data in order to undertake for a specific

epidemic. And in the last few years, a number of studies have given rise to positive results in Senegal. The ______ (not clear) epidemic, for instance, was monitored and this led to the Senegalese Government deciding to use its own funds and also on the basis of the Space Medicine and Spaciological(?) Institute to generalize the approach which had been developed for those diseases which can be transmitted by animals to human beings.

In Guyana, a remote epidemiology network has been set up to deal with haemmoraghic denghi(?). And in Burkina Faso and Niger a pilot network, for instance, infectious or contagious diseases called Sentinel, has been deployed, thanks to the space network and set up by the French Research Ministry.

And a consortium is currently being set up to look into the risk of an outbreak of cholera epidemics along the Mediterranean coast, thanks to space oceanographic data. And this brings together the space sector and the public health sector in Algeria, Morocco, Tunisia and also the universities of Verona, Genoa, Barcelona, Alicante, _____(?) and the ESA.

And, by way of conclusion, when it comes to remote training in the area of healthcare, French universities, in a public interest group called the Francophone Virtual Medical University, in conjunction with the University of Geneva, have, in the last two years, set up a video-conference healthcare professional training system in the countries of North Africa(?) and Mali using satellite communication.

Mr. Chairman, that is what my delegation wanted to bring to the attention of the Committee at this stage and under this agenda item.

Thank you very much.

The CHAIRMAN: I thank the distinguished representative of France.

I am told that we are going to lose interpretation in the next one to two minutes.

Ambassador Gonzalez, you have asked for the floor. If you need more that time, we can take it tomorrow morning.

Mr. R. GONZALEZ ANINAT (Chile) (*interpretation from Spanish*): No, very briefly, Mr. Chairman. It is vital, Mr. Chairman, that we should thank Canada and France for these excellent contributions and it is especially true, given that this is a matter which, for my country and Latin America as a

whole, is of vital importance. And I would like to recall once again that in March 2006, a Space Conference on Satellite Telecommunications and Remote Communications is going to take place in Chile and it is our hope that a very large number of delegates and if possible, a number of delegations who are present, especially Canada and France. These contributions were of very high quality and we simply wanted to express our gratitude.

Thank you.

The CHAIRMAN: I thank the Ambassador of Chile for that brief intervention.

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

We will meet promptly at 10.00 a.m. At that time, we will continue and conclude our consideration of agenda item 11, Space and Water.

We will also begin our consideration of the agenda item 12, Composition of the Bureaux of the Committee and its Subsidiary Bodies for the Period 2006-2007, and we will begin agenda item 13, Other Matters.

At the end of tomorrow morning's meeting, there will be a presentation by UNESCO on "Space and Water for Life".

Also tomorrow morning, the Working Group on Space Debris will continue to hold its intersessional meeting. I understand that this meeting will be starting at 9.00 .m. tomorrow morning.

This is the plan of work for tomorrow. Any comments or statements?

If none, then I have an announcement before adjourning the meeting and the announcement is that there will be a Western European and Others Group tomorrow morning at 9.30 a.m. in Room C-07.

This meeting is adjourned until 10.00 a.m. prompt tomorrow morning.

The meeting closed at 6.10 p.m.